

The Next Steps ... A West Coast Approach

*Low Emission Technology Modifications
to Ships on Order and Under Construction*

Faster Freight/Cleaner Air Summit
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The Puget Sound Region is in compliance with all federal, state, and local ambient air quality standards, but the health effects of exposure to diesel particulate from ocean going vessels in a densely populated setting is a concern.



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National Clean Diesel Campaign

- Goal to reduce air pollution emitted from 11,000,000 diesel engines in use across the country through the implementation of varied voluntary strategies and involvement of national, state, and local partners
- **Funding authorized by Congress but not all appropriated**



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West Coast Collaborative

- Voluntary, collaborative public-private partnership to reduce diesel emissions
- **Leveraging project funding**
- Six Sector Workgroups
 - Marine Vessels and Ports
 - Agriculture
 - Construction
 - Rail
 - Trucking
 - Fuels



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WEST COAST COLLABORATIVE
Public-private partnership to reduce diesel emissions

Marine Vessels & Ports Sector

- Share information and seek emission reduction project funding
- Primary West Coast source for information on a potential U.S. Sulfur Oxides Emission Control Area (SECA) application
- Initiated dialogue to encourage cleaner specs for new vessels



West Coast Collaborative grants have funded emission reduction projects to reduce emissions from ocean going vessels.

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Public-private partnership to reduce diesel emissions

MARPOL Annex VI



- International
- MARPOL Annex VI allows for the designation of SECA areas, where ships are required to burn fuel with sulfur content of 1.5% or less



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Sulfur Emissions Control Area (SECA)

- Congress must ratify IMO Annex VI, a pre-condition of being able to submit a SECA application or petition IMO for stronger standards on a number of issues.
- Canadian and U.S. federal governments with support from state and local agencies are conducting the technical work to support a SECA application.



Interest in
Incentive-based
pre-SECA pilot
emissions trading
project in Northwest



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Choose engines with advanced designs that reduce emissions and fuel consumption.

Leave Space on new builds for installation of emissions scrubber devices when they are developed and become available.



The Collaborative lacks expertise regarding available options and encourages assistance in identifying options that could be encouraged with incentives.

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Cleaner Fuels

When ordering new vessels specify flexibility redundant or dual fuel systems to use cleaner fuels in coastal areas.

- Reduced sulfur fuel
- Biodiesel
- Fuel additives
- Water emulsified fuel



New vessels being commissioned for regular service on the West Coast should include shore power equipment when built.

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When in Port



- Use lower sulfur fuels in engines at berth.
- Utilize shore power.

The Princess Shore Power Project was funded by Princess with support from US EPA, Seattle City Light, the Puget Sound Clean Air Agency, and the Port of Seattle.

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Puget Sound Maritime Air Forum

- Voluntary association of maritime organizations, air agencies, and other parties with operational or regulatory responsibilities related to maritime industry air quality impacts
- The purpose of the Forum is to work collaboratively to:
 - Build greater technical understanding of maritime-related air emissions and their impacts on public health and the environment
 - Support implementation and funding of cost-effective maritime air pollution control strategies by sharing expertise and resources
 - Serve as the Puget Sound forum for the ports and vessels track of the West Coast Collaborative
- Members reducing emissions
- Conducting the 2005 baseline Puget Sound Maritime Air Emissions Inventory



Puget Sound Maritime Air Forum

- **Forum members include the following organizations:**
 - American Lung Association of Washington
 - Cummins Northwest
 - North Pacific Fishing Vessel Owners' Association
 - Northwest Air Pollution Authority
 - Olympic Region Clean Air Agency
 - Pacific Merchant Shipping Association
 - Port of Anacortes
 - Port of Everett
 - Port of Olympia
 - Port of Seattle
 - Port of Tacoma
 - Puget Sound Clean Air Agency
 - Puget Sound Regional Council
 - Transportation Institute
 - Union Pacific Railroad
 - U.S. Coast Guard
 - U.S. Environmental Protection Agency
 - U.S. Navy
 - Victoria Clipper
 - Washington Department of Ecology
 - Washington Department of Transportation
 - Washington Public Ports Association
 - Washington State Ferries
 - Western States Petroleum Association



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Port of Seattle – a Green Port

- Commission Resolution and Direction
- Seaport Executive Support
- Diesel Emission Reduction Program
 - Princess Shore Power Project
 - Ultra Low Sulfur Diesel
 - Retrofit Projects
 - Biodiesel
 - Anti-idling
 - Natural Gas
 - Hybrids



Port of Seattle, Puget Sound Clean Air Agency, and U.S. EPA Funding

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