

Summary of major diesel emission reduction projects in Washington State¹ - October, 2008

<p>Washington State Local Government's Diesel Retrofits Grants Cities, counties, ports, and transit authorities are retrofitting their diesel fleets with funding from the Washington Department of Ecology. Ecology granted about \$4.8 million in awards to 50 recipients to retrofit more than 1000 vehicles. The retrofits, combined with the use of ultra-low sulfur diesel, reduce diesel emissions from each vehicle by 40 to 90 percent. The program also provided idle reduction equipment for transit buses.</p>	<p>Washington State Clean School Bus Program Ecology and the state's seven local air quality agencies have retrofitted about 5,600 school buses with emission reducing technology. The state legislature granted \$28.9 million over six years to retrofit 100% of school buses suitable for retrofits. The retrofits, combined with readily available ultra-low sulfur diesel, reduce emissions on individual buses by 40 to 90 percent. A portion of the funding has also been used to retrofit public fleet vehicles.</p>
<p>Washington State Ferries' Clean Fuel Initiative With funding from EPA and the Puget Sound Clean Air Agency, Washington State Ferries began a year-long pilot test of ultra low sulfur diesel (ULSD) on the M/V Elwha. Completing this pilot test helps users understand whether marine diesel engines can effectively burn ULSD over the long-term. It will also eliminate three tons of sulfur dioxide and approximately one-half ton of particulate matter.</p>	<p>Washington Department of Transportation Maintenance Vehicle Retrofits in Yakima With an \$84,000 EPA and Ecology grant, the Yakima regional air agency worked with the WSDOT to reduce over 30 percent of its engine and exhaust emissions on 29 maintenance vehicles. Vehicles include dump trucks, sweepers, and loaders that operate around the city of Yakima.</p>
<p>Washington State Clean Diesel Grant Program Beginning in 2008, the Dept. of Ecology expanded grant eligibility to privately owned diesel engines that serve a public function, such as garbage collection trucks, and those that are operated at or serve ports, such as cargo handling equipment and drayage trucks. Ecology will grant about \$2 million to retrofit 350 garbage and recycling trucks, 200 port drayage trucks working at NW ports and nearly 200 pieces of cargo handling equipment at the Ports of Tacoma and Seattle.</p>	<p>Locomotive Idle Reduction Four Tacoma Rail switchyard and short haul locomotives were retrofitted with idle reduction equipment in 2006 using Dept. of Ecology and Tacoma Rail funds. Over a five year period this will save 400,000 gallons of diesel and reduce 2.5 tons of PM, 75 tons of NOx and 4,500 tons of CO₂, a greenhouse gas. Four more Tacoma Rail locomotives are slated to get idle reduction equipment in 2009. In 2003, using public and private funds, the Burlington Northern Santa Fe Railway also retrofitted three switchyard locomotives with idle reduction equipment in Vancouver, Washington.</p>
<p>The Puget Sound Clean Air Agency's Diesel Solutions Program The Diesel Solutions Program, an initiative to make diesel engines in the Central Puget Sound region significantly cleaner, has installed over 2,000 retrofits in nearly 50 school districts with funding from the State's School Bus Program. They have also utilized more than \$780,000 in EPA grants and other funding to retrofit 1,260 public fleet engines and provide funding for other regional diesel emission reduction projects.</p>	<p>The Princess Cruise Shore Power Project at Port of Seattle In 2004, the EPA, Princess Cruises, Port of Seattle, Puget Sound Clean Air Agency, and Seattle City Light invested in shore power technology so that two cruise ships don't have to run diesel engines while docked at port. Approximately 35 metric tons of turbine engine fuel will be eliminated per ship call by connecting to shore side power, reducing the air emissions from dockside cruise ships in Seattle by more than a third.</p>
<p>The Puget Sound Maritime Air Emissions Inventory and Diesel Emissions Reduction Project With \$410,000 in an EPA grant and matching funds, the Puget Sound Maritime Air Forum has developed an activity-based inventory of all maritime-related air emission sources in the Greater Puget Sound region. This information was used to develop the NW Ports Clean Air Strategy (CAS) in 2008. Implementation of the CAS is currently in progress.</p>	<p>Washington Department of Transportation Uses Biodiesel in Maintenance Vehicles In 2005, WSDOT started using five percent biodiesel (B5) mixed with regular diesel in maintenance vehicles operating in the Central Puget Sound area. B5 is now being pumped at 16 WSDOT fueling stations. By 2009, WSDOT plans to use 20 percent biodiesel (B20) in all feasible applications.</p>
<p>The Truck Idle Reduction Project 76 Truck Electrified Parking (TEP) spaces have been installed at two truck stops in Washington with funds from the EPA, Ecology, Climate Trust and private companies. This is part of a joint effort to reduce idling along the West Coast. A total of 236 parking spaces in Washington and Oregon will be electrified, saving an estimated five million gallons of diesel over five years. In addition, a tax incentive is available for installing TEP or purchasing TEP equipment.</p>	<p>Washington Department of Transportation Maintenance Vehicle Retrofits and Idle Reduction in Puget Sound In 2006, the Puget Sound Regional Council approved \$1.5M in federal funding for WSDOT to install engine filters and exhaust retrofits on about 150 vehicles and replace power burning incandescent lights with light emitting diodes (LED) on about 700 vehicles. LED's reduce pollution by allowing lights to work with the engine shut off.</p>

¹ Information provided by the U.S. Environmental Protection Agency, the Washington Department of Transportation, the Puget Sound Clean Air Agency and the Washington Department of Ecology