

Summerland Family Accesses an Electric Vehicle on a Budget Second-hand EV pays for itself in five years



Grant and Angela Evans got a used electric vehicle (EV) to get into the market. They wanted an EV for their second family car for the financial savings and reduced environmental impact.

In 2017 they bought a used, fully electric 2013 Nissan Leaf S. Features of this model include 135 kilometres in range, heated front/rear seats, and a heated steering wheel.

The recommended retail price on the Nissan Leaf S in 2013 was \$31,698. In 2017 when they bought it second hand it was \$6,700 USD with 40,000 kilometres on it. It cost them an extra \$5,800 to get it imported from a used car dealer in Portland, Oregon, so in total it was \$12,500 CAD.

"There was no way we could have afforded a brand new electric vehicle," Grant says. "However, we did not want to wait for prices to drop before getting into an EV."

At the time Grant says there were hundreds, if not thousands, of lease returns on Nissan Leafs in the western USA. There were some for sale around the Lower Mainland but he found them more expensive at about \$14,000-\$16,000CAD plus taxes. Since then Grant says demand for EVs has increased and so have the prices on used EVs in the US.

In making the decision, Grant crunched the numbers to see whether it really was financially doable to go electric. He worked out that they spent on average of \$2200-\$2400 per year on gasoline. He hadn't even gotten to comparing the maintenance costs when he knew electric was the better choice.

"I realized that if we purchased and drove the used Nissan Leaf for just five years, the car would have paid for itself," he says.

In the four years that the Evans have owned their Leaf their only maintenance has been replacing the tires, wiper blades, and topping up the windshield wiper fluid.

It took some convincing for Angela to switch to electric, even after test driving a friend's second-hand Nissan Leaf. But it has worked out. "My wife loves driving our Leaf more than any other vehicle we have owned previously," Grant says.

They mostly charge at home with their Level 2 charger. This uses a 240V outlet similar to what an electric oven uses and fully charges the Leaf in just over three hours. Many new EVs come with a Level 2 charger cable.

For the couple, doing their part to reduce their carbon footprint weighed heavily on them for daily commuting and taking their kids to their many activities. They now use their Leaf as much as possible and also have a gasoline-powered car as back-up.

Grant is a passionate EV driver and has a lot of knowledge on electric vehicles. He has many friends who have also gone electric, with two of them upgrading from first generation Nissan Leafs to Tesla Model 3s.

"I tell people that purchasing our Nissan Leaf was one of the best decisions we ever made for a car purchase," Grant says. "I explain the environmental benefits, the cost savings, and the driving excitement it brings. I have let numerous co-workers test drive my Leaf so they understand what it feels like to drive electric. They all end the drive with a smile on their faces."

The furthest Grant has taken the Leaf was on a 209 kilometre trip to Kamloops and back. He went with two friends who were also first generation Leaf owners. Their convoy stopped in Vernon to use the fast charger while they had a bite to eat. They then made it the rest of the way. On the way home, they decided to get adventurous and try coming home via Merritt.



"We knew it would be a stretch since the Coquihalla Connector has quite a climb and would use a great deal of juice," Grant says. This was before charging stations existed at the Loon Lake rest area on the connector.

They topped up the batteries in Merritt and headed out taking it very slow on the climbs. They had ideal conditions that did not require heat or air conditioning. They made it to Pennask Summit and were able to charge the batteries using regenerative braking all the way down the big hill into Peachland.

"I made it home with 6% battery remaining," Grant says. "It was quite an adventure."

There are now numerous options for people considering an electric vehicle to buy and Grant looks forward to their next one with more range. "Driving an EV is something I look forward to each day I sit in the driver's seat," Grant says.

Grant's list of what they love most about having an EV

1. Leaving each day with a 'full tank' to be able to get around.
2. Never having to go to a gas station (except to use the window squeegee on occasion)
3. Knowing that the vast majority of our driving is not as harmful to the environment.
4. Having very little maintenance to complete on the car.
5. The torque! That is how fast it accelerates from a stop. There is no engine to wind up to get peak power. The power is always available.
6. No requirement to warm up the car in winter. With an EV, I can turn on my car and whip up to speed on the highway within minutes without fear of damaging the vehicle.
7. The handling of the car. Because EVs are designed using a skateboard design in which the batteries are located beneath the floor of the vehicle between the front and rear wheels, it gives the car a very low center of gravity which means it handles very well on corners. Additionally, there are no nose dives! In most ICE (internal combustion engine) vehicles, the mass of the engine is in the front. When leaving a driveway to enter a roadway, the Leaf does not nose-dive like many traditional vehicles do.
8. Once you go electric, you won't go back! The vast majority of EV owners state that they will buy another. According to a survey that AAA conducted, over 96% of EV owners say they will purchase another one in the future. I have yet to meet an EV owner who says they will not buy another.
9. Savings! The financial savings of driving an EV are substantial. As previously mentioned, we are saving over \$2000 each year by not paying for gasoline for our Leaf.