

ELECTRIC CARS ... WHAT'S OUR POTENTIAL?

Oregon is in an excellent position to lead in electric vehicle (EV) ownership. Here's why: Five states, including Oregon, have joined the U.S. Department of Energy funded "The EV Project."

The three-year project will install charging stations in Portland, Salem, Corvallis and Eugene. Individuals who participate in the research project will purchase Nissan Leafs and Chevy Volts, with free residential chargers provided. Starting in 2011, researchers will track their habits and usage.

The state has about 400 registered EV cars on the road now, according to DMV and the Oregon Department of Energy. By 2013, ODE predicts oil will hit \$200 a barrel and gas will cost \$6 a gallon. By 2022, state officials believe there could be 170,000 EVs in Oregon. Where those car owners live (and possibly vacation) will depend on whether they have access to charging infrastructure.

For rural Oregon and areas such as Coos Bay/North Bend, the opinions are mixed on whether EVs will become common or widely viable.

How they work

The Nissan Leafs are zero-emission 100 percent electric and have about a 100-mile range. The Volts are plug-in hybrids. They run up to 40 miles on a charge, and then gas kicks in and the Volts operate like traditional hybrids.

FEEDBACK

Emerging Technology is a quarterly newsletter. It's part of the Oregon International Port of Coos Bay's ongoing efforts to analyze trends and prospects for emerging industrial opportunity.

To receive a copy, e-mail to newsletter@portofcoosbay.com



WANT TO LEARN MORE?

[The EV Project](#)
[Ecotality](#)
[Oregon Electric Vehicle Assoc.](#)
[Shorepower Technologies](#)
[Nissan Leaf](#)
[Chevy Volt](#)
[Honda Clarity](#)
[Tesla Motors](#)

Charging stations

Commercial charging station development prices vary based on power usage and indoor vs. outdoor installation.

- **Cost:** Indoor units cost \$5,000 to \$10,000. Outdoor units cost \$15,000 to \$50,000, depending on the level of charge.

- **Construction:** Pedestals are free standing or stations are wall mounted.



EV Project Photo

- **Stations:** Oregon wants to put in 2,000 stations. Level 2 stations can charge a vehicle within 4 to 6 hours at 220-volt power. A Level 3 (440-volt) plug-in can charge a car to 80 percent in 20 minutes.

- **Factoids:** 75% of charging is done at home or work. An EV owner will pay up to \$1.50 to charge a car overnight.

South Coast potential

- **What's available?** Dealerships in Coos Bay will be selling a few EVs, including the Nissan Leaf and Chevrolet Volts.

People who purchase EVs and live in Coos County must install home chargers. The new Coos Bay fire station has two chargers available for public use.

State officials seem dubious about the South Coast seeing much development for EV use. Private industry is more optimistic.

- **Tourism?** Right now the two leading EVs have a 100-mile range. They won't make it here from Eugene.

Private charging station developers suggest rural communities adopt a destination mindset on charger locations. For tourists, it would make sense to put interim charging stations in Reedsport and Florence. Chargers should be in central locations, such as shopping malls, motels and downtowns.

- **Rural commute?** Oregon's EV car association members think it's practical, if people can charge at work or in town. The Volt plug-in hybrid concept makes it more feasible if chargers aren't available around town.

Tax incentives

- **Federal:** Possible plug-in vehicle credit up to \$7,500.
- **Oregon:** Offers up to \$1,500 in credits for personal electric vehicle purchases. There's also a 35% tax credit for businesses and a low-interest loan program.



EV Project Photo