

Reduced Idling at Truck Stops A Truck Stop Electrification Pilot Project on Oregon's I-5



State of Oregon
Department of
Environmental
Quality

What is Truck Stop Electrification?

The concept is relatively simple: instead of idling truck engines during mandated safety rest periods, truck drivers can connect to a truck side service unit that provides power for their comfort and work needs. Systems now available on the market provide power for heating or cooling the sleeper compartment, electricity for personal appliances and in some cases, phone service, movies on demand and internet access.

Why Is Reducing Truck Idling Important?

Over 10,000 trucks travel the I-5 corridor every day in Oregon. When drivers stop for safety rest periods, they often have little choice but to leave their engines running to provide power for basic comfort services like heat and air conditioning and to provide power for other systems. Idling like this



increases fuel costs for truckers, adds wear and tear on the engine and generally adds to overall transportation costs. It also creates diesel emissions which are known to be harmful to human health and CO₂, a global warming contributor. Reducing idling with technologies such as truck stop electrification, is a "win-win" for truck drivers, truck stop operators and the community as a whole.

What Is The Pilot Project?

Governor Kulongoski designated an Oregon Solutions Team to look at the issue of reducing truck idling at truckstops in an effort to reduce the impact of diesel emissions and global warming gases. Oregon Solutions (www.orsolutions.org) projects develop sustainable solutions through the collaborative efforts of

businesses, government, and non-profit organizations. Project team leaders at the College of Engineering and the Institute for Natural Resources at Oregon State University (OSU) brought university researchers together with The Climate Trust, the Department of Environmental Quality (DEQ) and the Oregon Department of Energy (ODE) to take advantage of a federal funding opportunity. This \$200,000 EPA SmartWay Transport Partnerships grant is leveraging over \$6 million in on-the-ground investment by utilizing Oregon's Climate Trust and Energy Tax Credit and loan programs. Truckstop projects are being funded by EPA in California and Washington too.

This project's goal is to "electrify" 600 commercial truck parking spaces along I-5 in Oregon, out of about 2,000 spaces in this portion of the corridor. When completed, the project will result in the following annual savings:

- 3.1 million gallons of diesel fuel;
- \$1.8 million to truck drivers and trucking companies in avoided fuel costs and reduced engine wear;
- \$6.6 million in avoided public health costs and environmental benefits
- more than 900 tons of carbon monoxide, hydrocarbon, particulate matter and nitrogen oxides
- 33,000 tons of carbon dioxide, a global warming contributor.

How Will This Be Accomplished?

OSU researchers will develop a site prioritization method with DEQ. The Climate Trust will run a solicitation for participation from truck stops and technology providers, and will negotiate agreements with participants in the projects. OSU will develop and implement a monitoring, evaluation and assessment system, and survey community and user response.

How Can I Get More Information?

For more information about the project, call Kevin Downing, DEQ at 503-229-6549.

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