Electric Vehicles in Nevada

Economic Benefits

Consumers Savings & New Jobs

Electric vehicle (EV) owners pay the equivalent of $1 per gallon to drive their EVs. In Nevada, EV drivers can expect to save between $945 and $1,264 annually on fuel and maintenance costs, totaling between $11,000 and $15,000 over the life of the vehicle. On a macro-economic scale, these savings stimulate the state economy and create new jobs. In a high-growth EV scenario with 650,000 EVs on the road in 2030, the total economic benefit to the state of Nevada in consumer savings could reach $720 million per year and create approximately 6,150 new jobs.

Keep Energy Spending in Nevada

Nevada does not produce any oil for motor vehicle consumption, so virtually all of its transportation fuel is imported from outside the state at an estimated $2.72 billion every year. As Nevada transitions its transportation fuel source from gasoline to electricity, those energy dollars stay inside the state economy.

Lower Electric Bills for All Nevadans

Managed EV charging will shift most charging to off-peak demand periods, which will allow more efficient use of generating capacity, make it easier to integrate renewables, and exert downward pressure on electricity rates for all customers. Electricity customers in Nevada can expect long-term savings, regardless of whether they own an EV.
Electric Vehicles in Nevada

Emissions Benefits

Air Quality Benefits

Electric vehicles (EVs) reduce harmful tailpipe emissions compared to gas-powered vehicles, which improves local air quality and lowers healthcare costs. Clark and Washoe Counties face ozone and particulate challenges, and light-duty vehicle emissions are a significant source of pollutants that contribute to this problem.

Criteria Pollutant Emissions: Electric Vehicle Compared to a Gas-Powered Car

<table>
<thead>
<tr>
<th></th>
<th>VOCs</th>
<th>NOx</th>
<th>PM 10</th>
<th>PM 2.5</th>
<th>SO2</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric</td>
<td>-99%</td>
<td>-84%</td>
<td>-34%</td>
<td>-58%</td>
<td>-51%</td>
<td>-99%</td>
</tr>
<tr>
<td>Gas-Powered</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Climate Benefits

Electric vehicles are only as clean as the electricity grid that charges them and Nevada is home to the cleanest electricity grid in the Southwest. As the Nevada grid continues to transition away from fossil fuels and toward renewables, EVs will get even cleaner each year. In 2017, an EV in Nevada produced the equivalent greenhouse gas (GHG) emissions as a 101-mpg gas-powered car, a number that will double to 207-mpg in 2030. A high EV scenario with 650,000 EVs on Nevada’s roads in 2030 would remove 1.6 million metric tons of CO2 per year and have the same climate benefit as retiring one of the two 250 MW coal-fired generators at North Valmy Power Plant, the last utility-owned coal plant in Nevada.

Nevada Electricity Grid Mix

- Natural Gas 20%
- Renewables 5%
- Hydroelectric 5%
- Coal 70%

GHG emissions equivalent to 101 mpg gas car

2017

GHG emissions equivalent to 207 mpg gas car

2030

January 2019

For more information visit www.swenergy.org/publications/transportation