

2015 Nissan Leaf — an all-electric car — FAQs

Why did we buy a Nissan Leaf? It is inexpensive compared to Tesla models and most other makes. We bought this car used in 2017 for \$12,500. It had only 11,845 miles. Furthermore, the Nissan Leaf has been in production since 2010, a long time for an electric vehicle (EV). The 2015 Leaf is a second-generation model.

Is an electric car more expensive than a gasoline car? Over the life of the car, EVs are often less expensive. The sticker price is higher, but the operating and maintenance costs are lower.

- Electricity is less expensive than gasoline. Furthermore, electricity can be generated in many ways, therefore EVs are not dependent upon a single type of fuel. In SD, it may be coal or wind power.
- An electric car has fewer moving parts and fewer liquids resulting in lower maintenance costs.
 - NO engine oil or air filter
 - NO fuel pump, fuel line, fuel tank, or fuel cap
 - NO catalytic converter or oxygen sensor
 - NO spark plugs, spark plug wires, or ignition coil
 - NO EVAP system (purge control valve or solenoid) or mass air flow sensor

Did anything surprise us? Yes.

- Performance. The Leaf—perhaps the least sporty EV—has fantastic performance. Acceleration is immediate, powerful, and smooth. There is no shifting. The handling is superb because the battery provides a low center of gravity.
- Convenience. We never need to stop at a gas station. We simply charge overnight in the garage using an ordinary outlet. We never need an oil change. (We did buy new tires.)

What else do we like about it?

- It is very quiet. In fact, it has a loudspeaker to make sound when driving slowly to protect pedestrians. It beeps like a truck when you back up and whirrs like the Jetsons' car at low forward speeds.
- It has no exhaust, no smell, and no danger of carbon monoxide poisoning.
- Regenerative brakes charge the battery.
- It is very clean under the hood—no engine oil.

What is the range of this model? That depends upon the temperature. In the summer, it is about 90 miles. In the winter, it is about 75 miles. It is our second car. We only drive it in Aberdeen—just a few miles per trip. We charge about once a week. NOTE: This is a 2015 Nissan Leaf, a relatively inexpensive and “older” electric car with a less impressive battery than more recent models.

Why does this car have a standard 12-volt car battery? To save money. The headlights, radio, electric windows, etc. are identical to those in gas-powered Nissans built at the same plant in Tennessee.

Have our electric bills risen? Negligibly. We charted our utility bills 2 years before we bought the car and 2 years after the purchase. We saw almost no difference. Home heating and cooling accounted for much larger rises and falls.

Can the battery freeze in extreme cold? No. The large lithium-ion battery has a heater that turns on when the air temperature falls below 0° Fahrenheit.