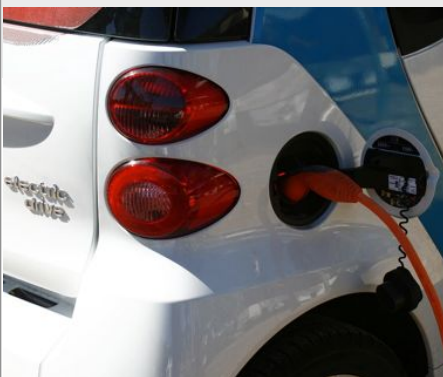


TRANSPORTATION ELECTRIFICATION IN THE NORTHWEST

Early in the 20th century, petroleum became the dominant fuel for cars, buses, trucks, vans, marine vessels, and railroads. While natural gas plays a role in commercial fleets, electricity and other renewable fuels are poised for expansion of use in transportation, thereby linking more closely the transportation and utility sectors.

It's a transition from which the Northwest, which is blessed with low-emission electricity, is uniquely positioned to benefit.



Benefits

- **Reduced greenhouse gas emissions:** Electric Vehicles powered by combined cycle natural gas electricity generate 40% fewer emissions on a lifecycle basis than the average gas car. Vehicles fueled by hydropower or other renewables generate 85% fewer emissions.
- **Improved air quality:** EVs powered by wind, water, solar, and natural gas release 50% fewer air toxics than conventional gas and diesel vehicles, according to one major study.
- **Greater efficiency:** To go one mile, EVs require less than one quarter of the energy of the average gas car, and less than one half of the energy of a high-efficiency hybrid.
- **Financial savings:** Electricity is cheaper than gasoline and its price is more stable, saving the average driver about \$1,100 in annual fueling costs.
- **Economic growth and jobs:** Money saved by consumers and businesses will be spent in other sectors creating jobs and commerce.
- **Greater energy security:** Using domestic electricity reduces reliance on foreign oil.
- **Electric-generating capacity already exists:** By concentrating recharging activity during off-peak hours, the Northwest grid is capable of powering up to 2 million EVs without requiring additional power generation.
- **A more stable utility business model:** Many utilities are seeing relatively flat electric loads, and some utilities are currently seeing declines, so new transportation business offers the opportunity to sell a few more kilowatt hours, increase net utility revenue and help put downward pressure on rates.

To realize these benefits, the region must be proactive and deliberate in promoting the transformation. Policymakers, utilities, regulators, industry stakeholders and public interest advocates must work together to accelerate adoption of electric and renewable powered vehicles.

For more information, please contact NWEK senior policy associate JJ McCoy at jj@nwenergy.org.

(206) 621-0094 www.nwenergy.org

Policy and Program Recommendations

- **Implement local, state and federal programs** to create electric charging stations in multi-family housing units, workplaces and garages, and in neighborhoods that lack off-street parking.
- **Provide clear legal authority** for Northwest utilities to participate in transportation electrification.
- **Ensure equity for low-income people and communities** by creating income-targeted vehicle incentives and require utilities to extend charging infrastructure to low-income neighborhoods.
- **Make Transportation Electrification programs incremental** to existing energy efficiency programs and renewable energy investments.
- **Establish fair charges and rates** for transportation-sector electricity that reflect utility system costs and do not unnecessarily burden users nor cause significant rate increases for low-income households and other customers.
- **Amend building codes** to make it easier to install charging infrastructure.
- **Encourage utilities to invest** in home, apartment, condominium, workplace, industrial, public, and highway fast-charge locations.
- **Help utilities develop charging strategies** such as time-of-use rates and charge management programs to insure that the bulk of recharging activity takes place during off-peak periods.

FACTS

- Chevrolet announced that its 2017 all-electric Bolt EV has an EPA-approved range of 238 miles.
- Americans have purchased more than 500,000 plug-in electric vehicles since 2011.
- Many EV's consume less than one-third the energy of a 35 MPG gasoline-powered car and less than half the energy of a 50 MPG hybrid.



To read the Coalition's full white paper on transportation electrification entitled "Building Good Load to Reduce Carbon Emissions: Getting Northwest utilities more involved in widespread transportation electrification", please visit: <http://tinyurl.com/transportationelectrification>

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