DRIVING TOWARD AN ELECTRIC FUTURE

September 2020

It's not just about cutting emissions or saving the world: Driving an electric vehicle has practical and lifestyle benefits you may not anticipate.

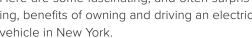


FOUR REASONS DRIVING AN EV IS AWESOME

Choosing to drive an electric vehicle makes more sense for more people with each passing year. Long gone are the days when EV ownership required a major lifestyle change. Cars on sale today, from an increasingly diverse set of automakers, are usually able to slot right into one's existing driving routines. In fact, EV ownership offers real advantages over a traditionally powered vehicle on a number of fronts.

On top of that, the New York Power Authority has committed \$40 million toward the expansion of the state's direct current fast charging (DCFC) electric vehicle infrastructure to ensure that there are chargers along key sections of major roads, in urban hubs, and at the airports. It's part of a statewide initiative to decarbonize the state's transportation sector — the leading cause of climate pollution.

Here are some fascinating, and often surprising, benefits of owning and driving an electric vehicle in New York.



BANG FOR YOUR BUCK

Day-to-day driving in an electric vehicle tends to be a lot more budget-friendly than a traditionally powered car simply because EVs are so efficient overall.

The Department of Energy's Alternative Fuel Data Center makes the point that, mile for mile, electric vehicles are simply far more economical than traditionally powered vehicles. "Depending on how they are driven, today's light-duty EVs (or PHEVs in electric mode) can exceed 100 miles per gallon equivalent," says the Department of Energy. That kind of mile-by-mile economy adds up quickly for those with longer driving cycles.

For example, the EPA's 2020 Fuel Economy Guide estimates that a compact car driver could spend up to \$3,300 per year on gasoline, while a standard pickup truck driver could hit \$3,900. (It's no wonder the EPA's list of 2020 "Fuel Economy Leaders" is littered with EVs.)

The longer the term, the better the return on one's EV investment too. Many of the "replacement parts" we associate with reqular vehicle maintenance simply don't apply to electric motors and battery packs. Replacing items like oil and oil filters, air filters, timing belts, spark plugs and head gaskets, all critical



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to anything with a gas engine, get crossed off the EV owner's list.

Significant rebates, especially in New York, help make this math work too. Federal tax credits are available from \$2,500 to \$7,500 depending on the vehicle; the New York State Energy Research and Development Authority offers a \$500 to \$2,000 Clean Rebate; E-ZPass commuters can even save daily with discounted rates on tolls.



There's nothing worse than rushing to get out of the house and heading through rush hour to work and then notice that your fuel gauge is on "E." Often that means heading to an extremely busy gas station, which can cause delays and stress.

Daily EV driving tends to mitigate most of this exposure. Being able to get your "fuel" at home or in pre-selected charging stations takes a lot of the guesswork and undesirable encounters out of the transportation experience. When you know you can fuel up overnight at home, you don't need to worry about running low during the day. And, with the growing number of DC fast chargers along key routes through New York (thanks to NYPA's EVolve NY program), there's less worry about being able to find a charging station if you need one.

There could be other benefits as well. Some owners, happy to skip the service station, report that simplifying the routine helped lead to healthier choices — like skipping that second sugary coffee drink, impulse candy and the like.

NEW FEATURES, FEW DEALER VISITS

One sneaky-great benefit of electric vehicles is that they tend to be packed with as much technology in the cabin as they have behind the steering wheel. But it's not all big infotainment screens and futuristic versions of cruise control. Over-the-air updates to software — offered in many EVs today and coming soon to a wide array of models — allow automakers to make major quality-of-life changes, and even improvements in capability (like range), with no visit to a service center needed. These vehicles are computer controlled, so optimizing software can make a world of difference.

Owners we spoke with compared it to getting an all-new operating system on your phone: The sudden wealth of features can make it feel like you have a brand-new device.

AN OASIS AMIDST THE RACKET

Anyone who's seen an electric vehicle glide past understands just how quiet these machines are while operating. In fact, a lot of emphasis and development have gone into making sure EVs make enough noise outside of the cabin to be safe around pedestrians. But behind the wheel, electrically powered vehicles have a distinct advantage over most cars and trucks when it comes to noise, vibration and harshness. Those of us who spend uncountable hours on I-95 will appreciate even a bit more peace and quiet.

Exploding fuel and expelling gases is a noisy business. By contrast, modern electric motors are virtually imperceptible. What's more, many EVs have been designed with a special emphasis on slippery aerodynamics, which aid their overall mission of efficiency. This quiet propulsion system inside a wind-cheating shape makes for a great space to listen to music, enjoy a podcast, talk with a friend and generally feel less stressed about driving.

JUST GETTING STARTED

These four benefits are just the start. EVs are fun to drive, reduce our overall carbon footprint, tend to be more stylish ... the list goes on.

