



WEST COAST COLLABORATIVE

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.

Marine Vessels & Ports Sector Overview

The West Coast Collaborative Marine Vessels & Ports Workgroup shares information and funding opportunities for innovative diesel emission reduction projects and policies.

Sector Partners and Strategies

Sector Partners

The West Coast Collaborative Marine Vessels & Ports Workgroup is a collaboration between EPA Regions 9 and 10, state and local governments, port authorities along the West Coast, and stakeholders from the environmental and industry communities.

Sector Strategies

The Sector explores opportunities to share information and leverage funding for a variety of activities and projects to reduce diesel emissions. In addition, the Marine Vessels & Ports Workgroup serves as a primary source of information exchange and venue for facilitated strategic discussions regarding current regional and international marine-related issues. Topics include proposed state, national, and international legislation; new and emerging technologies; and voluntary programs and activities.

Sector Activities

Information Sharing

The Sector fosters information sharing among partners on current issues, technologies, and other relevant topics through:

- Bi-monthly conference calls
- Yearly face-to-face meetings
- A web-based technology clearinghouse
- Conferences (e.g. Faster Freight – Cleaner Air)
- News and Events on the collaborative website

Regional Collaboration

Due to the diffuse nature of air pollution, the issue of diesel emissions requires regional and cross-state collaboration to create sustainable solutions. The Sector works to facilitate communication and foster relationship building among stakeholders. In addition, the Sector supports the following regional collaborations addressing diesel emissions in tandem with Sector activities.

San Pedro Bay Ports Clean Air Action Plan

The San Pedro Bay Ports CAAP brings together the Ports of Los Angeles and Long Beach to reduce diesel emissions and the subsequent health effects in the region, while still allow port development and growth. The Ports work together under this plan to reduce particulate matter pollution as well as NO_x and SO_x emissions through mandatory requirements and voluntary incentive programs.

Northwest Ports Clean Air Strategy

The Northwest Ports Clean Air Strategy seeks to reduce air pollution in the Puget Sound-Georgia Basin region through a partnership between the Ports of Seattle and Tacoma in Washington State, the Vancouver Port Authority in British Columbia, and regional air agencies on both sides of the border. This strategy sets targets for reductions in diesel emissions and then builds on past successes to define a menu of voluntary actions and programs to meet the targets.

International Issues

The Sector also facilitates partnerships with international ports and stakeholders to address diesel emissions through policy changes and complementary programs and activities.

The Sector serves as the primary information exchange for a potential application to the International Maritime Organization (IMO) for a North American West Coast Sulfur Emissions Control Area

(SECA). The SECA team is led by the California Air Resources Board (ARB), EPA, and Environment Canada. The SECA team collects technical information that would support a North American SECA application.

The Sector facilitates discussions and uses an integrated approach to support key international policies including the U.S. proposal to amend the IMO Marine Pollution treaty to enact stricter worldwide standards.

The Sector is also launching a Northwest and Pacific Rim Ports and Marine Vessels Air Quality Partnership, which will create and further partnerships between West Coast ports and partner Asian ports, culminating in the implementation of a joint diesel emissions reduction project.

Funded Projects

Since 2004, funding has allowed the West Coast Collaborative to fully or partially support six local and regional maritime efforts to reduce diesel emissions. Newly funded projects are anticipated for 2008.

Demonstration Projects

Liquefied Natural Gas Port Equipment Demonstration Project

This demonstration project is in place at the Port of Long Beach, and retrofits three yard hostlers (small trucks for on-site container movement) with liquefied natural gas engines to test the relative emission-reduction and cost effectiveness.

Port of Long Beach Hybrid Yard Hostler Demonstration and Commercialization Project

This project funds the research and purchase of three hybrid yard hostlers for the Port of Long Beach. In addition to analyzing the economic and environmental performance of these vehicles, the project also develops the business case for wider use of hybrid yard hostlers in and out of the marine sector.

Holland America Cruise Vessel Seawater Scrubber Demonstration Project

This project uses funding to design, develop, and install a seawater scrubbing system for a 1,500 passenger cruise vessel owned by

Holland America. The cruise vessel operates all along the West Coast, and the system demonstrates the feasibility and effectiveness of this technology at reducing diesel emissions.

Emissions Reduction Programs

Cruise Liner Emissions Reduction Incentives Project

This grant allows the Port of San Francisco to provide monetary incentives to cruise vessels to burn lower-sulfur fuel while docked in port. The funding reduces the costs of low-sulfur fuel for cruise ships through overall lower docking fees while in port.

Princess Cruises Shore Power in Seattle

Funding for this project allowed the Port of Seattle to hook up two cruise vessels to the electric grid while at dock. With these ships hooked up to the grid instead of idling their engines, the Port has reduced dockside emissions by a third.

Puget Sound Maritime Air Emissions Inventory & Diesel Emissions Reduction Project

The Puget Sound Maritime Air Forum, a regional association of ports and environmental stakeholders, was able to fund an emissions inventory (EI), partly through the support of the Collaborative. This regional EI was released in May 2007. The project also promotes the use of control technologies like diesel oxidation catalysts (DOC), cleaner fuels like ultra-low sulfur diesel (ULSD) and biodiesel, and public education activities such as idle reduction programs for truckers and equipment operators at the seaport.

Port of Seattle Diesel Emissions Reduction Project

This project implements the 30 priority strategies for reducing diesel emissions based on the findings of the Puget Sound Maritime Air Emissions Inventory.

For More Information

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

For more information about the Marine Vessels & Ports Sector, please contact Grace Cheng, Sector Lead (cheng.grace@epa.gov) or visit the website at www.westcoastcollaborative.org/wkgrp-marine.htm.