WEST COAST COLLABORATIVE
Public-private partnership to reduce diesel emissions

The goal of the Collaborative is to leverage federal funds to strategically reduce emissions from the most polluting diesel sources in impacted communities. The Collaborative seeks to improve air quality and public health by targeting the highest polluting engines with the most cost effective control strategies.

Oregon On-Board Shore Power Truck Idle Reduction Rebate Program

What is the Oregon On-Board Shore Power Truck Idle Reduction Rebate Program?

Through the On-Board Shore Power Idle Reduction Rebate Program, approximately 60 trucks that travel along the I-5 Corridor will be retrofitted with idle reduction technologies. This program plans to leverage other projects aimed at developing on-ground infrastructure for idle reduction technologies.

Why is this project important?

This project will support the use of electrified truck stops along the I-5 corridor on the West Coast. Truck Stop Electrification projects have been initiated in Washington, Oregon and California over the past year. By providing innovative financing to truck companies and drivers, this project will increase the number of existing trucks that have the on-board infrastructure to utilize those electrified spaces, reducing emissions of particulate matter (PM) and nitrogen oxides (NOx) and other air pollutants.

In children, air pollutants like particulate matter (PM) and nitrogen oxides (NOx) have been linked with asthma and bronchitis, and high levels of the pollutants have been associated with increased school absenteeism and emergency room visits.[1]

PM is the microscopic soot emitted by diesel engines. Public health authorities associate exposure to PM with an increased risk of premature death, greater number of hospital admissions for heart and lung disease, and amplified adverse respiratory symptoms such as asthma. Long-term exposure to diesel exhaust may also pose a lung cancer hazard to humans. Recent studies of children's health conducted in California have demonstrated that particle pollution may significantly reduce lung function growth in children because particulate matter becomes embedded in the deepest recesses of the lung where it can disrupt cellular processes.[2]

NOx are a major contributor to ozone formation (a precursor to smog) which affects human health and damages crops and the natural environment. NOx also exacerbate global climate change through their contribution to "greenhouse gases." Other recent studies reveal how elevated ozone levels are linked to the onset of asthma in exercising children, and ozone can damage the respiratory tract, causing inflammation and irritation, and induce symptoms such as coughing, chest tightness, shortness of breath, and worsening of asthma symptoms.[3]

What are the estimated environmental benefits of this project?

Reducing idling will not only significantly reduce emissions, but will also reduce the amount of fuel consumed, saving trucking companies money and reducing our dependence on foreign oil.

This project is expected to result in the following benefits over a five-year period:

- → 80 tons of NOx emissions reduced
- → 2.4 tons of PM emissions reduced
- → 5,640 tons of CO2 emissions reduced

How is this project funded?

Through EPA, the Collaborative is providing $100,000 in support of this project. In addition, $120,000 will be provided in matching support from the State of Oregon Department of Energy Business Energy Tax Credit and rebates from technology manufacturers.

[1] Bailey, Diane. Plenys, Thomas. Solomon, Gina. Campbell, Todd R., Ruderman Feuer, Gail. Masters, Julie and Tonkonogy, Bella. (March 2004). "Harboring Pollution: the Dirty Truth about U.S. Ports." Natural Resources Defense Council. p. 3.

[2] American Lung Association of California and Cal-EPA Air Resources Board. (January 2004). "Recent Research Findings: Health Effects of Particulate Matter and Ozone Air Pollution." Website accessed July 2005: http://www.arb.ca.gov/research/health/fs/PM-03fs.pdf

[3] ibid

What is the Oregon Department of Energy Business Energy Tax Credit?

The Oregon Department of Energy offers the Business Energy Tax Credit to those who invest in energy conservation, recycling, renewable energy resources and less-polluting transportation fuels. The tax credit is 35 percent of the eligible project costs – the incremental cost of the system or equipment that is beyond standard practice. You take the credit over five years: 10 percent in the first and second years and 5 percent each year thereafter. If you cannot take the full tax credit each year, you can carry the unused credit forward up to eight years. Those with eligible project costs of $20,000 or less may take the tax credit in one year. Through 2003, more than 7,400 Oregon energy tax credits have been awarded. Together, those investments save or generate energy worth about $215 million a year.

What is the Collaborative?

The West Coast Collaborative is an ambitious partnership between leaders from federal, state, and local government, the private sector, and environmental groups committed to reducing diesel emissions along the West Coast. Partners come from all over Western North America, including California, Oregon, Washington, Alaska, Arizona, Idaho, Nevada, Hawaii, Canada and Mexico. The Collaborative is part of the National Clean Diesel Campaign (www.epa.gov/cleandiesel).

How can I find out more about the Collaborative?

For more information about the West Coast Collaborative, please contact Peter Murchie (murchie.peter@epa.gov, 503-326-6554), or visit our website at www.westcoastcollaborative.org.