

Electric Vehicles in Nevada

Plug-in electric vehicles (PEVs) are fun to drive and provide significant benefits to the American economy not just through the domestic manufacturing of the vehicles, but also through additional jobs in the electric power industry for the energy to operate them. ^{1,2} The increased use of domestic electricity in the transportation sector promotes national security by reducing our dependence on imported oil. These vehicles keep the U.S. competitive with China and the Europe Union, which are both movingly aggressively towards full deployment of the vehicles and nationwide charging systems.

There are currently over 3,683 PEVs on Nevada roads today, with the market ready to expand as new vehicle makes and models become available in Nevada.³ As these vehicles are a win-win for Nevada, it's no surprise that consumers want more of these vehicles today.

Policies in Nevada for PEVs

Policy support at the federal, state and local levels is needed as the PEV market continues to develop and grow. Below is the most current list of PEV policies in Nevada:

HOV Lane Access Policy: According to Nevada law NRS 484A.463, the NV Department of Transportation can adopt regulations to allow PEVs to access HOV lanes.⁴

Utility Charging Rates for PEVs: NV Energy offers a specific EV charging rate with reduced prices from 10pm - 6am.⁵

License and Registration Policy: PEVS are exempt from emissions testing.⁶

Parking Policy for PEVs: According to Nevada law NRS 484A.468, local authorities may choose to exempt PEVs from



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parking fees. The City of Reno has already established an Alternative Fuel Vehicle Parking program; PEVs are exempt from parking fees with the proper permit displayed. The City of Las Vegas also has an Alternative Fuel Vehicle Parking program; qualified PEVs are eligible for free metered parking at any city-enforced parking facility with the proper permit.

Other: NV Insurance companies may offer discounts on PEVs.

Fun Facts for PEVs in Nevada

 Colorado, Utah and Nevada are building a regional electric vehicle corridor that will include Interstates 70, 76 and 25 across Colorado; Interstates 70, 80 and 15 across Utah; and Interstates 80 and 15 across Nevada. In total, the charging network will connect more than 2,000 miles of highway.⁷

¹ Currently, the U.S. manufactures PEVs and other advanced technology vehicles and components in at least 20 states, creating thousands of new, good jobs. Furthermore, the auto industry has distribution centers, sales offices and operational facilities in all 50 states; the PEV industry is a part of the same distribution, sales and operational network and is difficult to separate from the main auto industry. More at: http://sierraclub.typepad.com/compass/2012/06/fuel-economy-jobs.html

² PEVs include battery-electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs). The BEVs are charged by electricity from the local grid, while PHEVs drive on electricity from the local grid first, then on gasoline for longer trips

³ https://autoalliance.org/in-your-state/NV/

⁴ https://www.leg.state.nv.us/nrs/NRS-484A.html#NRS484ASec463

⁵ https://www.nvenergy.com/renewablesenvironment/EV/electricVehicle.cfm

⁶ http://www.dmvnv.com/emission.htm

⁷ https://www.colorado.gov/governor/news/governors-colorado-utah-and-nevada-announce-joint-action-build-regional-electric-vehicle



- NV Energy and the Nevada Governor's Office of Energy will be adding charging stations on US route 95, between Las Vegas and Reno (1 DC fast charger and 2 level 2 chargers).⁸
- PEV drivers can expect to save between \$1,000 and \$1,300 annually on fuel costs, which equals between \$11,600 and \$17,100 over the life of the vehicle, depending on the price of gasoline. The total economic benefit to the state of Nevada in reduced fuel costs could reach \$138 million per year by 2030.9

Benefits for Every Driver in Nevada

The benefits of PEVs accrue to all residents in Nevada, regardless if the driver is in an urban or metro area. Top benefits include:

- 1. **PEVs put money back in the pockets of consumers.** On average, fueling a car with electricity is roughly the same as gas at \$1 per gallon, thanks to a PEV's performance efficiency and the lower cost of electricity. Maintenance costs are also significantly reduced.
- 2. All drivers in Nevada have the ability to charge. PEVs can be charged on a standard 120V wall outlet, also called Level 1 charging. ¹¹ Faster charging can be achieved at the home or workplace with Level 2 charging. ¹² The map at the right shows the public charging stations that are currently available to all Nevada drivers. ¹³ The orange icons are DC Fast charging stations, and the green icons represent public Level 2 charging stations. It is possible to get nearly anywhere in the state with a PEV, proving that these vehicles can work for all Nevada drivers.
- 3. **PEVs are significantly better for the local economy**. PEVs are fueled from electricity from the local grid, which is cheaper for all consumers. Money not spent on gas or on maintenance can be invested back into the local economy.



Current public charging stations available to all Nevada drivers.

4. **PEVs improve air quality and reduce health care costs.** Poor air quality is still a problem for many U.S. states. ¹⁴ PEVs produce far fewer tailpipe emissions than a standard gasoline-powered vehicle, therefore significantly reducing dangerous air pollution. With more PEVs on the roads, public and private health care costs can be greatly reduced.

About Plug In America

Plug In America is the nation's leading independent consumer voice for accelerating the use of plug-in electric vehicles in the United States to consumers, policymakers, auto manufacturers and others. Formed as a non-profit in 2008, Plug In America provides practical, objective information collected from our coalition of plug-in vehicle drivers, through public outreach and education, policy work and a range of technical advisory services. The organization conceived National Drive Electric Week. We drive electric. You can too. www.pluginamerica.org

⁸ https://www.nvenergy.com/renewablesenvironment/EV/EVhighway.cfm

 $^{^9\,}http://energy.nv.gov/uploadedFiles/energynvgov/content/Programs/SWEEP_Economic_and_AQ_Benefits_of_EVs_in_NV-Sept_2014.pdf$

¹⁰ http://energy.gov/eere/eveverywhere/ev-everywhere-saving-fuel-and-vehicle-costs

¹¹ Level 1 is AC charging at 120V, the level of power that is supplied by a normal household outlet. This will supply up to 40 miles of range for an 8-hour connection during a typical work day. That's enough to replenish the charge for the majority of Nevada drivers.

¹² Level 2 is AC charging at a power level similar to what is supplied by an outlet for an electric dryer, typically 240V.

¹³ Zooming in further shows even more charging stations available. PlugShare is one platform that tracks charging station locations, prices and types of charging at each location. Drivers can download the PlugShare app to a mobile phone for free.

¹⁴ http://www.lung.org/our-initiatives/healthy-air/sota/key-findings/