

Presented by
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and
Nissan LEAF Owner

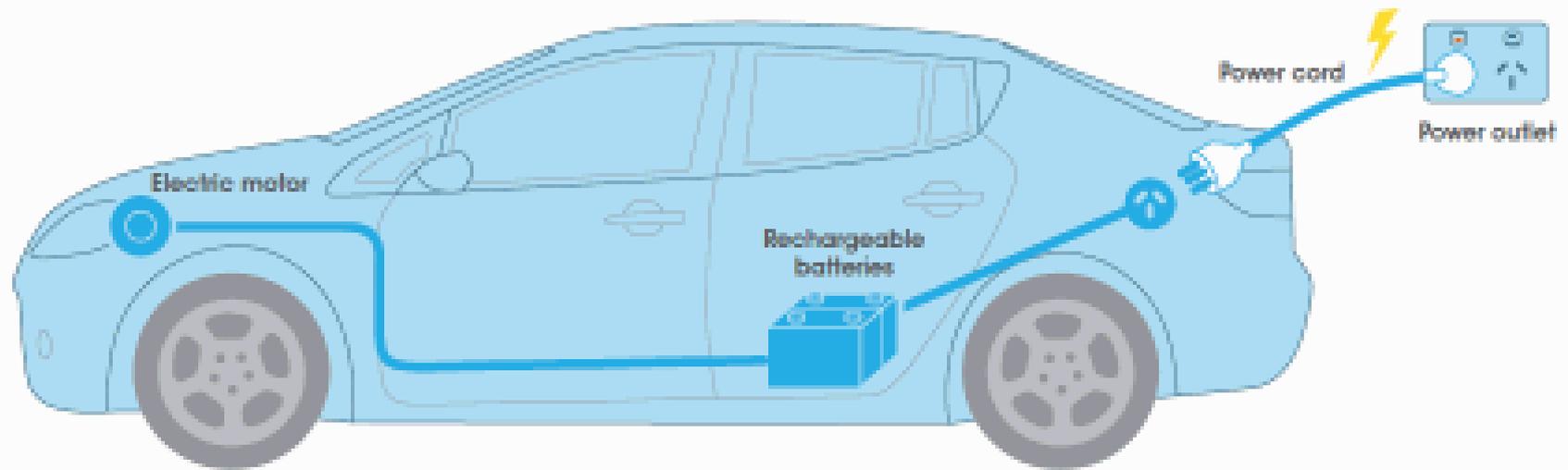
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What is an Electric Vehicle (EV)?

- Uses electricity as a power source
- Hybrid EV
 - Uses both a gas engine and an electric motor
 - Examples: Toyota Prius, Chevy Volt
- Battery EV
 - Large battery
 - Electric motor
 - No gas engine

How does an Electric Vehicle work?

- Charge battery at home, work, store, restaurant, etc.
- Electric motor draws power from battery
- Regenerative braking uses motor as generator to slow car and charge battery



2015 Nissan LEAF



Price: \$29-35K before \$7,500 tax credit
Range: 84 miles (EPA)

My 2012 LEAF

- Purchased a 2012 LEAF SL in April 2012
- Net cost was $\$39,500 - \$7,500 = \$32K$
- EPA range of 73 miles
- 30K miles in just over 3 years
- 20 mile round trip commute for first 3 years
- 80 mile round trip commute now

My Operating Costs

- Fuel costs
 - Annual Average = 5¢ per mile
 - Monthly Best = 4¢ per mile
 - Monthly Worst = 7¢ per mile
- Less maintenance
 - Only tires, brakes, wiper blades, and cabin air filter
 - No oil, spark plugs, air filter, exhaust system, etc.

Limitations

- Range – Best was 85 miles, max of 50 mph
- Range – Worst was 45 miles, winter w/ heater
- Range – Not practical for long trips
- Charging Time – 7 to 8 hours from empty
- Very Limited Public Charging

Risks

- Out of charge
 - Nissan provides 3-year roadside assistance
- Battery life
 - Nissan predicts 70-80% capacity after 8-10 years
 - Some LEAF owners in Arizona and Texas have lost 15% capacity after 1 year and 12,000-18,000 miles due to constant 120-140°F summer temps
- New technology
 - Battery chemistry
 - Electric heater, A/C, power steering, power brakes

What Would I Do Different?

- Not bother with Quick Charger port
 - Have never used it
 - Only at some Nissan dealerships (none in NH)
- In 2012
 - Still buy because lease was around \$400
- Now
 - I would lease (\$199/mo) or buy used (\$12-14K)
 - 2013+ has optional 6.6 kwh charger
 - 2013+ has more efficient heater