



WEST COAST COLLABORATIVE

A public-private partnership to reduce diesel emissions

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

Innovative Energy Solutions for a Vibrant Environment and Economy

Projects and activities that reduce energy use and greenhouse gases, while increasing alternative fuel production and demand, play an important role in improving our national security by making us less energy dependent, supporting vibrant rural economies and improving our environment.

Reducing the use of traditional petroleum products in on-road and non-road heavy duty engine fleets in the West is an important priority for the West Coast Collaborative. These reductions are accomplished in two primary ways: utilizing technologies and practices to reduce fuel use and supporting the production and use of renewable and alternative fuels.

West Coast Collaborative Long-Term Goals Related to Energy Security and Greenhouse Gas Reductions

Support Energy Security and Greenhouse Gas Reductions by:

- Using 10% cleaner fuels (biodiesel, natural gas, electric) relative to total diesel fuel by 2015
- Utilizing EPA's SmartWay Transport Partnership to virtually eliminate on-road, locomotive and where appropriate non-road heavy duty diesel idling (ports, corridors, distribution locations)
- Facilitating the development of renewable/alternative fuels and energy efficiency strategies that are cost effective and support economic development in the West

Measures and Measurement tools for Energy Security Goals:

- Percentage breakdown of fuel types produced and sold (annual)
- Tracking renewable fuel production in the region (annual)
- Number of vehicles retrofitted with Auxiliary Power Units (compared to total number)

- Number of Truck Stop Electrification locations
- Number of organizations with idle reduction programs

Examples of West Coast Collaborative Energy and Greenhouse Gas Reduction Projects

The West Coast Collaborative has prioritized supporting energy and greenhouse gas reduction projects, including developing a biofuels guide for fleet managers, demonstration projects for the production of biofuels, information sharing and incentives to promote demand for biofuels, implementing idle reduction programs and technologies including Truck Stop Electrification, Auxiliary Power Units, Aerodynamic and decreased road friction technologies. To date the EPA through the Collaborative and the national SmartWay program has awarded over \$3.4 million in grants for energy efficiency and alternative/biofuels related projects.

The examples below represent a sampling of energy-related West Coast Collaborative supported projects (additional information can be found at <http://www.westcoastcollaborative.org/projects.htm>).

Energy Efficiency/Reduced Fuel Use Projects:

Trucking and Locomotive (Freight Movement)

- **Implementing the SmartWay Package on the I-5 Corridor from Mexico to Canada:** The EPA selected Cascade Sierra Solutions to receive a \$200,000 grant to work with trucking owner operators and fleet owners to provide innovative financing to put SmartWay technologies on long haul trucks that operate along the I-5 corridor.
- **Oregon On-Board Truck Electrification Project:** The EPA selected the Oregon Department of Energy to receive a \$100,000 grant to provide incentives to long haul truckers to add on-board equipment that would allow them to plug at truck stops to supply power for quality of life and operational needs.
- **Everybody Wins:** The EPA SmartWay program selected Lane Regional Air Pollution Authority to receive a \$500,000 grant to provide incentives to long haul truckers operating in Oregon and along the I-5 corridor to put on SmartWay idle reduction and fuel use improvement technologies.
- **I-5 Corridor Truck Stop Electrification Program:** The EPA SmartWay program selected recipients in

Washington, Oregon and California to receive a total of \$400,000 to put in electrified truck spaces along the I-5 Corridor.

- **Locomotive Idle Reduction Demonstration Project:** The EPA SmartWay program selected Southwest Washington Clean Air Agency to receive a \$85,000 grant to demonstrate the effectiveness of Auxiliary Power Units and automatic shut down/start up technologies on switcher locomotives in Vancouver Washington.

Ports and Marine Vessels

- **Electric Hybrid Yard Hostler Demonstration Project:** The EPA selected the Port of Long Beach to receive a \$300,000 grant to demonstrate the use of electric hybrid yard hostlers at the Port. (leverage: \$600,000)
- **Electrification of Port Gantry Cranes Project:** The EPA selected the Port of Tacoma to receive a \$75,000 to demonstrate the effectiveness of electrifying all of their gantry cranes.
- **Cruise Ship Shore Power Project:** The EPA selected the Puget Sound Clean Air Agency to receive a \$50,000 grant to support the City of Seattle, Port of Seattle, Seattle City Light and Princess Cruise Lines putting in shore side power for Cruise ships to plug into while berthing at the Port of Seattle. (leverage: \$1.5 million)

Agriculture

- **Diesel Pumping Efficiency Program:** The EPA selected the Center for Irrigation Technology, California State University, Fresno, for a \$50,000 grant to provide low-cost pump efficiency tests; retrofit research; and incentive rebates for retrofit and repair of six inefficient agricultural pumps in the San Joaquin Valley. The project will reduce nitrogen oxide (NO_x) by an estimated 19.8 tons annually.
- **Direct Seed No Till:** The EPA selected the Upper Columbia Resource Conservation District to receive a \$100,000 grant with support from USDA NRCS to provide incentives to farmers to use direct seed/no till practices in Washington State. Direct seed/no till substantially reduces the number of passes needed to farm a crop thus reducing fuel use and emissions.

Other

- **NW Hybrid Electric Medium and Heavy Duty Engine Program:** The EPA selected King County to receive a \$250,000 grant to work with their municipalities to offset the cost of purchasing ultra-clean new Hybrid Electric medium and heavy duty engines for their public fleets.

Alternative Fuels and Biofuels Projects:

Production

- **Fields to Fuel San Joaquin Valley Biodiesel Project:** EPA selected Sustainable Conservation to receive a \$100,000 grant to test the effectiveness of a new fuel additive in reducing nitrogen oxide (NO_x) emissions from biodiesel use in America's most productive agriculture region, the San Joaquin Valley.
- **Biomethane to Vehicle Fuel Project:** The EPA selected Western United Resource Development, Inc. to receive a \$400,000 grant to demonstrate the feasibility of converting dairy lagoon waste into usable natural gas for their delivery trucks.
- **Biodiesel from Fuel Crops in Hawaii:** The EPA selected Honolulu Clean Cities to receive \$100,000 to demonstrate the feasibility of growing biofuels feedstock on unused agriculture land.
- **Alaska Fish Oil Biodiesel Project:** The EPA selected the Alaska Energy Authority to receive a \$200,000 grant to demonstrate the potential of producing usable biodiesel for rural Alaska power generation from fish processing waste.

Use

- **Biodiesel Federal Users Guide:** West Coast Collaborative and the Federal Network for Sustainability have created a biodiesel buying guide for federal fleet managers.
- **Bridging the Biodiesel Gap -- From Boutique to Mainstream Alternative:** The EPA selected the City College of San Francisco to receive a \$200,000 grant to work with distributors and trucking companies in San Francisco to promote the use of biodiesel in the local trucking sector.
- **Washington State Ferries Biodiesel Demonstration Project:** The EPA selected the Puget Sound Clean Air Agency to receive a \$51,000 grant to demonstrate the use of biodiesel in the Washington State Ferry System.
- **LNG Yard Hostler Demonstration Project:** The EPA selected South Coast Air Quality Management District to receive a \$100,000 grant to demonstrate the feasibility of Liquid Natural Gas Yard Hostlers at the Port of Long Beach CA.
- **Bio49:** The EPA selected the Northwest Energy Technology Center to receive \$70,000 to work with Puget Sound Energy and BC Hydro to use locally produced biodiesel in the utility trucks that operate along the US/Canada border.

For more information about the West Coast Collaborative, please visit our website at <http://www.westcoastcollaborative.org>.