

## Electric Vehicles in Oregon

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.<sup>1,2</sup> 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 moving aggressively towards full deployment of the vehicles and nationwide charging systems.

There are currently over 11,910 PEVs on Oregon roads today, with the market ready to expand as new vehicle makes and models become available in Oregon.<sup>3</sup> As these vehicles are a win-win for Oregon, it's no surprise that consumers want more of these vehicles today.

### Policies in Oregon 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 Oregon:

**Charging Station Incentive:** The Alternative Fuel Vehicle Infrastructure Program provides a residential tax credit up to 50% of the cost of the charging station, not to exceed \$750. Businesses may receive a tax credit up to 35% of the cost of the charging station. Business applications are due December 31, 2017.<sup>4</sup>

**Utility Charging Rates for PEVs:** Portland General Electric does not yet offer an EV specific charging rate. However, PGE recommends EV customers switch to the time-of-use rate plan to take advantage of lower off-peak night rates.<sup>5</sup> The utility has proposal on transportation electrification with the utilities' Commission as of 2017.



Lincoln City, Oregon National Drive  
Electric Week 2016

### Fun Facts for PEVs in Oregon

- The Northwest Economic Research Center estimates that the economic activity from the OR EV industry creates 1,169 jobs, in addition to the 411 full-time jobs created directly for a total impact of 1,579 jobs. The industry generates gross economic activity of \$266.56 million, a total value added of nearly \$148 million and provides over \$89 million in total employee compensation.<sup>6</sup>
- Oregon adopted the California vehicle fuel economy standards, one part of which includes a "Zero Emissions Vehicle Mandate." This mandate requires automakers to sell or purchase credits for a certain number of PEVs in Oregon. The OR market will begin to see a significant increase in PEV makes and models available in the state starting in 2018.<sup>7</sup>

<sup>1</sup> 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>

<sup>2</sup> 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

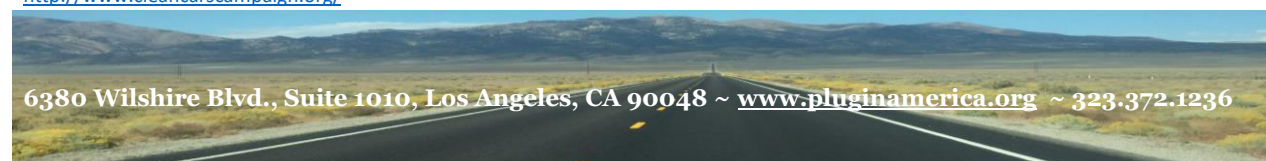
<sup>3</sup> <https://autoalliance.org/in-your-state/OR/>

<sup>4</sup> <http://www.oregon.gov/energy/at-home/pages/alternative-vehicle-charging-fueling.aspx>

<sup>5</sup> <https://www.portlandgeneral.com/residential/electric-vehicles-charging-stations>

<sup>6</sup> <https://www.pdx.edu/nerc/sites/www.pdx.edu/nerc/files/NERC%20EV%20Industry%20Final%20Report%202013.pdf>

<sup>7</sup> <http://www.cleancarscampaign.org/>

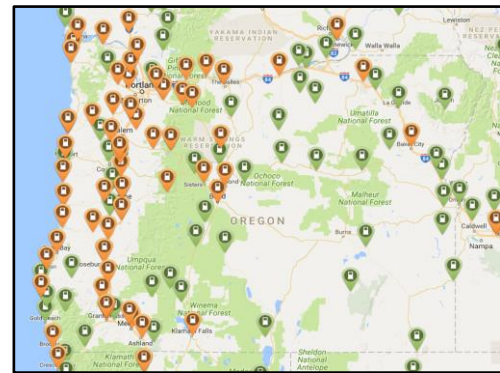


- Based on an estimated 5,000 EVs on the road in Oregon, plug-in vehicles are save Oregon drivers more than \$3 million a year in fuel costs and prevent the burning of 1.3 million gallons of gasoline and the emission of 9,000 tons of global warming pollution annually.<sup>8</sup>

## Benefits for Every Driver in Oregon

The benefits of PEVs accrue to all residents in Oregon, 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.<sup>9</sup> Maintenance costs are greatly reduced.
2. **All drivers in Oregon have the ability to charge.** PEVs can be charged on a standard 120V wall outlet, also called Level 1 charging.<sup>10</sup> Faster charging can be achieved at the home or workplace with Level 2 charging.<sup>11</sup> The map at the right shows the public charging stations that are currently available to all Oregon drivers.<sup>12</sup> 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 Oregon 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.
4. **PEVs improve air quality and reduce health care costs.** Poor air quality is still a problem for many U.S. states.<sup>13</sup> 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.



Current public charging stations available to all Oregon drivers.

## 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. Our expertise represents the world's deepest pool of experience of driving and living with plug-in vehicles. The organization conceived National Drive Electric Week and has advanced workplace charging by pioneering ride-and-drive events at such leading corporations as Google, Mattel and Paramount Pictures. We drive electric. You can too.

[www.pluginamerica.org](http://www.pluginamerica.org)

<sup>8</sup> <http://www.ucsusa.org/sites/default/files/attach/2015/03/How%20Oregon%20Can%20Benefit%20from%20Electric%20Vehicles.pdf>

<sup>9</sup> <http://energy.gov/eere/everywhere/ev-everywhere-saving-fuel-and-vehicle-costs>

<sup>10</sup> 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 Oregon drivers.

<sup>11</sup> Level 2 is AC charging at a power level similar to what is supplied by an outlet for an electric dryer, typically 240V.

<sup>12</sup> 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.

<sup>13</sup> <http://www.lung.org/our-initiatives/healthy-air/sota/key-findings/>

