

5 reasons to like the Nissan Leaf

October 11 2010, By Jim Motavalli



Surprise, the Nissan Leaf is great fun to drive. Well, it's not all that much of a surprise: I'd driven two other cars with the Leaf technology under the hood, but this was my first go-round (through Central Park, of all places) in the actual production Leaf, one of just 17 in the U.S. right now.

We're on a countdown to delivery -- the first Leafs, costing \$25,280 after a \$7,500 federal tax incentive, will be delivered in December. Those owners are in for a treat, because the Leaf is a delight on nearly every level:

- It's really fun to drive. The [car](#) is almost preternaturally quiet -- you can't even hear the gentle motor sound it makes to warn pedestrians at speeds of 20 mph or less. And yet it surges ahead like, well, Lance Armstrong at the start of a bike race, on or off steroids. (Armstrong, the official spokesman for the Leaf, is the only American to actually have one right now.) The Leaf offers faster acceleration than you'd expect from 107 horsepower, a factor of its relatively light weight and aerodynamic design. There's very little regenerative braking effect unless you engage "Eco" mode, but there is a bit of comforting "creep" when you release the brakes at a stoplight. The handling is quite sharp, and the ride is nicely balanced -- even New York's potholes didn't upset it.
- The graphics and interface are cool. If you like cutting-edge video games, you'll be right at home. My favorite screen showed a map with a circle that encompassed your driving range -- your performance at the wheel helps determine how far you'll get. There's a nicely designed app for the iPhone (or any computer) that allows the driver to remotely stop or start a charge, as well as pre-heat or cool the car's cabin. A screen-based timer can be set to start charging late at night when rates are low, but you can override it with a touch of a button to start charging immediately. Does it have USB iPod access? Of course -- did you have to ask?



- The incentives are in place. Some Leaf owners will be luckier than others. Luckiest are in California, where a \$5,000 cash rebate gets the price down to around \$20,000. California is also doing more than any other state to put in a charging network. But other states are also getting involved: EV purchase subsidies of one form or another are also in place in Tennessee (where the Leaf will be built starting in model year 2013), Hawaii, Georgia and Colorado. Anyone can get the federal \$7,500 tax incentive, and also an up-to-\$2,000 tax credit to install a 240-volt charger. But that one expires Dec. 31 unless the dithering Congress manages to renew it. It's too bad we're not Chinese, because over there you can get \$8,800 for buying an EV.

- The economics make sense. According to Paul Hawsom, Nissan's product planning manager for sports cars and EVs, a 25-mpg car running on \$3 a gallon gas will cost 12 cents per mile to operate, or \$1,800 over 15,000 miles. The Leaf or comparable EV operating on electricity at the national average of 11 cents per kilowatt-hour will cost 2.6 cents per mile. That means \$396 over 15,000 miles. "The advantage exists even if

gasoline drops below \$1.10 per gallon," Hawsom said. And since there's no real purchase penalty to a subsidized Leaf, the savings start immediately.

- There are charging options. The Leaf will come with a 110 charger for any wall outlet, but that's a 16-hour slog. Nissan, with partner AeroVironment, will equip your garage for 240-volt charging that can be subsidized by that disappearing federal credit. Luckily, 240-volt charging (seven hours from when the warning light comes on) is standardized with the gun-shaped J1772 plug. Less sure is 480-volt fast charging, which takes just 30 minutes. Leafs in selected markets will be equipped for the Japan-developed CHAdeMO fast-charging standard, but the U.S. is still debating whether to go with that or not.

The Leaf and its ilk aren't for everyone. "If you do a lot of camping, it's probably not the vehicle for you," Hawsom said. Likewise if you tow a boat or need seven-passenger seating (though it seats five comfortably, with OK but not great rear legroom). And you'll need to live with the limited, 100-mile range, which could be less in weather extremes (when the heater or air conditioner are cranking, and the batteries are performing less than optimally). A lot of highway driving will affect range, too.

Nissan has 20,000 \$99 reservations in the U.S. In the first year, global production in Japan is set at 50,000, which could mean that the allocation and the reservations line up neatly. Production capacity should ramp up quickly, because Nissan is planning to add both battery and car plants in Europe and the U.S. Battery capacity in conjunction with NEC will far exceed car capacity, because the companies are planning to supply battery packs to other carmakers. All in all, it sounds like a workable plan.

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