The Economics of Purchasing & Owning an EV

Funding and incentives for EVs can come from the federal and state governments as well as utilities. Here are a few tips to help you find and utilize your local funding sources.

**Federal**

A [federal tax credit](#) may be available for drivers purchasing new EVs. The credit amount ranges from $2,500 to $7,500. You must have purchased the car during or after 2010, and begun driving it in the year in which you claim the credit. Currently, the credit begins to phase out for a manufacturer when that manufacturer sells 200,000 qualified vehicles.

**New York State**

New York State offers a [Drive Clean Rebate](#), which discounts the price of EVs for consumers by up to $2,000 at participating new car dealers. [Participating dealerships](#) in NY are linked here.

There are also discounts on tolls for electric vehicle drivers, including the [Thruway Authority’s Green Pass Discount Plan](#), which offers a special 10% discount.

Although not a discount, the state has instituted a Clean Pass Program which allows drivers of electric vehicles to use the HOV lane of the Long Island Expressway regardless of how many people are riding. This greatly decreases the travel time for EV drivers. For more information and a list of eligible vehicles, check out this link.

**Utilities**

Your local energy utilities may offer incentives for EV drivers. Check out the list below to find what your utility offers for EVs:

<table>
<thead>
<tr>
<th>Con Edison</th>
<th>Central Hudson</th>
<th>National Grid</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYSEG</td>
<td>PSEG</td>
<td></td>
</tr>
</tbody>
</table>

“With liberal federal tax credit ($7,500), New York State incentive at the dealership ($2,000), PSEG Long Island’s high speed charger credit ($500) and an off peak charging incentive of three cents ($0.03) per Kilowatt hour, pure electric vehicles make perfect sense to purchase and own. Good savings in operating costs including maintenance is like icing on the cake.”

- Professor Yelleshpur Dathatri, Long Island NY, Hyundai Kona Electric driver
One commonly held misconception is that EVs are cost prohibitive. While this may have been true decades ago, the upfront cost of an electric vehicle is now competitive with that of their gasoline counterparts. Furthermore, this discrepancy is often covered by the maintenance and fuel savings of owning an EV.

**Upfront Costs**

Upfront costs EV costs are coming down quickly and may equal the cost of conventional vehicles sooner than expected. According to a September 2020 New York Times article, battery prices, which is typically the most expensive component, are dropping rapidly. Economists had projected that EV’s would be cheaper than gasoline modes by 2025, but now they’re looking at 2024 or perhaps earlier.

**Operating & Maintenance Costs**

One common misconception about EVs is that they are extremely costly to maintain. While this may have been true twenty years ago, EV owners today will see savings as early as their first year. According to a 2018 University of Michigan study, the average yearly cost of fueling an EV in New York was $708, while for a gas-powered car it was $1,200.

Electric cars are much cheaper to maintain than their gasoline-powered counterparts. According to AAA, electric vehicle maintenance costs come out to $0.0660 per mile driven. By comparison, a gasoline-powered medium-sized sedan and medium-sized SUV will cost $0.0918 and $0.0960 to maintain per mile driven, respectively. Electric cars have fewer moving parts (e.g., belts, crankshaft, fuel pumps, pistons) so they have fewer mechanical failures. They also don't require oil, radiator fluid, coolant, and other petro-chemical fluids that are used by a combustion engine (and are harmful for the environment when they're improperly disposed of!). These maintenance savings add up to, on average, about $800 per year. Over the life of owning a car, that could mean savings of $4,600!

Additionally, a comprehensive study by NYSERDA found that increased adoption of EVs would economically benefit EV owners. Depending on their location within the state, owning an EV could net drivers savings of up to $3,857 over a vehicle’s lifespan. EV owners are not the only beneficiaries of increased EV adoption, either; moderate adoption of electric vehicles would result in a statewide net societal benefit of approximately $5.1 billion.

**Charging**

If you’re looking to speed up the charging process, you may be able to purchase a “Level 2” at-home charger for your EV. This will reduce the charge time from 17-25 hours to 4-5 hours.

A Level 2 charger usually costs around $1,000 to purchase and install. However, that cost can vary from at little as $450 to as much as $2,200. Much of the cost comes from parts and labor for installing, which can vary widely depending on your location. For more information, check out our Electric Vehicle Charging Fact Sheet.

“I’ve absolutely saved money on fuel and maintenance. In the first year alone my savings were many thousands of dollars, since there’s been hardly any need to pay for charging except on long trips (supercharging is not free, but most public charging options are), and there’s been zero maintenance outside of tire rotations and a few repairs which are covered by Tesla. Oil changes are a thing of the past!”

- Jeff K., Queens NY, Tesla Model 3 driver

Photo credit: Jeff K.