



Model: M100-LP

- α **Mobile EV Charger**
- Ω **Rapidly Deployable**
- α **100% Independent of the Electric Power Grid**
- Ω **Completely Self-Contained**
- α **Fueled by Green Propane and Renewable Propane**
- Ω **Immune from Blackouts, Brownouts and Demand Charges**
- α **Provides Energy Resilience**
- Ω **Remote Access and Monitoring Software**
- α **EPA Compliant**

Prototype



Why off the grid?

Charging Redundancy

No reliance to the Power Grid

Propane or CNG

On-Board/Virtual Pipeline

Instant Charging to Accommodate your Fleets Immediate Needs

Disaster and Evacuation Deployment

Leasing for Special Events, Municipalities and Private Entities

210 gallon on-board LP storage



Low Greenhouse Gas Emissions

Studies have shown that propane releases significantly less greenhouse gasses into the atmosphere when released into the air, or burned as fuel. This can have a profound measurable impact on total GHG emissions year-round. Propane has a lower carbon footprint, producing 38% fewer emissions than oil, with low carbon monoxide and hydrocarbon emissions.

Highly Efficient

Per litre, propane is generally cheaper than other fuel sources including electricity. Propane furnaces and other appliances have up to 90% efficiency or more in real-world scenarios. Propane appliances are usually highly efficient as well, making it even easier to use less fuel on average. Less fuel means less emissions, adding to our effort to protect the environment.

EPA Approved

As an Environmental Protection Agency (EPA)-approved clean alternative fuel, propane offers lower greenhouse gas emissions than many other energy options without compromising performance in a wide range of applications.

Low Carbon

Propane has a lower carbon content than fuel oil, gasoline, diesel, kerosene and ethanol. As mentioned above, this means it produces less GHG emissions and other environmental contaminants, as well as makes it non-toxic and more stable.



Natural gas is also a deregulated utility meaning that consumers have more control and choice over the price they pay. On top of those savings, appliances that use natural gas often have much lower operating costs than non-gas appliances, so making the switch to natural gas can save you even more.



Part of trying to reduce dependency on foreign oil means finding sources of alternative forms of energy here in America—and according to the FNGA, over 97% of the natural gas used domestically is produced here, in North America.

Installation and Infrastructure Considerations

Coordination of an electrician can take weeks and permitting are estimated between 4-12 months in some locations

Infrastructure design and construction for a new transformer may take two to three months

Design and construction of new distribution lines or substation upgrades could take six months or longer

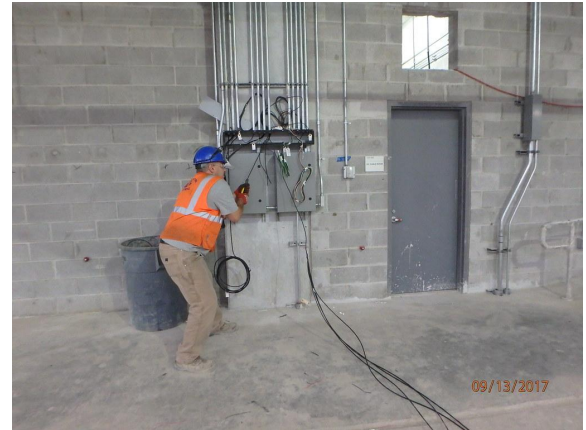
Cost of electrical wire alone has doubled

Boring and conduit runs are expensive

Constrained budgets of cities, companies and Governments often slows infrastructure construction

Grid tied ev charging is expensive and very time consuming, Most cases companies are having to hire or add the burden of responsibility to a novice administrator

Deploying EV Power Pods allows you to charge your fleet the day your vehicles arrive



$$\begin{aligned} \text{electric rate} &= \text{fixed charge (fixed fee per month)} \\ &+ \text{energy charge (\$ per kWh consumed in the month)} \\ &+ \text{demand charge (\$ per kW of peak demand in the month)} \end{aligned}$$

Duke Energy divides the rate by the total kWh consumed during a billing period. If the rate exceeds a predetermined cap in terms of \$/kWh, the bill is recalculated at the capped rate (kWh consumed * capped \$/kWh rate)

Additionally, companies and fleet operators expect utilities to meet the load growth from transportation electrification with new zero emissions resources and will be reluctant to embrace EVs if it is met by building new fossil fuel generating units

A big constraint has been, unfortunately, the utility programs require some pretty firm easements... the easement and some of the contractual terms are kind of deal breakers for property owners aiming to maintain flexibility of the real estate

Some fleet electrification efforts may require upgrades at the substation level of the distribution grid, creating further delays

As fleet operators continue to electrify, they need pathways to renewable energy, like markets that allow commercial customers to source from utility-scale renewable energy projects, utility facilitation of onsite generation, and green tariff programs

Examples of fleet vehicles



Transit Buses



Step Van



Cab Chassis

Category	BEV	BEV	BEV
Battery Size	135-395 kWh	60-125 kWh	145-207 kWh
All-Electric Range	140-160 miles	90-150 miles	100-155 miles
Example Fleet	<u>City of Denver</u>	<u>UPS</u> <u>FedEx</u>	<u>Frito Lay</u>

The more gasoline miles transitioned to electric miles, the faster the fleet can expect to see a return on their investment

The benefits of deploying a EVPP in fleet applications can be numerous, from reduced petroleum use and greenhouse gas emissions to lower fuel and maintenance costs

EVs cost significantly less to operate than ICE vehicles. The average fuel cost of an ICE vehicle is approximately 8-12¢ per mile, while using electricity to drive an EV costs 3.5¢ per mile on average

In 2020, EVs saved more than 50 Mt CO₂-eq of GHG emissions globally, equivalent to the entire energy sector emissions in Hungary in 2019

Electricity is generated from a diverse range of domestic fuels in the U.S., including coal, natural gas, nuclear power, and a half-dozen renewable energy sources

Delivery Vehicles

Amazon carbon neutral by 2040
Rivian Delivery van 150 miles
Fleet of 10,000 by 2022

IKEA is to deploy 40 trucks to service home delivery of the 5 boroughs 05-21
Goals are to be climate positive by 2030
Lightning eMotor electric class 4 commercial box trucks
105 kw 120 miles

Workhorse C1000 (2) battery packs for 35 kw range 100 miles
IKEA Parent company recently became minority partner of Fluid Truck



Parking

