Extended Range Electric Trucks

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The eREV Powertrain from VIA Motors

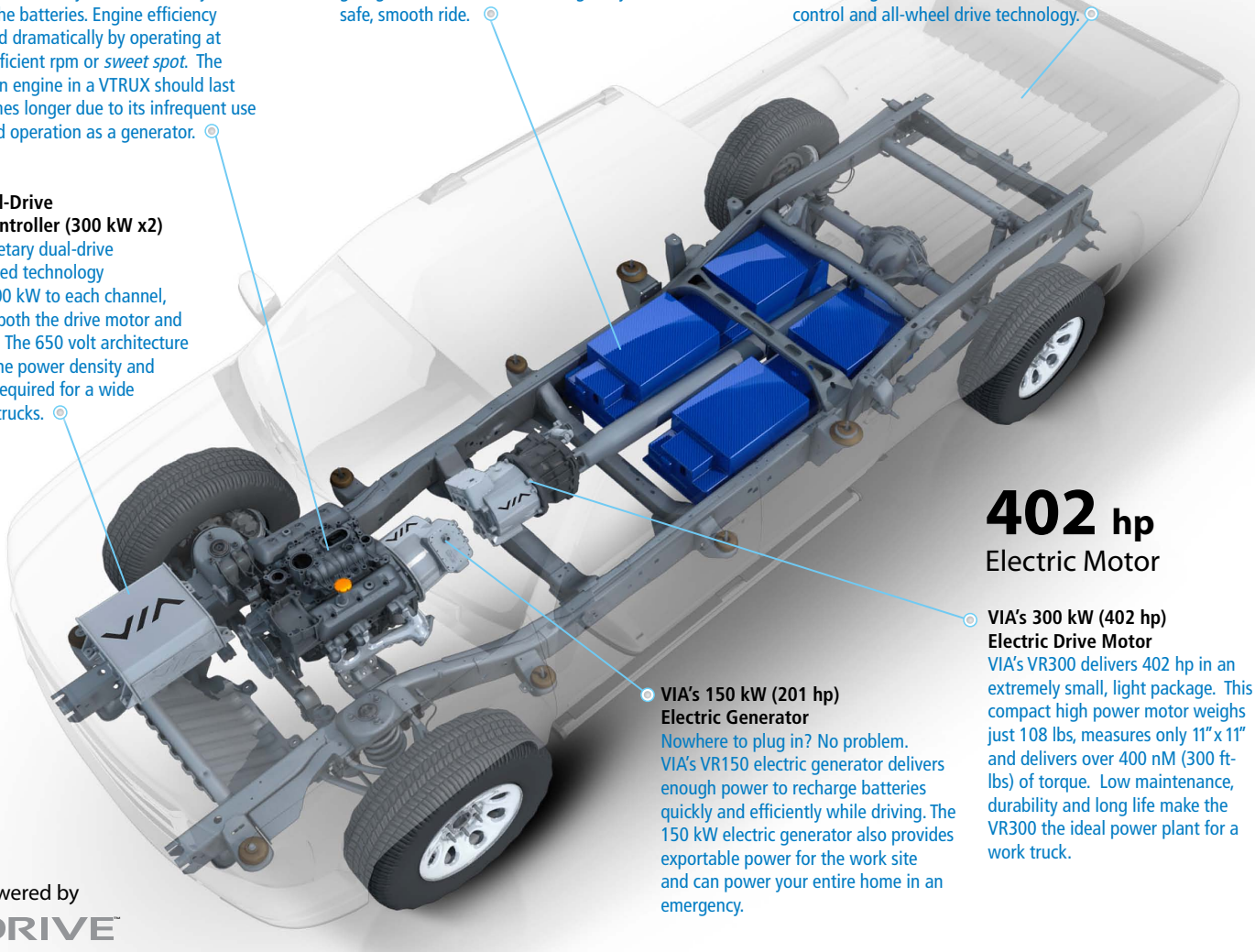
Extended Range Electric Vehicle

Gas/Electric Generator
The economical 4.3L V6 combustion engine is paired with VIA's electric generator to form a gas/electric generator set. The combustion engine is connected directly to the electric generator and is used only when needed to generate electricity to automatically recharge the batteries. Engine efficiency is improved dramatically by operating at its most efficient rpm or *sweet spot*. The combustion engine in a VTRUX should last up to 3 times longer due to its infrequent use and limited operation as a generator.

Advanced Li-Ion Batteries
The 24 kWh liquid cooled Li-ion battery pack delivers up to 40 mile, zero-emission battery range and many hours of quiet power export for the work site. The batteries are located under the bed, safely inside frame rails, giving the truck a low center of gravity for a safe, smooth ride.

Payload and Towing
The VTRUX Extended Cab has a curb weight of 5,500 lbs and a full size bed; delivering a 1,500 lb payload capacity. The 402 hp high-torque electric motor gives ample towing capacity. VTRUX are available in 2WD and 4WD configurations with automatic traction control and all-wheel drive technology.

VIA's Dual-Drive Motor Controller (300 kW x2)
The proprietary dual-drive liquid-cooled technology delivers 300 kW to each channel, powering both the drive motor and generator. The 650 volt architecture provides the power density and economy required for a wide variety of trucks.



402 hp
Electric Motor

VIA's 300 kW (402 hp) Electric Drive Motor
VIA's VR300 delivers 402 hp in an extremely small, light package. This compact high power motor weighs just 108 lbs, measures only 11"x 11" and delivers over 400 nM (300 ft-lbs) of torque. Low maintenance, durability and long life make the VR300 the ideal power plant for a work truck.

VIA's 150 kW (201 hp) Electric Generator
Nowhere to plug in? No problem. VIA's VR150 electric generator delivers enough power to recharge batteries quickly and efficiently while driving. The 150 kW electric generator also provides exportable power for the work site and can power your entire home in an emergency.

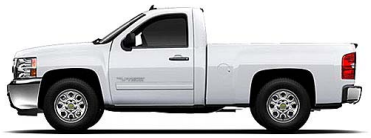
Powered by VDRIVE™

VIA's eREV powertrain is powerful enough for a variety of light trucks, SUVs and delivery vehicles.

VIA's eREV powertrain was designed to power many popular trucks, vans and SUVs that share a similar chassis.

VIA's 402 hp eREV powertrain can be designed to power a wide range of vehicles, up to class 6 trucks.

VIA Motors is a new kind of car company.
We build electric versions of your favorite trucks and SUVs.



Standard Cab

Extended Cab
First Production Model

Crew Cab

Driving on electricity

The eREV powertrain by VIA enables larger vehicles, including SUVs and light trucks, to drive the first 40 miles in all-electric mode with near zero emissions, and a full range of 300 miles on a single fill-up. For most drivers, this means over 100 mpg in typical local daily driving. It's exciting to drive — with more low-end torque. The electric truck performs as well as or better than the comparable gas version.

More efficient use of batteries

With 75% of drivers averaging less than 40 miles a day, most electric vehicles carry extra weight in costly batteries—VIA has optimized its battery pack, carrying only what's needed for most days. VIA's eREV truck generates its own electricity on longer trips using the onboard range extender.

Designed for how we drive

With 40 miles of battery range, most drivers won't burn any gas in a typical day. Driving 50 miles in a day, 40 miles on batteries and 10 miles with the help of the range extender, the typical driver would average about 100 miles per gallon in gas fuel economy. When driving beyond battery range, the VTRUX still gets significantly better fuel economy than the gas model.

Gas Fuel Economy	40 (75% of Drivers)	50	60	200+
Miles Driven per Day				
Gas Fuel Economy	Battery only	100 mpg	60 mpg	25 mpg

The vehicle gets 40 mpg using proposed EPA rating for extended-range electric vehicles by averaging battery range and charge sustaining mpg.

The best way to improve gas economy...
...is not to burn gas!

Performance Targets	eREV Truck
Acceleration (0–60 mph)	9.7 seconds
Electric Range	Up to 40 miles
Combined Range	300 miles (15 gal tank)
Charge Sustaining Fuel Economy	24 to 26 mpg
Max Vehicle Speed	85 mph
Horsepower (Traction Motor)	402 hp
Curb Weight	5,500 lbs
Payload	1,500 lbs
Gross Vehicle Weight	7,000 lbs

Powering America's Green Fleets

Ideal for fleets—cuts fuel costs by up to 75%

Up to 40 miles in all-electric mode and up to 300 miles using the range extender

The onboard generator provides a work site with 15 kW of exportable power

Enough mobile emergency power for you and your neighbors

The fuel economy of a Prius™ with the payload of a pickup.

VIA's eREV powertrain is ideal for America's fleets, cutting fuel costs by up to 75%, while dramatically reducing gas consumption and emissions. By recharging daily, the average driver could expect to refill the gas tank less than 10 times a year rather than once a week. It offers all the advantages of an electric vehicle without range limitations. Working with vehicle manufacturers, VIA is delivering eREV trucks to government and utility fleets.

Plug it in

Plug it into a standard outlet or charge in half the time with a 240 volt outlet or charging station. Driving in all-electric mode costs as little as 60 cents per equivalent gallon or about 5 cents a mile. In addition, VTRUX qualifies for a $7,500 federal tax credit and thousands of dollars in additional clean fuel credits in several states.

Gas it up

Gas it up and say good-bye to "range anxiety." VIA's new eREV trucks drive up to 40 miles on batteries then continue up to 350 miles, generating their own electricity using a fuel-efficient onboard generator or "range extender."

Exportable power for the work site

The VTRUX power export module option provides 15 kW at 30 amps of onboard mobile power. A utility grade output module, now in development, is designed to provide 50 kW of mobile emergency power to keep critical facilities online. With nearly $50,000 worth of mobile power built into VIA's work truck, some fleet customers say, "It's like getting a free truck with our generator!"

Power In

Use a standard charging station, or charge conveniently at home using a standard 110 or 220 volt outlet.

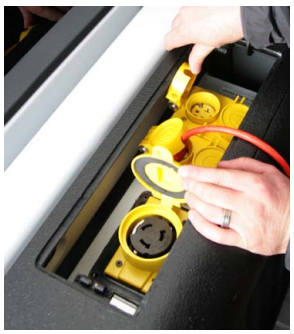
240 volt charger	120 volt charger
4 hours	8 hours

Get a quick charge through a charging station

Or charge with a standard 120 or 240 volt outlet

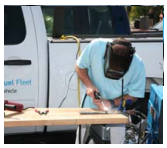
Power out

Power where you need it—at home or the workplace. 120 and 240 volt outlets right on the back of the truck provide easy access for work or emergency. Now you can plug your *house* into your *truck* in an emergency!



Onboard 120 & 240 volt outlets 15 kw @ 30 amp

Work site power



Enough power to run an arc welder all day

VIA Motors. A Better Way to Go.

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