

## SOAP Action Update

### Electrifying Snohomish County's Fleet



#### Why electric vehicles?

Over the last few years, Snohomish County has been replacing old fleet vehicles with all electric, plug-in vehicles. In the fall of 2011, the County purchased five Nissan Leaf electric vehicles and installed electric vehicle charging stations at seven county facilities. Since joining the fleet, the County's Nissan Leaf vehicles have travelled over 32,000 miles and saved the county over 1,500 gallons of gasoline<sup>1</sup>. That's enough gasoline to fill up 1/5 of a tanker truck<sup>2</sup>!

The County's all electric vehicles have additional benefits beyond the fuel savings and time at the pump. Vehicles with internal combustion engines are a significant contributor of air pollution and greenhouse gases. In fact, the transportation sector contributes more than 25% of all greenhouse gas emissions in the United States<sup>3</sup>. Electric vehicles help to meet some of the County's transportation needs without generating any emissions from combustion engines. Two of the County's seven electric vehicle charging station locations have solar panels on site which are designed to off set the power needed to charge vehicles, further reducing the impact of the electric cars.

[For more information about electric vehicles, visit this link on the Department of Energy's website.](#)

[More information about the County fleet hybrid electric vehicles and use of alternative fuels can be found in the Sustainable Operations Action Plan and 2010 Sustainability Update.](#)

<sup>1</sup> Uses the 2011 weighted average combined fuel economy of cars and light trucks combined of 21.4 miles per gallon (FHWA 2013).

<sup>2</sup> Calculated using the EPA's greenhouse gas emissions calculator at <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>.

<sup>3</sup> EPA. <http://www.epa.gov/climatechange/ghgemissions/sources/transportation.html>

### environmental goals

Snohomish County is working to achieve the energy and resource conservation goals established in our internal Sustainable Operations Action Plan (SOAP) for government operations. Increasing electric vehicle use in the County fleet is one example of how we are taking action to achieve our SOAP Goals and Objectives, namely:

- **Goal 2:** Reduce Greenhouse Gas Emissions from County Operations
- **Objective 2E:** Reduce greenhouse gas emissions from County operations to 20% below 2000 levels by 2020.
- **Objective 2F:** Continue to increase the percentage of alternative-fuel vehicles in the County's fleet to the greatest extent feasible when vehicles need to be replaced.

### environmental benefits

Establishing electric vehicle infrastructure for Snohomish County's fleet has.....



Avoided the purchase of 1,517 gallons of gasoline to date<sup>1</sup>. That's the equivalent of 31.4 barrels of oil<sup>2</sup>.



Avoided 13.5 metric tons of carbon emissions that would have otherwise been released by internal-combustion engines<sup>2</sup>.

### economic case

By taking action to achieve Snohomish County sustainability goals, and increasing electric vehicle use, the county realizes an economic benefit as well.

- Electric cars have saved nearly \$6,000 in gasoline to date at \$3.89/gallon.
- Electric cars are expected to save \$45,000 over the life of the vehicle in reduced fuel consumption and maintenance costs.