



2019

Media Kit



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GS Motors

Hopkins, MN 

gsmotors.us

PERSONAL & COMPANY PROFILE

GS Motors is the only **used** car dealer in the Twin Cities dedicated to electric cars - or EVs.

The company's mission is to supply Minnesota residents with reliable used electric cars, making the technology more popular and accessible for those who care about our planet.

Pavel Ihnatovich is the owner of GS Motors. He launched the business in 2012 as a used car dealership, but a few years ago he began seeing an increase in inventory for EV lease returns. He tested the market for Used EVs and realized immediate success. He especially found interest from people wanting an affordable and reliable 2nd car.



In addition to the positive results from his original market test, Pavel also made his decision to enter the Used EV market for other reasons:

- **Matched his personal green philosophy.**
- **EVs are more economical to drive than gas or hybrid.**
- **Electric more reliable than gas or hybrid.**

Pavel was raised to be careful with nature. Growing up in Belarus his parents taught him to value and appreciate what he had because most everything was scarce. In addition, as a boy he became addicted to Jacques Cousteau specials – which were one of the limited TV shows available. This generated a sincere interest in doing his part to help protect the planet if he could.

A reflection of how Pavel walks the talk is that GS Motors is a member of Xcel Energy's Renewable Connect program. This program provides 100% of the electricity to GS Motors from locally sourced wind and solar generation facilities. That means their cars are fueled onsite by 100% clean and renewable energy.

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Jukka Kukkonen from **PlugInConnect** works as an EV consultant in Minnesota and sees the importance of Pavel and GS Motors to consumers in the emerging EV market. Jukka also coordinates the MN EV Owners group, which has become one of the largest and most active regional plug-in vehicle owner groups in the nation. Many group members have purchased their EVs from GS Motors, and Jukka relates, “I have heard only good things about Pavel’s business from our members.”

“... people can test drive and compare a variety of EVs at one location. This experience has given Pavel an edge in the market because he knows a variety of EVs well and can match the right EV for buyer’s use case.”

- Jukka Kukkonen, PlugInConnect



“GS Motors provides a rare opportunity for buyers to compare different EV makes and models. Because they’re not tied to a single brand, people can test drive and compare a variety of EVs at one location,” Jukka explains. “This experience has given Pavel an edge in the market because he knows a variety of EVs well and can match the right EV for buyer’s use case.”



AFFORDABILITY

Used EVs may be the least expensive vehicle option.

The relatively inexpensive purchase price of a Used EV combines with the evidence showing EVs have a lower cost of ownership than gas-powered vehicle.

Pavel realized that combining the relatively inexpensive purchase price of a Used EV with the volumes of evidence showing the lower costs of owning an EV instead of a gas-powered vehicle, makes a strong case for used EVs being one of the most affordable driving options available.

“It’s a Great Time to Buy a Used Electric Vehicle”.
 - Consumer Reports, August 31, 2018

A recent article in Consumer Reports was titled “It’s a Great Time to Buy a Used Electric Vehicle”. They suggest EVs are a great choice for a teenager commuting to high school. The combination of short trips to school and work mean that they’ll rarely draw the battery too far down, and they’d likely appreciate the big savings on gas. “Buying a recent model-year EV could be a cost-effective way to get a car with advanced safety features,” says Jake Fisher, director of automotive testing at Consumer Reports.

Forbes states that “Once you figure in the cost of ownership, especially maintenance and fuel, electric vehicles are a bargain despite the up-front price tag.” (“The Bottom Line on Electric Cars: They’re Cheaper To Own”, Forbes, October 24, 2017).

Because an EV’s maintenance requirements are fewer, the maintenance costs are lower:

Charging an electric car costs about half as much as fueling a gasoline-powered car. Using an average cost of \$2.50 per gallon of gasoline vs. \$1.10 per eGallon to charge an electric car, the energy cost is less than half (according to a tool developed by the Department of Energy which compares the cost of driving with electricity by state). In addition, Xcel offers special programs for charging vehicles overnight when electricity produced typically goes to waste.

“Once you figure in the cost of ownership, especially maintenance and fuel, electric vehicles are a bargain...”
 - Forbes, October 24, 2017

RELIABILITY

Fewer moving parts means less maintenance & greater reliability

As CarsDirect States (“How Reliable Is an Electric Car Engine?”, July 29,2019) “It’s the moving parts in a regular gasoline or diesel engine that tend to fail over time and can include anything from the pistons to the belts. The great advantage of an electric car engine is that it has no moving parts so these cannot fail in the same manner.”

“...electric car engines are far more reliable than their gas counterparts”

- CarsDirect, July 29,2019

The most common maintenance procedures in EVs are tire air pressure checks, adding windshield washer fluid, tire rotation, cabin air filter replacement and tire replacement.

Battery replacement will eventually be a cost, but most EVs come with a warranty of 8+ years for the battery. 80% of the GS Motors’ vehicles are lease returns so they typically have at least 5 years of battery warranty left.

There’s also evidence that battery life may be longer than anticipated. According to Green Car Report, data shows Tesla batteries have

- The electric motor has one moving part (a rotor) which is very reliable and requires little or no maintenance.¹
- The controller and charger are electronic devices with no moving parts, and they require little or no maintenance.²
- EV batteries use lithium ion, which are sealed and maintenance free. (However, the life of these batteries are limited and will require periodic replacement.)³
- The regenerative braking in an EV could also reduce costs by extending the life of brakes on electric cars. An electric motor is able to slow itself down, so the use of brake pedals is reduced, and brake pads and rotors last longer.⁴

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¹ How Do Gasoline & Electric Vehicles Compare?”, Advanced Vehicle Testing Activity, INL - U.S. Depart of Energy

² How Do Gasoline & Electric Vehicles Compare?”, Advanced Vehicle Testing Activity, INL - U.S. Depart of Energy

³ How Do Gasoline & Electric Vehicles Compare?”, Advanced Vehicle Testing Activity, INL - U.S. Depart of Energy

⁴ The Bottom Line on Electric Cars: They’re Cheaper To Own”, Forbes, October 24,2017

FAQs

What are the environmental impacts of driving an electric vehicle?

According to Green Car Reports, researchers estimate the average electric car has 54% lower lifetime carbon emissions than a traditional vehicle. By adding renewable energy through programs such as Xcel Energy's Windsource, you can opt to fuel your EV with 100% carbon-free electricity.⁵

How do you recharge a plug-in hybrid or an electric vehicle?

All electric vehicles come with a standard 120V charging cord (like your laptop or cell phone) that you can plug-in in your garage or carport. They also can charge using a dedicated charging station that operates at 240V. Many houses already have 240V available for electric clothes dryers. You can install a 240V charging station at home, and simply plug the car into the charging station. There are thousands of 120V and 240V public charging stations all over the country, and there's a growing number of even higher power fast-charging stations around the country. Many, but not all, electric vehicles are equipped to accept a high-power fast charge.⁶

How long does it take to recharge a plug-in vehicle?

It depends on how big the battery is, and whether you charge using a regular 120V outlet a 240V charging station, or a fast charger. Plug-in hybrids with smaller batteries can recharge in about 3 hours at 120V and 1.5 hrs at 240V. Electric vehicles with larger batteries can take up to 20+ hours at 120V and 4-8 hours using a 240V charger. Electric vehicles that are equipped for fast charging can receive an 80% charge in about 20 minutes.⁹

How much will it cost to equip a home to accommodate an electric vehicle?

It can cost as little as zero. Today's electric vehicles are capable of being charged from a standard 120-volt circuit, which every home has. So, a buyer can purchase a car, drive it home and charge it in a typical home outlet. However, **Mississippi Power** recommends using a dedicated 120-volt outlet to avoid overloading the circuit. For those who would like to charge their cars faster, there are higher-powered chargers available. However, because of the higher voltage, a permit may be required for the home installation of some of the faster chargers.¹⁰

⁵ https://www.xcelenergy.com/energy_portfolio/innovation/electric_vehicles/electric_vehicle_faq

⁶ <https://phev.ucdavis.edu/about/faq-phev/>

⁹ <https://phev.ucdavis.edu/about/faq-phev/>

¹⁰ <https://www.mississippipower.com/residential/products-and-services/electric-vehicles/electric-vehicle-faq.html>

How far can I drive on a charge?

Most electric vehicles are currently capable of about 100 miles of driving before they need to be recharged. The exception is the Tesla Model S, which can travel about 250 miles on a charge. Many automakers have announced plans to bring to market electric vehicles that promise longer range – around 200 miles on a charge.⁷

What happens to Electric Vehicle batteries when they reach end of life for the car?

Batteries have a limited life for electric vehicles. However, because they still have 70 percent of their capacity after electric vehicle use, there is a secondary market for them for home storage, streetlights, elevators, data centers and other uses. Once these uses have expired, the battery can be recycled to obtain reusable materials, such as lithium, cobalt, and nickel. But advanced processes are still needed to make recycling more economic. Several companies are working on the technology. However, if the electric vehicle market grows as these projections indicate, the resulting significant increase in the demand for battery and battery materials may be a major challenge for suppliers.⁸

Plug-In Hybrid vs. Pure Electric

Plug-in hybrid electric vehicles can operate on electric power alone for anywhere from 10 miles to 50 miles. Once their battery power is depleted, plug-ins transition from running on electricity to being powered by the gasoline engine mode to extend their range, allowing them to drive about as far as a regular car, and they can quickly refuel at a typical gas station.

Plug-in hybrids are an appealing option for drivers who travel mostly short distances and can benefit from operating on electricity most of the time. But those owners can still get the ultimate range of a gasoline engine when needed.

Battery electric vehicles are very efficient, and most newer models have enough range to satisfy the needs of a typical driver for multiple days without fully recharging. For most drivers, this means daily energy usage can be replenished from a simple 110-volt outlet, without the need to purchase and install a 240-volt charger. Battery electric vehicles have fewer components than a plug-in hybrid or an internal combustion engine vehicle, and so they often have lower maintenance costs—no oil changes necessary!¹¹

⁷ <https://phev.ucdavis.edu/about/faq-phev/>

⁸ <https://www.instituteforenergyresearch.org/renewable/the-afterlife-of-electric-vehicles-battery-recycling-and-repurposing/>

¹¹ <https://www.consumerreports.org/hybrids-evs/electric-cars-101-the-answers-to-all-your-ev-questions/>