

# Northwest Ports Clean Air Strategy 2009 Implementation Report

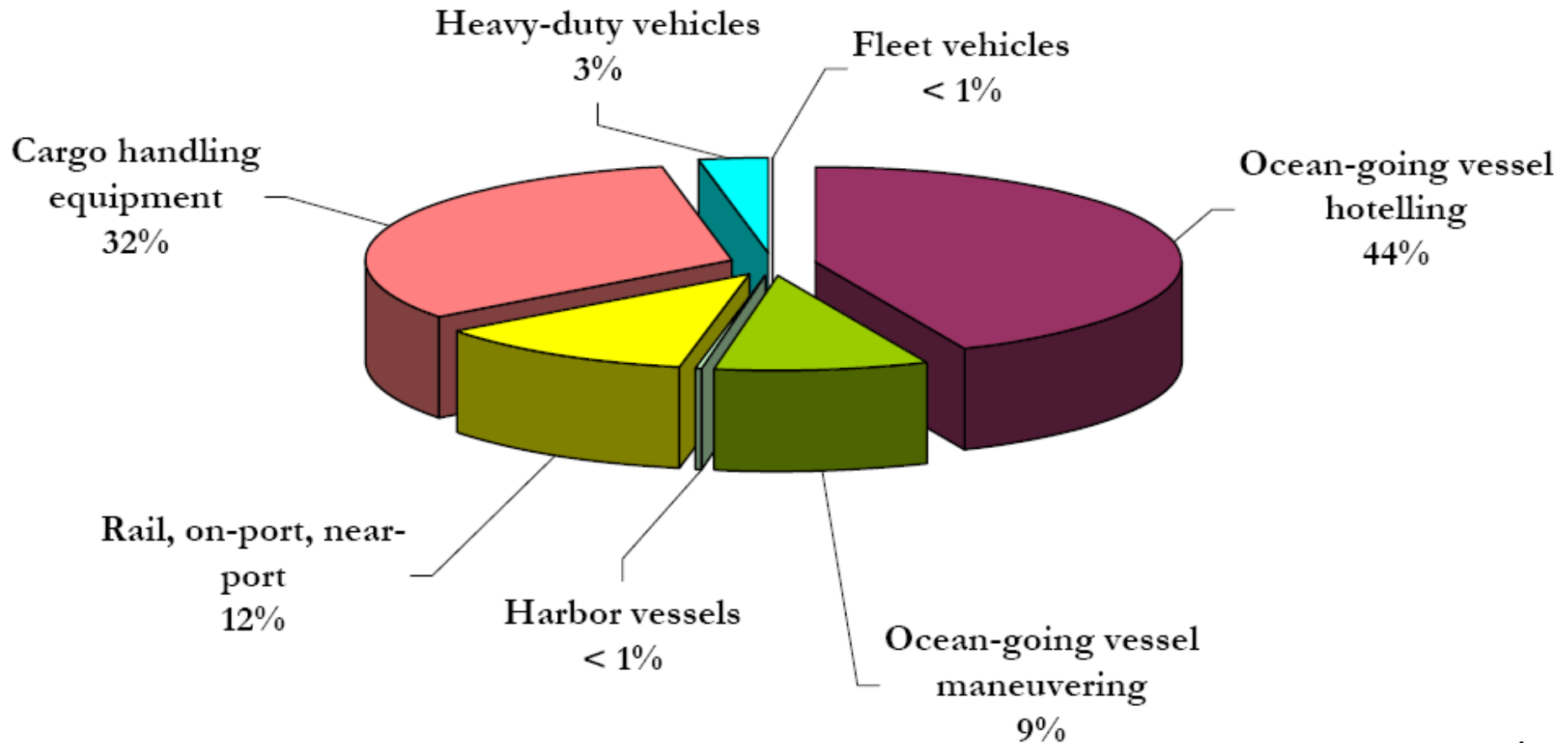
# Briefing Overview

- Northwest Ports Clean Air Strategy approach and performance measures
- 2009-2010 Implementation Status

# Strategy Approach

- Focused on diesel particulate matter and greenhouse gases
- Clear, measurable performance measures
  - Ocean-going vessels (OGV)
  - Cargo handling equipment (CHE)
  - Trucks
  - Rail
  - Harbor vessels
- Encourage ongoing innovation and efficiencies
- Short Term (2010) and Long Term (2015) targets

# Diesel Particulate Matter Port of Seattle Seaport



# Strategy Performance Measures

	2010	2015
Ocean-Going Vessels	≤ 0.5% fuels in auxiliary engines while at berth	Meet IMO standards
Cargo-Handling Equipment	Use of ULSD, meet Tier 2 or 3 PM standards	Best available emission control devices
Rail	Expedite EPA SmartWay standards	Comply with U.S. EPA 2007 locomotive rules
Trucks	100% trucks must have 1994 or newer engines	80% of trucks must meet 2007 U.S. EPA PM emission standards, 100% by 2017
Harbor Vessels	Low-sulfur fuels, new technologies	Advanced technology pilot projects

# Implementation Status

## Ocean-Going Vessels

- **2009 Success Towards 2010 Goal: 63.5% of frequent callers**
  - Container vessels: 40% of frequent callers used  $\leq 0.5\%$  sulfur fuel in auxiliary engines while at berth (236 calls)
  - Cruise Vessels: 100% of frequent callers (218 calls)
    - 23% used shore power (50 calls)
    - 38.5% used  $\leq 0.5\%$  sulfur fuel (84 calls)
    - 38.5% used 1.5% sulfur fuel (84 calls)

# 2010 Implementation Status

## Ocean-Going Vessels

- At-Berth Clean Fuels Vessel Incentive Program
  - \$2,250 per call incentive to use  $\leq 0.5\%$  sulfur fuel in auxiliary engines while at berth
  - Audits
  - 11 participating lines
  - YTD (as of 11/10): 347 participating calls
  - Reduced over 200 metric tons of SO<sub>2</sub>
- IMO approved North American Emission Control Area designation (3/2010)

# Implementation Status

## Cargo-Handling Equipment

- **2009 Success Towards 2010 Goal:**
  - 68% of all CHE at Port of Seattle met the 2010 performance measure
  - 100% of CHE used ultra low sulfur diesel fuel and/or biodiesel blends
- **2010 Efforts:**
  - Grants awarded by U.S. EPA, PSCAA, and WA Dept. of Ecology to retrofit or replace CHE



# Implementation Status

## Rail

- **2009 Success Towards 2010 Goal:**
  - BNSF North Seattle International Gateway electrification
  - Port continues to support commitments made by UP and BNSF Railway to the U.S. EPA SmartWay Transport Partnership
  - Louis Dreyfus switched to ULSD/B20 fuel for locomotive and facility operations at T-86
- **2010 Efforts:**
  - Q1 2010: PSCAA and Louis Dreyfus installed anti-idling equipment on switcher locomotives at T-86, reducing fuel consumption by 50%

# Implementation Status

## Harbor Vessels

- **2009 Success Towards 2010 Goal**
  - Port continues to support PSCAA in reducing emissions from harbor tug operations
- **PSCAA projects:**
  - Partnered with Caterpillar and a Seattle-based fishing vessel, Fierce Allegiance, to develop engine rebuild/upgrade kit
  - \$700k grant from U.S. EPA to retrofit two Foss tugs with diesel oxidation catalysts
  - Partnered with WA Dept. of Ecology and Kitsap Transit to install diesel particulate filters on the new passenger ferry
  - Received \$2.1 million federal grant to retrofit Washington State Ferry engines

# Implementation Status

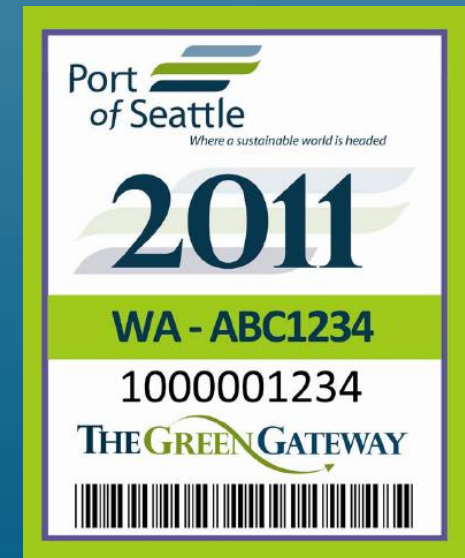
## Clean Truck Program

- **Mandatory**
  - Negotiated lease amendments with marine terminal operators (MTOs)
  - 1/1/2011: all trucks must have MY 1994 engines and be in the Port's Drayage Truck Registry (DTR)
- **Scrappage and Retrofits for Air in Puget Sound**
- **Terminal 25 South truck parking facility**
- **Communications and outreach**

- Puget Sound Clean Air Agency program
  - Administered by non-profit Cascade Sierra Solutions
- \$5 million program
  - Port of Seattle provided \$1.7 million
- Provides \$5k (or blue book value) to scrap pre-1994 drayage trucks
  - Must prove truck operates at the Port of Seattle
  - Owner can use the incentive as they wish
- Scrapped 244 trucks (as of 11/29)
  - \$1,220,000 paid to drivers in incentives

# Drayage Truck Registry

- All trucks must be registered by 1/2011
- [www.portseattledtr.org](http://www.portseattledtr.org)
- Currently have 3,450+ trucks registered
- Investigating RFID options with the MTOs



# Communications and Outreach

- Trucker Liaison in the Port's Office of Social Responsibility
  - Hotline: 206-787-6888
  - Email: [cleantruck@portseattle.org](mailto:cleantruck@portseattle.org)
- Trucker Resource Fairs
- Partnerships:
  - African Chamber of Commerce
  - Port Jobs Employment Assistance



# Implementation Status

## Port Administration

- Continued use of B20 biodiesel at Marine Maintenance
- Joined the Evergreen Fleets program
- Reduced Pier 69 electricity consumption by 44.5%
- Submitted first Port-wide greenhouse gas report to The Climate Registry (for year 2008)

# 2010 Implementation and Next Steps

- Complete implementation of programs to meet 2010 performance measures
- Continue to refine data collection, verification, and reporting processes
- Development of projects/programs to meet the long-term 2015 performance measures
- 2011 Emissions Inventory update