Researchers say charging stations key to electric cars

IDAHO FALLS, Idaho (AP) — An Idaho National Laboratory study has found that widespread adoption of electric vehicles could reduce the country's gas consumption, but that the availability of charging stations will determine if more people buy.

The report looks at research from 2011 through 2013 and is the most comprehensive study of electric vehicles and charging usage ever conducted, according to the Post Register (http://bit.ly/1Lf8GXu). The research was conducted for the U.S. Department of Energy, which is pushing for more widespread adoption of plug-in electric cars.

"Widespread adoption of plug-in electric vehicles has the potential to significantly reduce our nation's transportation petroleum consumption and greenhouse gas emissions," INL researchers wrote.

Researchers collected data from thousands of charging stations as well as more than 8,000 Nissan Leafs, Chevrolet Volts. They also collected data from electric vehicles in car-sharing fleets in 22 cities.

The report found that charging stations should be in places where vehicles spend long periods parked, including homes and workplaces, as opposed to where gas stations are. It also found that home charging stations could be made more efficient and cost effective, such as having owners charge during off-peak hours.

The report found that 85 percent of charging took place at drivers' homes, with charging primarily taking place at workplaces otherwise.

Volt drivers tend to drive more electric-powered miles in a year on average than Leaf drivers, despite having less battery capacity. Researchers said this is in part because the Volt has a traditional backup engine, allowing drivers to feel more confident running down their battery.

Information from: Post Register, http://www.postregister.com

Copyright 2015 The Associated Press