

A National Conversation on the State of US Ports

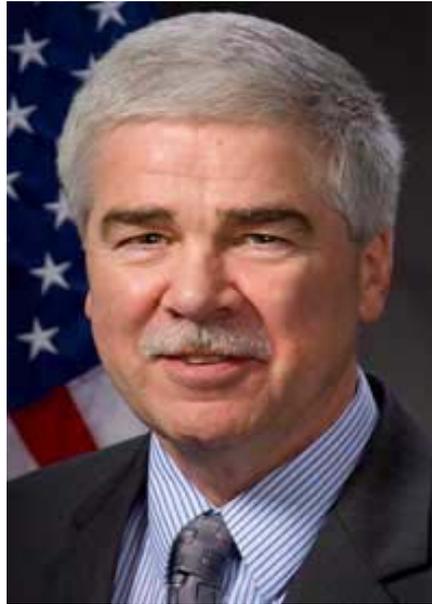


Advancing Solutions to Support More Sustainable Ports

Tuesday, March 4, 2014

Webinar Agenda

- **Webinar Format and Housekeeping**
- **Welcome & Opening Remarks**
- **Building a Toolkit for Sustainable Ports: A Case Study Approach to Evaluating Existing Tools**
- **Open Floor/Questions and Answers**
- **Concluding Remarks**



Welcome & Opening Remarks:
Dennis McLerran
Regional Administrator
U.S. Environmental Protection Agency
Region 10



**Heather L. Wood, Vice President
Government Affairs
Virginia Port Authority**



Building a Toolkit for Sustainable Ports

Advancing Solutions to Support More Sustainable Ports

The background of the lower half of the slide is a blue-tinted image of a port terminal. It shows a large cargo ship docked at a pier, with stacks of shipping containers in the foreground. A world map is overlaid on the background, centered on the Atlantic Ocean. The text "THE Port of VIRGINIA" is faintly visible across the top of the background image.

Heather Wood

Vice President , Government Affairs

Virginia Port Authority

2011 Comprehensive Air Emissions Inventory Update

- **The Port of Virginia has long implemented programs and initiatives at its terminals that seek to lower emissions and improve air quality**



Inventory Purpose

- **To monitor and document emissions contribution of port activities to the overall Hampton Roads Ozone Attainment / Maintenance Area**
- **To forecast future air emissions based on cargo growth projections (2012, 2015, 2018, 2021)**
- **To identify mitigation strategies for further study**

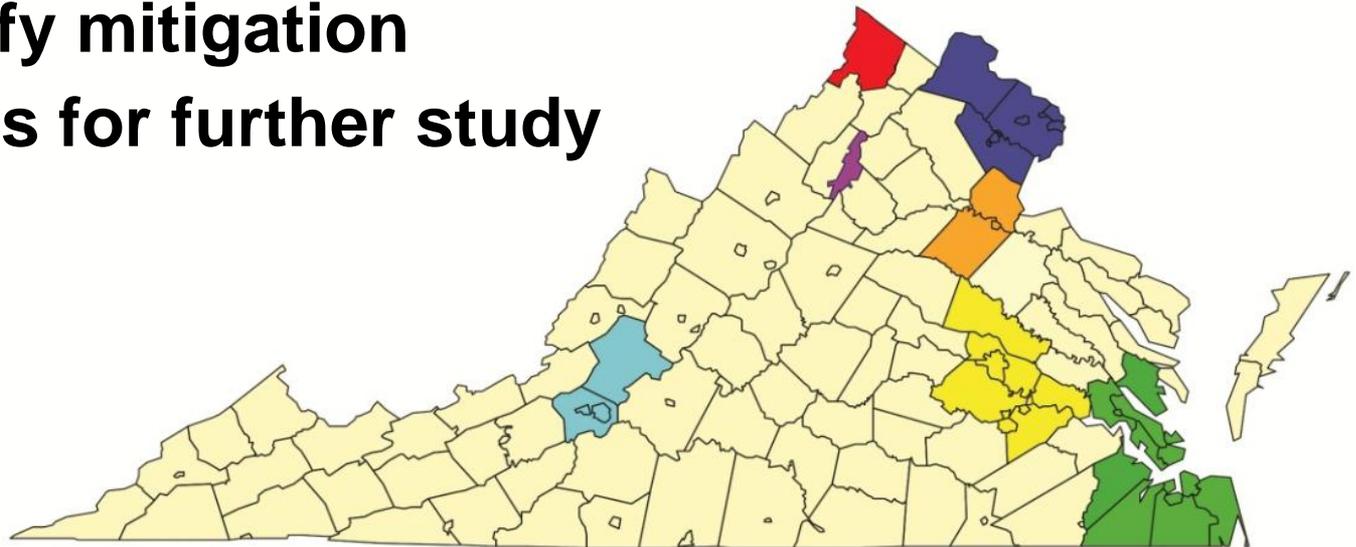


Figure 2-1: Hampton Roads Ozone Attainment/Maintenance Area (Shown in Green)

- **Analysis of VPA terminals**
- **Pollutants from each source within terminals**
 - **Ocean-going vessels (OGV), by type**
 - **Ship assist tugs known as harbor craft (HC)**
 - **Cargo handling equipment (CHE)**
 - **Rail locomotives (RL)**
 - **On-road heavy duty vehicles (HDV)**
- **Emission levels of pollutants in each source**
 - **Carbon Monoxide, Carbon Dioxide Equivalent, GHG, Oxides of Nitrogen, Hydrocarbons, Sulfur Dioxide, Particulate Matter 10, Particulate Matter 2.5**

- **Consistent with EPA best practices for mobile sources**
- **Emissions levels calculated using integrated terminal capacity model to assess activity and operational efficiency levels based on VPA cargo throughput**
- **The model uses MOVES 2010b**
 - **EPA's new emissions analysis software**
 - **Also uses actual engine specifications, fuel type, operating hours for each mode, and time in operational element.**

- **Calculate baseline activity levels, future activity levels and resulting emissions by source**
- **Use latest vessel & equipment type operational data**
 - **Engine specifications**
 - **Ship call & truck trip data**
 - **Time in mode calculations (idle, maneuvering, hoteling, etc.)**
 - **Hours of operation**
 - **Truck path data**
 - **Load factors**
 - **Emission factors**

- **Reduced emissions of all pollutants in all modes, with increased cargo, since 2008**
 - **NO_x = -26%**
 - **HC: -20%**
 - **PM 2.5 & 10 = -56%**
 - **SO₂ = -59%**
 - **CO = -38%**
 - **CO₂ = -18%**
- **Due to:**
 - **Newer, cleaner engines**
 - **Policies to upgrade engines & exhaust systems**
 - **Policies requiring low sulfur fuels**
 - **Reduced truck trips due to APMT on-dock rail**
 - **Updated EPA software for over-the-road vehicles**

- **Used cargo growth forecast of 2040 Master Plan**
 - **APMT & NIT: 5% - 7% annual container growth**
 - **NNMT: steady container growth**
 - **PMT: excluded**
- **Forecasted reductions of all pollutants in all modes through 2021:**
 - **NO_x = -24%**
 - **HC = -27%**
 - **PM 2.5 & 10 = -61%**
 - **SO₂ = -92%**
 - **CO = -34%**
 - **CO₂ = -9.3%**

- **Forecasted reductions due to:**
 - **Wider and earlier adoption of low sulfur fuels**
 - **Fleet turn-over to cleaner engines**
 - **Increasing ship loading and discharge rates**
 - **Greater use of hybrid & electric equipment**
 - **Funding of Capture Fleet Engine Replacement**
 - **Higher use of Rail & Barge Operations.**
 - **Coordinated port / operator data collection**
 - **Gate Automation / Appointment Systems**
 - **Container Stack Automation**

- James River Barge Line
- Maersk Low Sulfur Fuel Use
- Port of Virginia Green Operator (GO) Program
- Straddle Carrier vs. RMG Terminal Operations
- Ocean Going Vessel Baltimore Transit
- Locomotive Replacement





Thank You





**Elena Craft, Phd, Health Scientist
Environmental Defense Fund**

National Conversation on Ports with Port Stakeholders

Advancing Solutions to Support More Sustainable Ports

Elena Craft, PhD

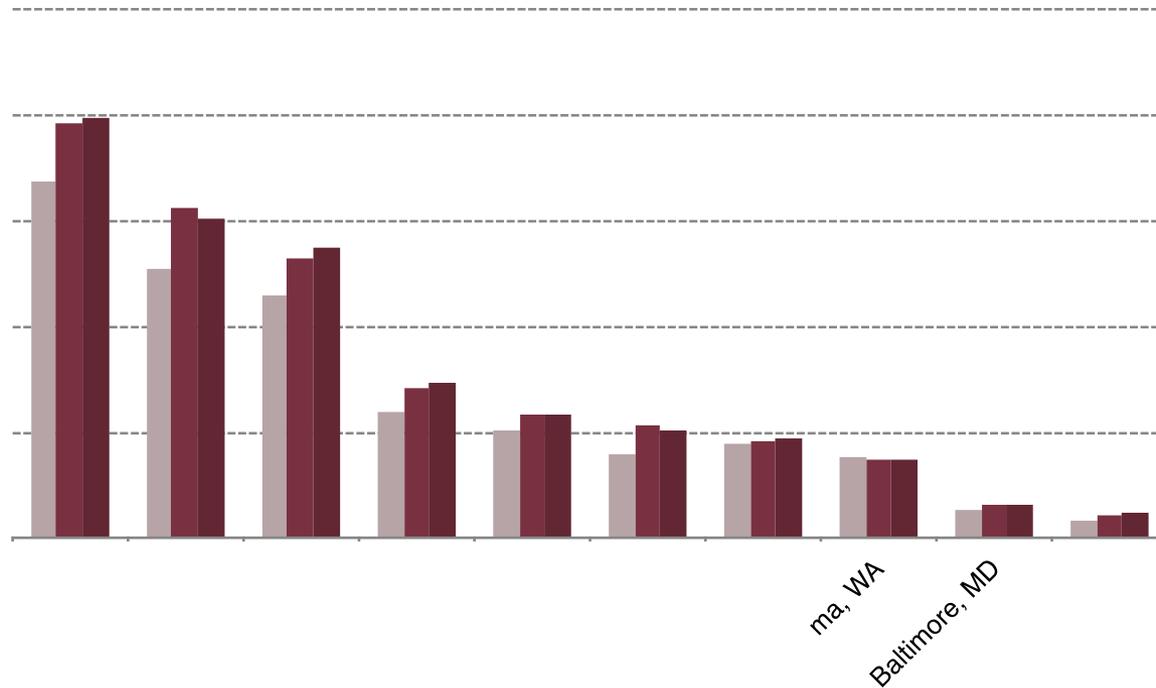
Health Scientist

March 4, 2014



Port growth in the US

- Ports in the US collectively handle more than 40 million TEUs per year



Data Source: Port Authority of Hamburg

Containership traffic in the US

Record Setting Growth

PORTMIAMI

Cruise
& Travel

Cargo
& Trade

Online
Services

Business
Operations

Customer
Care

About
The Port

Full Speed Ahead

PortMiami, the *Cruise Capital of the World*, is poised for new growth as it welcomes an impressive roster of new cruise lines and brand new vessels to its fleet – [Regent Seven Seas Cruises' Regent Navigator](#) and the [Regent Mariner](#); [Carnival Cruise Lines' newbuild Carnival Breeze](#); [Oceania Cruises' newbuild ship, Oceania Riviera](#); [Celebrity Cruises' newbuild ship, Celebrity Reflection](#); and [Disney Cruise Line's Disney Wonder](#).

- » [More](#)
- » [Video](#)
- » [PortMiami Wins World Travel Award](#)

BIGGEST EXPANSION EVER



A New Chapter in the Evolving NY/NJ Waterfront



Live Photo - Click To Zoom



Fly Over Animation

Panama Canal



« Welcome Home Search Español

Maritime Services

News

Financial Information

Jobs

Expansion Program

Multimedia

Panama

About ACP

More Information

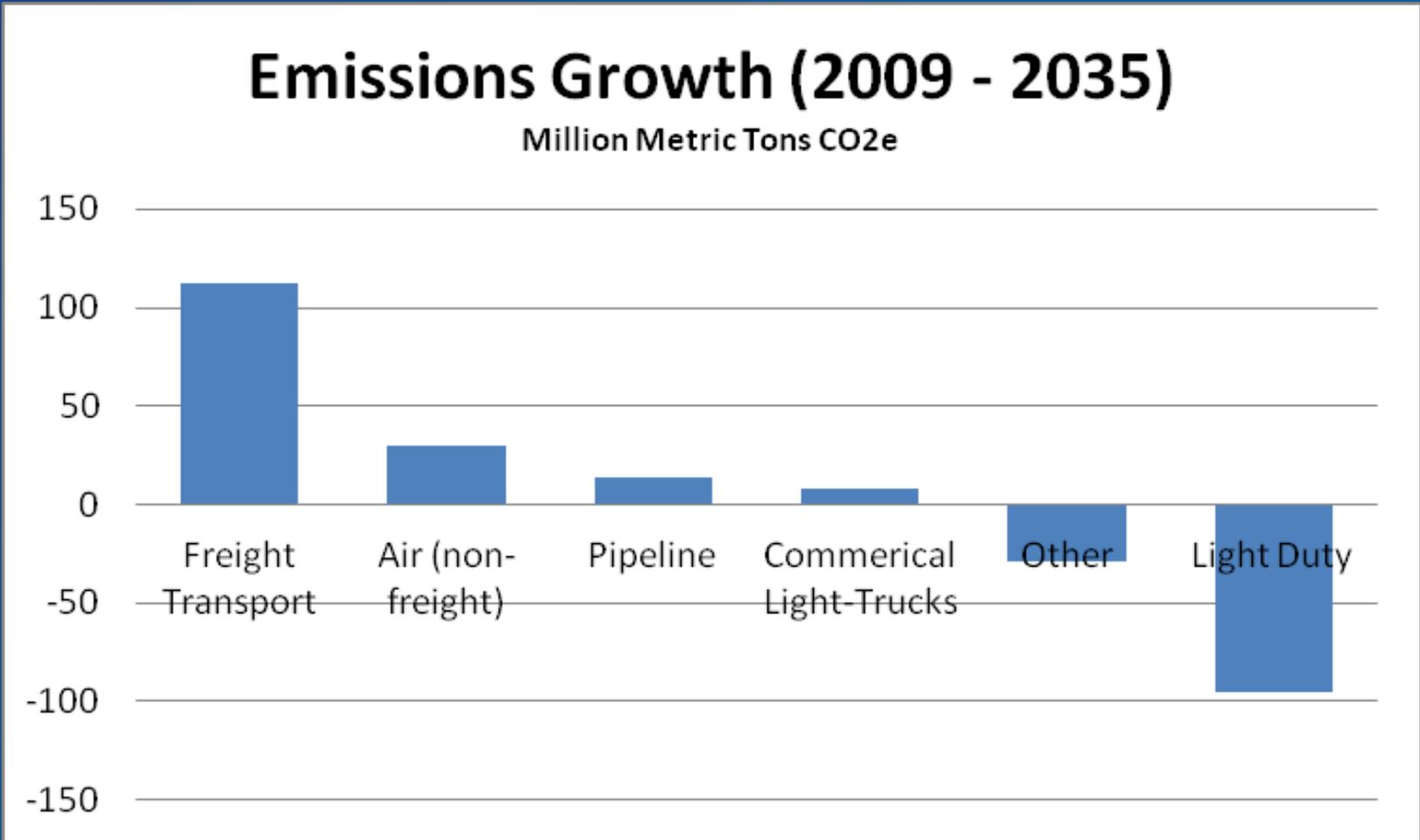
Maritime Services
Operations

Canal Expansion
Construction of the third set of locks

Environment
Watershed and Social Report

Webcams
View the Canal Operations

Freight Emissions Growing Domestically

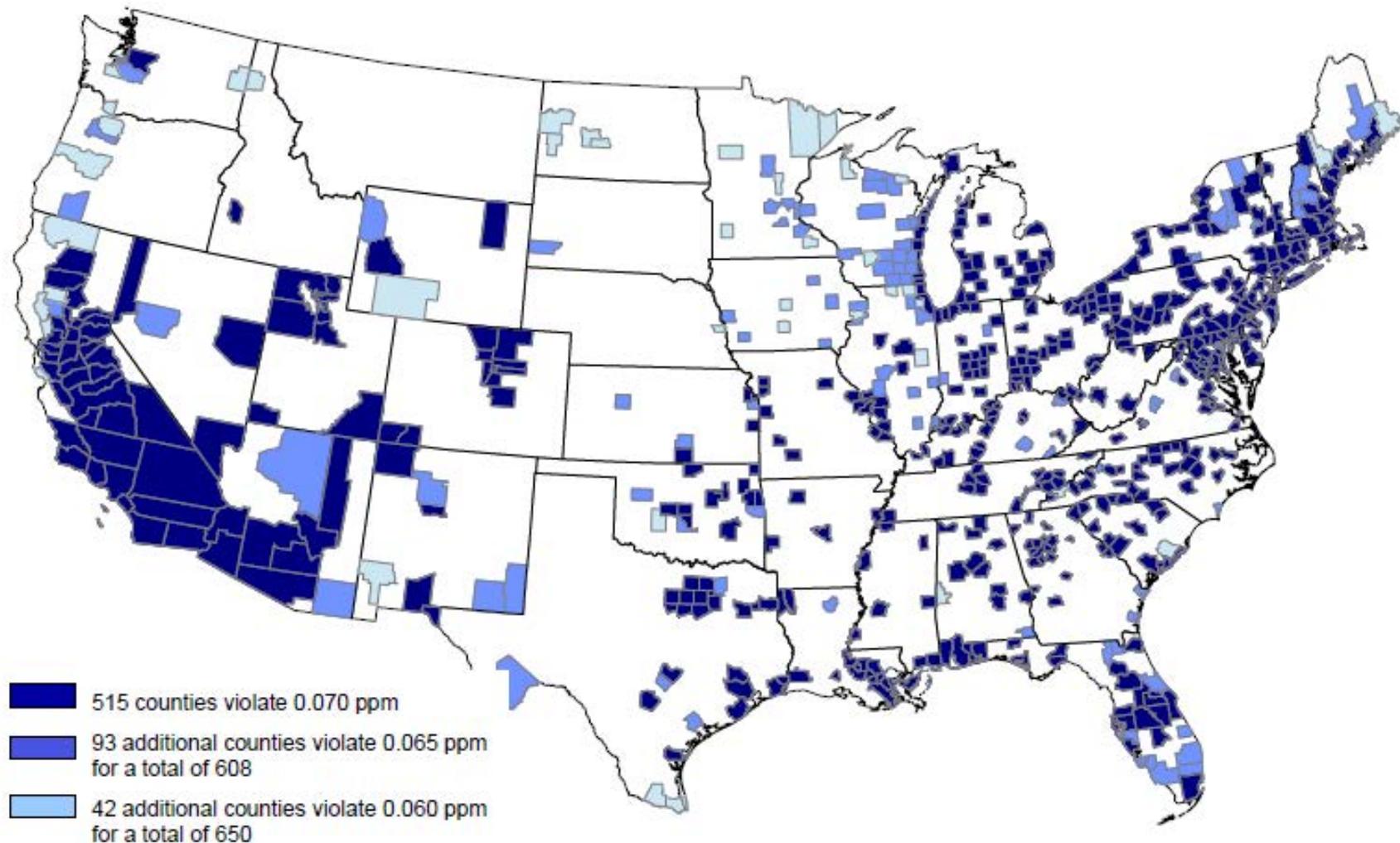


Counties With Monitors Violating Primary 8-hour Ground-level Ozone Standards

0.060 - 0.070 parts per million

(Based on 2006 – 2008 Air Quality Data)

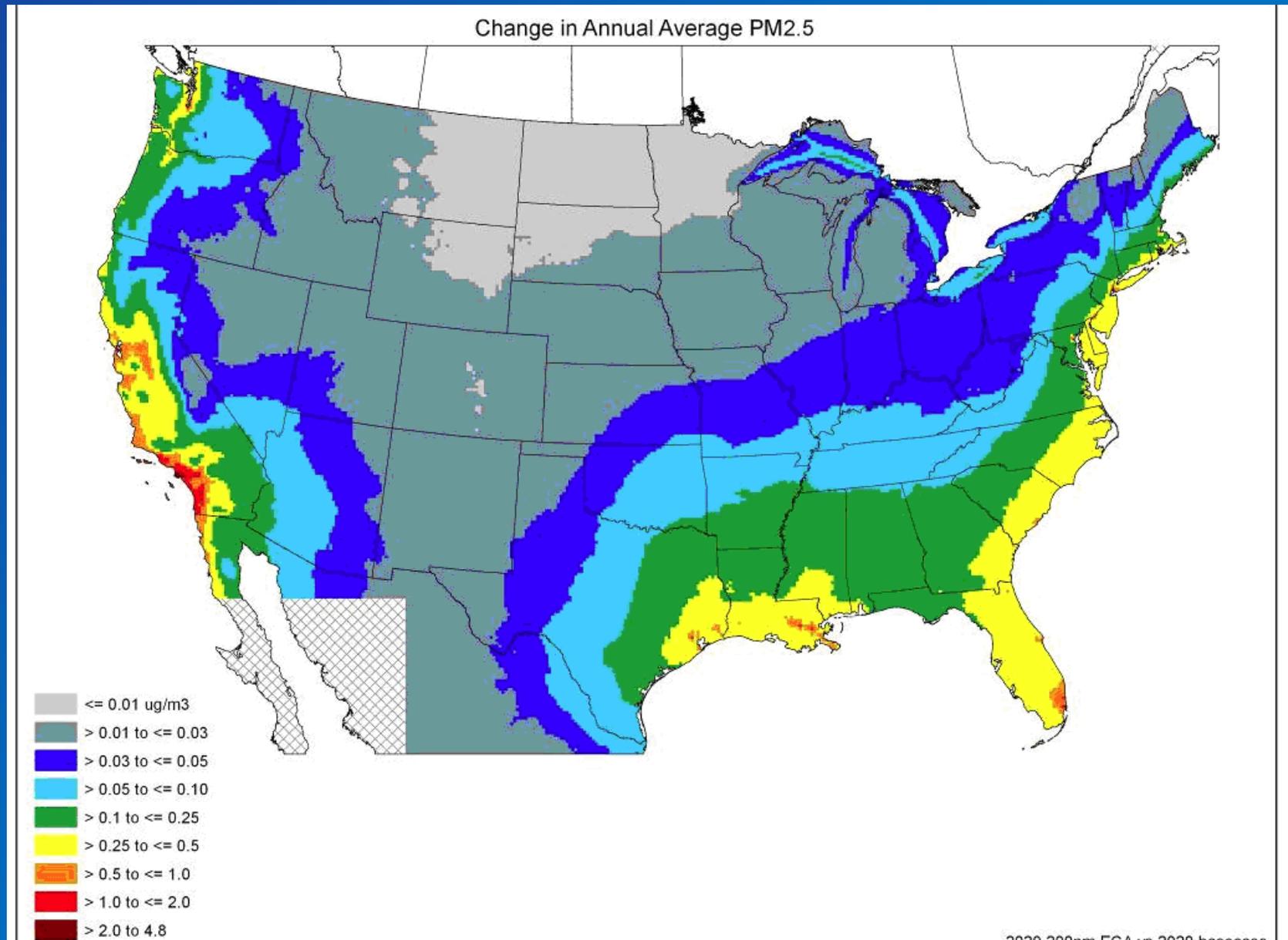
EPA will not designate areas as nonattainment on these data, but likely on 2008 – 2010 data which are expected to show improved air quality.



Notes:

1. No monitored counties outside the continental U.S. violate.
2. EPA is proposing to determine compliance with a revised primary ozone standard by rounding the 3-year average to three decimal places.

Absolute Improvement in PM2.5 concentrations by 2020 due to emission control areas



Cleaning-up Hot Spots: Port Initiatives



Tugs



Ships

**Cargo
handling
equipment**



Rail



Trucks



Comparison of drayage truck standards adopted at US Ports

Model Year	LA/LB	CARB	SEATAC	OAKLAND	NY/NJ	HOUSTON
ADOPTED	NOV 2007	DEC 2008	APRIL 2009	JUNE 2009	MAR 2010	JAN 2011
PRE-1994	BANNED JAN 2010	BANNED JAN 2010	BANNED JAN 2011	BANNED JAN 2010	BANNED JAN 2011	10% REDUCTION BY 2014
1994-2003	RETROFIT BY JAN 2010 BANNED JAN 2012	RETROFIT BY JAN 2010 BANNED JAN 2014	BANNED JAN 2018	RETROFIT BY JAN 2010 BANNED JAN 2014	BANNED JAN 2017	-
2004-2006	BANNED JAN 2012	RETROFIT BY JAN 2012 BANNED JAN 2014	BANNED JAN 2018	RETROFIT BY JAN 2012 BANNED JAN 2014	BANNED JAN 2017	-
2007+	REQUIRED JAN 2012	REQUIRED JAN 2014	REQUIRED JAN 2018	REQUIRED JAN 2014	REQUIRED JAN 2017	RECCOMEN- DED BY 2021



FOR IMMEDIATE RELEASE

EDF Contact: Mica Odom, (512) 691-3451 or modom@edf.org

CRT Contact: James Jack, (916) 813-0839 or execdir@responsibletrans.org

Groups Launch National EPA SmartWay Drayage Program

Public-Private Partnership to Reduce Diesel Truck Emissions at U.S. Ports

June 28, 2011 (Charleston, SC) - The Coalition for Responsible Transportation (CRT), Environmental Defense Fund (EDF), and U.S. Environmental Protection Agency (EPA) today announced the launch of the EPA SmartWay Drayage Program, a new goods movement initiative designed to clean up the air in and around our nation's ports. The announcement came at a press conference held earlier today at the Port of Charleston, S.C..



REQUEST FOR PROPOSAL (RFP)

ENVIRONMENTAL RECOGNITION PROGRAM FOR PORTS

**ENVIRONMENTAL DEFENSE FUND
301 CONGRESS AVE SUITE 1300
AUSTIN, TX 78701**

PROPOSALS DUE: AUGUST 2, 2013



Identify Environmental Performance Metrics

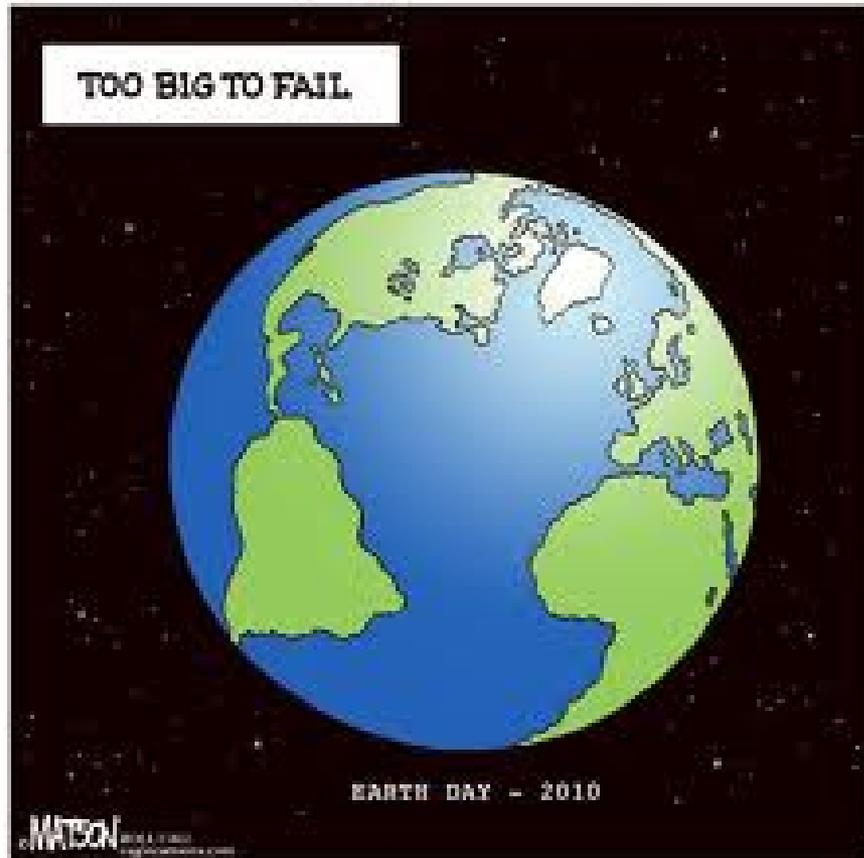
- Potential environmental performance metrics
 - Metrics: quantitative and/or qualitative
 - Based on the program review and the results of stakeholder outreach
 - No one-size-fits-all
 - Ownership structure
 - Geographical distribution
 - Variation in ship traffic
 - Stakeholder engagement
- 

Framework and Administration

- Establish effective framework
 - Criteria that will form the basis for recommendations for recognition levels
 - Draft guidelines for implementation of green programs in ports
 - Recommendations for branding/ recognition for the program, promotion and marketing
- Administration
 - Identify potential administrators for the recognition program.
 - Identify strategies for program implementation based on strengths of potential administrators.

Next Steps

- Final Report of Program Recommendations
 - EPA's National Port Stakeholders Summit
 - Engage Stakeholders on Effort
 - Work with EPA and other stakeholders on Recognition Program
- 



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**Rose Siengsubcharti, Program Manager
San Pedro Bay Port's Clean Air Action Plan (CAAP)
Technology Advancement Program (TAP)
Port of Long Beach**

Technology Advancement Program

Rose Siengsubcharti

Environmental Specialist

EPA Port Stakeholder Webinar

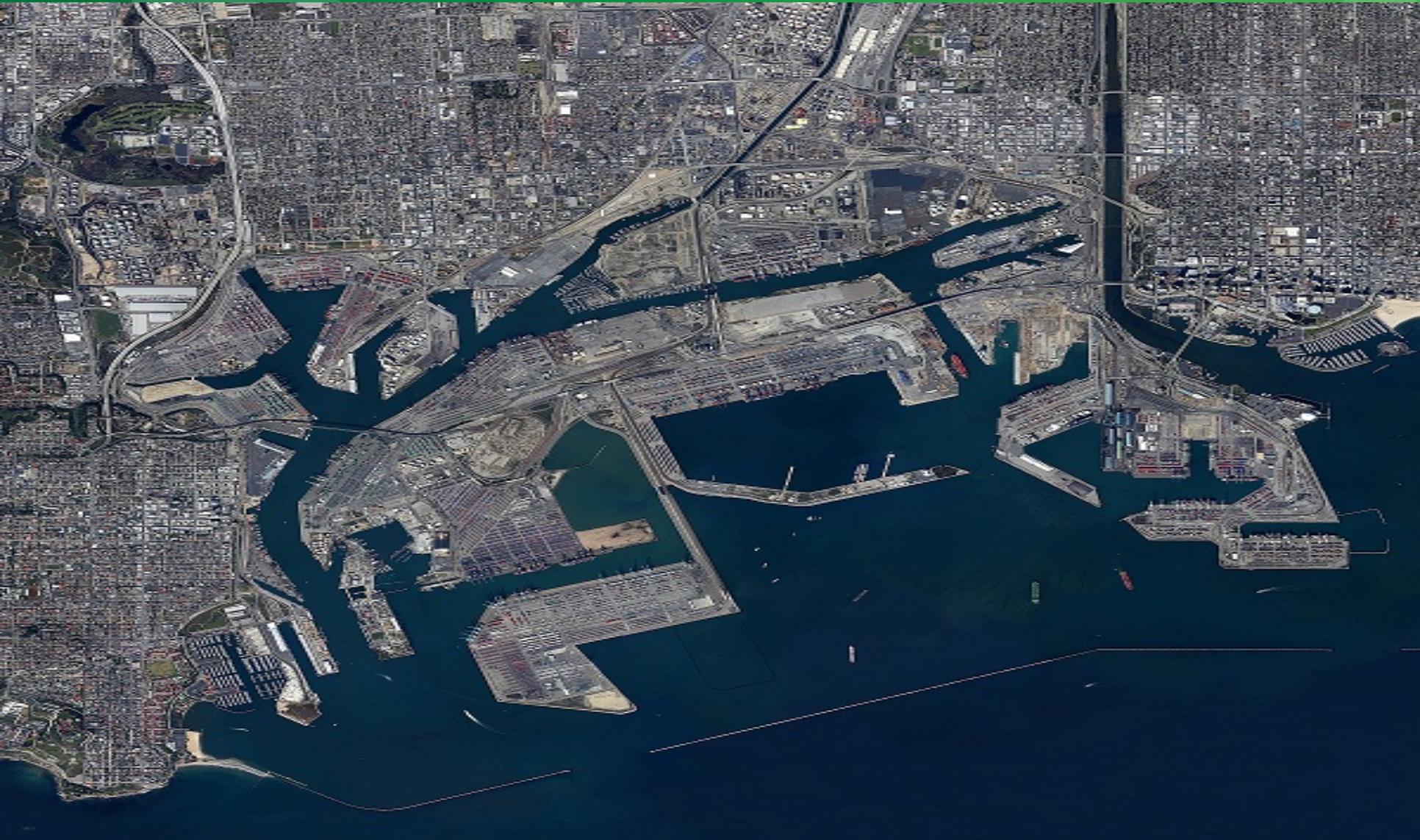
March 2014



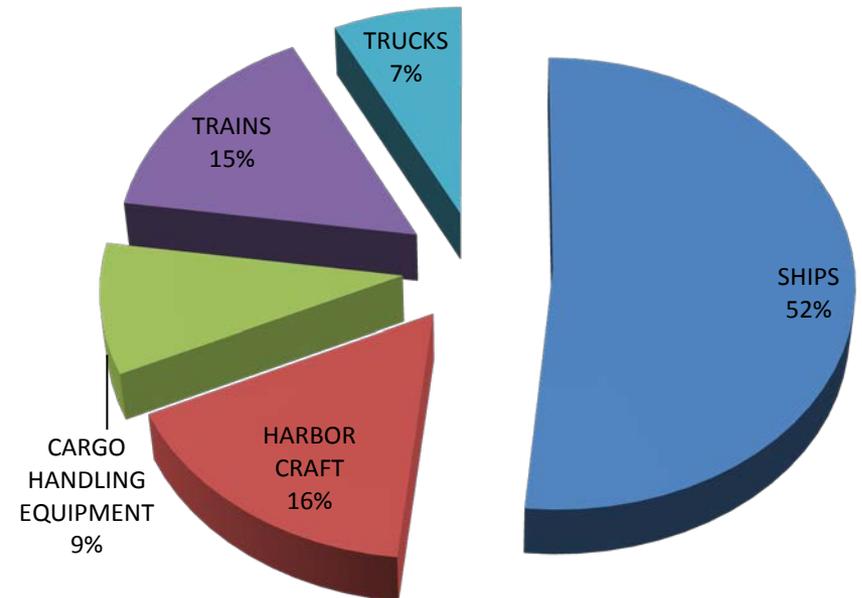
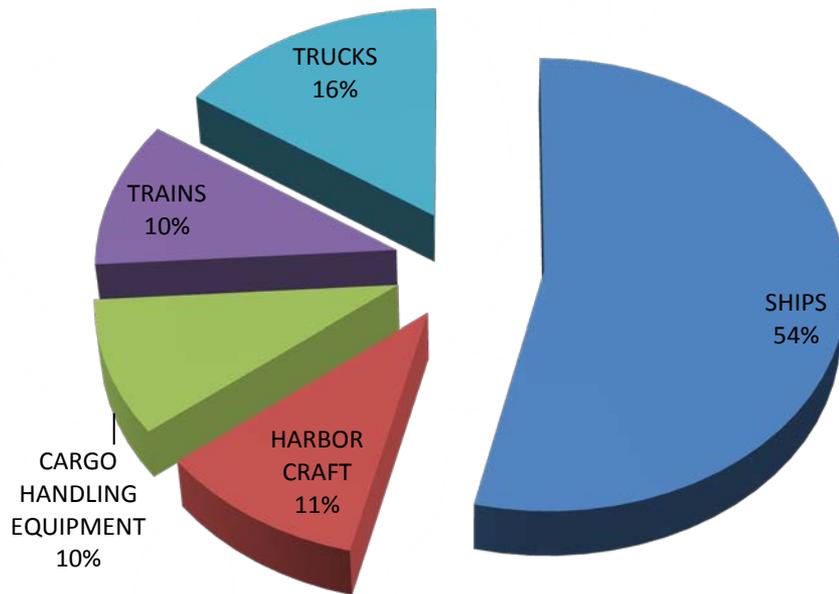
Port of
LONG BEACH

The Green Port

The San Pedro Bay Ports



2012 POLB/POLA NOx and DPM Emissions



Community Health



Clean Air Action Plan




The Port of Long Beach Green Ship Award Program Fact Sheet

 Port of LONG BEACH
The Green Port

The Port's Green Ship Award Program rewards vessel operators for deploying today's greenest ships to the Port of Long Beach and accelerating the use of tomorrow's greenest ships.

The program is very simple. Vessel operators only need to register for the program to receive incentives. Eligibility and payments are determined based on ship data the Port already collects.

Vessels with main engines meeting Tier 2 or Tier 3 standards established by the International Maritime Organization (IMO) will be eligible for incentives ranging from \$2,500 to \$5,000 per ship call.

The Green Ship program's goal is to have, by 2015, 50 percent of all ship calls at the Port of Long Beach be from Tier 2 vessels and 40 percent from Tier 3, which will reduce NOx emissions from ships by 2,500 tons a year.

The Port will recognize the top performing shipping lines with a Green Ship Award acknowledging their commitments to environmental stewardship.

For registration and more information, visit www.polb.com/greenship. For questions, email greenship@polb.com.

The Port of Long Beach greatly appreciates the participation of its shipping lines in this important air quality program.

www.polb.com

Technology Advancement Program (TAP)



TAP Objectives

- **Encourage technology innovation**
- **Show that the technology works**
- **Get the technology verified and approved for sale in the marketplace**
- **Improve emissions reductions**
- **Reach our stated goals and strive for an emissions-free port**

TAP Implementation

- **Budget**
- **Unsolicited Proposals**
- **Proposal Evaluation**
- **Match Requirement**
- **Partnership with Port Terminal Operator, Shipping Lines, Licensed Motor Carrier, Harbor Craft Company**
- **Technology Verification or Certification**

TAP Advisory Committee



The Port of
LONG BEACH



California Environmental Protection Agency

 **Air Resources Board**

Emission Control Technologies

DEMONSTRATION PROJECT	SOURCE CATEGORY	TOTAL PROJECT COST	TAP FUNDING	AGENCY FUNDING
SEAWATER SCRUBBER	SHIPS	\$3,390,000.00	\$1,650,000.00	NA
FUEL SLIDE VALVE	SHIPS	\$1,300,000.00	\$45,000.00	\$783,628.00
DIESEL PARTICULATE FILTER	TRAINS	\$692,356.00	\$150,000.00	\$346,178.00
SOCK ON A STACK	SHIPS	\$603,211.00	\$299,054.00	\$55,000.00
DIESEL PARTICULATE FILTER	HARBOR CRAFT	\$531,308.00	\$265,654.00	NA
DIESEL PARTICULATE FILTER	CARGO HANDLING EQUIPMENT (CRANE)	\$322,140.00	\$64,668.42	NA
FUEL SLIDE VALVE (FOLLOW-UP)	SHIPS	PORTS PROJECT	\$216,000.00	NA

Alternative Engine and Fuel Technologies

DEMONSTRATION PROJECT	SOURCE CATEGORY	TOTAL PROJECT COST	TAP FUNDING	AGENCY FUNDING
LNG ENGINE CERTIFICATION	TRUCKS	\$9,894,027.00	\$500,000.00	\$1,750,000.00
LNG YARD TRACTOR	CARGO HANDLING EQUIPMENT (YARD TRACTOR)	\$425,000.00	\$350,000.00	\$75,000.00
CNG TRUCK	TRUCKS	IN-KIND	\$223,155.00	\$421,250.00
EMULSIFIED BIODIESEL FUEL	CARGO HANDLING EQUIPMENT (TOP HANDLERS)	\$132,000.00	\$88,000.00	NA

Hybrid Technologies

DEMONSTRATION PROJECT	SOURCE CATEGORY	TOTAL PROJECT COST	TAP FUNDING	AGENCY FUNDING
HYBRID TUGBOAT	HARBOR CRAFT	\$8,000,000.00	\$1,389,920	NA
HYBRID YARD TRACTOR	CARGO HANDLING EQUIPMENT (YARD TRACTOR)	\$1,200,00.00	\$600,00.00	\$300,000.00
HYBRID CRANE	CARGO HANDLING EQUIPMENT (RTG CRANE)	\$169,870.00	\$84,935.00	\$130,130.00
PLUG-IN HYBRID YARD TRACTOR	CARGO HANDLING EQUIPMENT (YARD TRACTOR)	IN-KIND	\$61,500	NA
ENERGY STORAGE	CARGO HANDLING EQUIPMENT (RTG CRANE)	PORTS PROJECT	\$23,000.00	\$8,000.00
HYBRID YARD TRACTOR (FOLLOW-UP)	CARGO HANDLING EQUIPMENT (YARD TRACTOR)	PORTS PROJECT	\$26,000.00	NA

Zero Emission Technologies

DEMONSTRATION PROJECT	SOURCE CATEGORY	TOTAL PROJECT COST	TAP FUNDING	AGENCY FUNDING
ALL-ELECTRIC YARD TRACTOR (LEAD ACID BATTERIES)	CARGO HANDLING EQUIPMENT (YARD TRACTOR)	PORT PROJECT	\$263,500.00	\$263,500.00
ALL-ELECTRIC YARD TRACTOR (LITHIUM ION BATTERIES)	CARGO HANDLING EQUIPMENT (YARD TRACTOR)	\$940,000.00	\$400,000.00	NA
ALL-ELECTRIC ON-ROAD TRUCKS (NEW)	TRUCKS	\$4,429,421.00	\$300,000.00	\$3,488,801.00

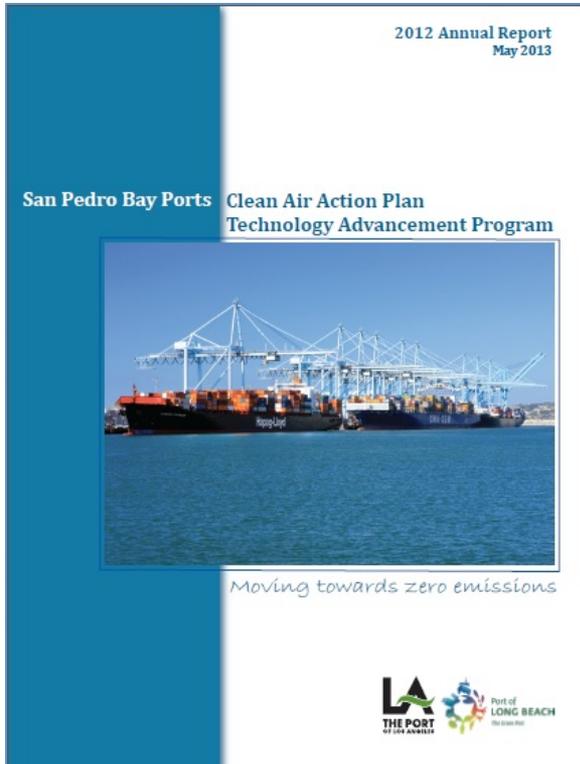
Updates on Port Technologies

- **Foss Maritime's Hybrid Tug Retrofit Project**
- **EPA DERA Funded Technologies**
- **Port Shorepower Progress**
- **Port At-Berth Technologies**

Looking Ahead

- **Seek zero emission technologies**
- **Focus technology projects on ship applications**
- **Monitor for federal and state grant opportunities**
- **Partner with air agencies on projects**

TAP Annual Reports



For more information on current and past technology projects, access the following link:

<http://www.cleanairactionplan.org/programs/tap/techdemos.asp>

Ports Technologies Contacts

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Strategic Plans for Sustainable Ports: The Northwest Ports Clean Air Strategy Experience



Stephanie Jones Stebbins,
Port of Seattle

Beth Carper,
Puget Sound Clean Air Agency



What We Will Share Today

- Background: Initial Strategy and 2013 update
- Emission-reduction goals and performance measures
- Performance targets, by sector and lessons learned
- The big picture lessons learned

Northwest Ports Clean Air Strategy: What is it?

- Three-port, international collaboration focused on reducing diesel particulate matter and greenhouse gases
- Sets clear, measurable short-term and long-term targets for:
 - Ocean-going vessels (OGV)
 - Harbor vessels
 - Rail
 - Cargo handling equipment (CHE)
 - Trucks
 - Port administration
- Pilot Projects
- <http://bit.ly/NWPortStudy2013>

Strategy Partners

- Port of Seattle
- Port of Tacoma
- Port Metro Vancouver (BC)
- US Environmental Protection Agency
- Washington State Department of Ecology
- Puget Sound Clean Air Agency
- Environment Canada
- Metro Vancouver, BC

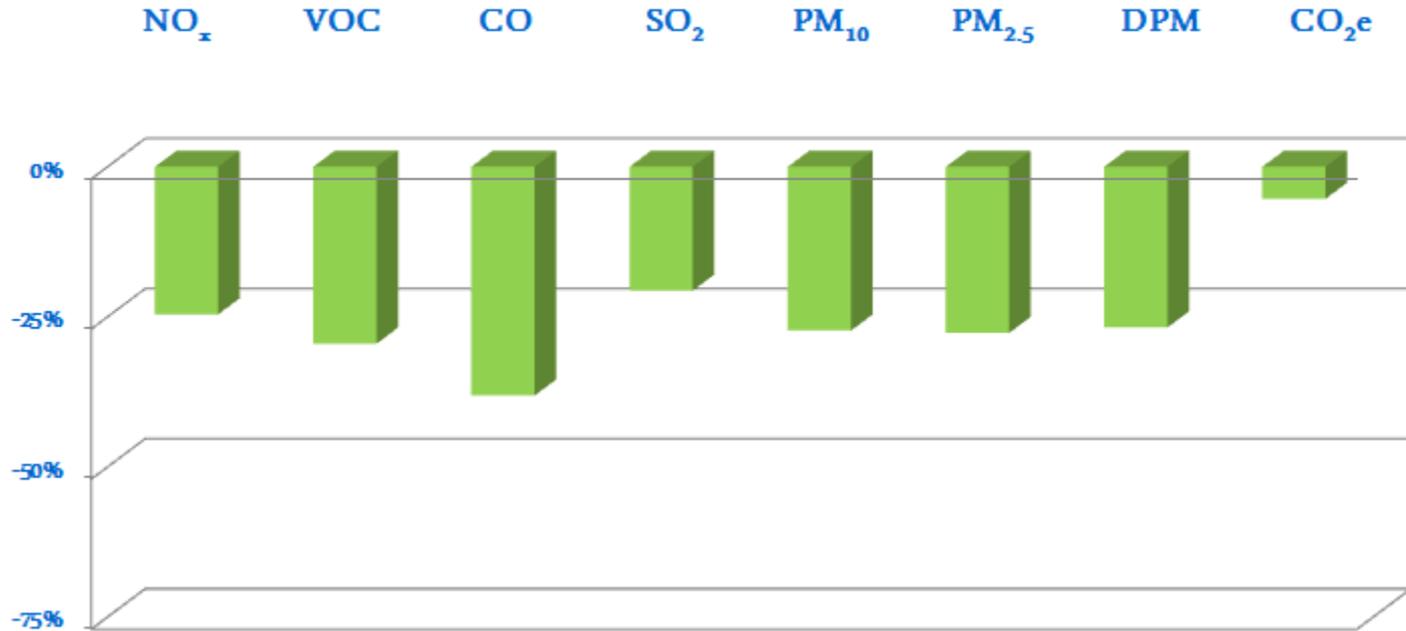
Strategy's Geographic Reach



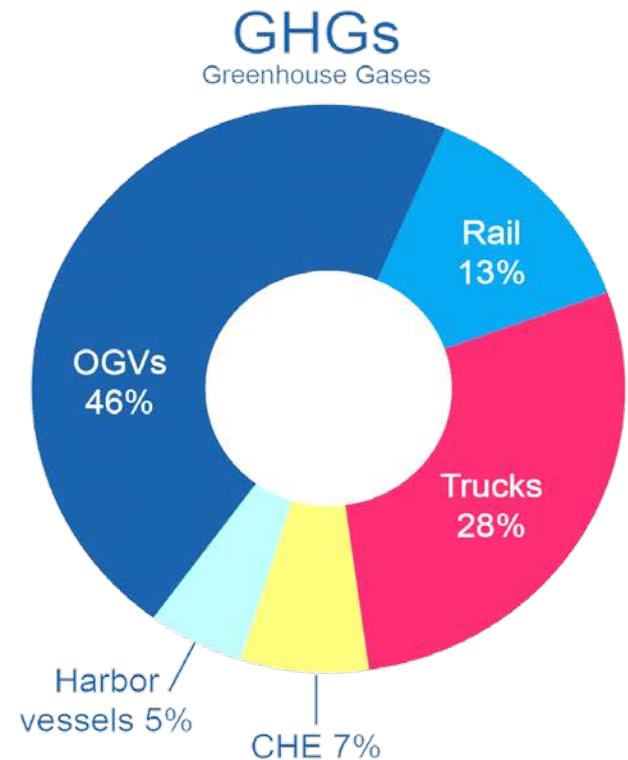
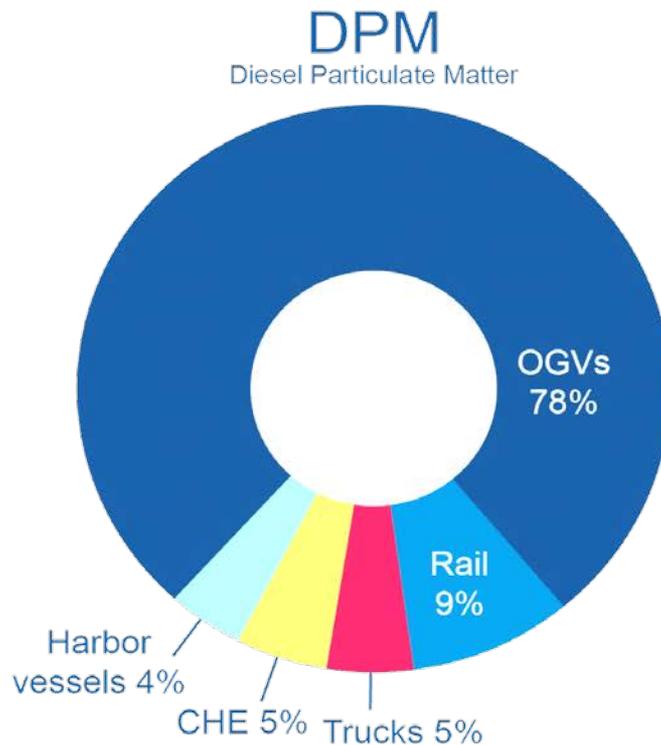
Summary of Approach

- 2005 Emissions Inventory measuring maritime air quality & sources
- 
- 2008 NW Ports Clean Air Strategy
- 
- 2010 and 2011 Emission Inventory Updates
- 
- 2013 Northwest Ports Clean Air Strategy Update

Port of Seattle Airshed's 2005–2011 Emission Reductions (Similar Results for POT)



Port-Related DPM and GHG Emissions by Sector, from the Three Ports, 2010/2011



Northwest Ports Clean Air Strategy: 2013 Update

- The 2013 Strategy update reflects results of the 2011 Emissions Inventory
- Set DPM and GHG goals
- Established actions and performance targets by sector for 2015 and 2020
- Proposed pilot studies and demonstration projects
- Encouraged 3rd-party certification programs

2013 Strategy Update's Emission-Reduction Goals (from 2005 Baseline)

Targeted Emissions	2015 Goals	2020 Goals	Measurement
Diesel particulate matter	75% reduction	80% reduction	Emissions per ton of cargo
Greenhouse gases	10% reduction	15% reduction	Emissions per ton of cargo

Performance Measurement

Annually:

- Publish a progress report on status of meeting actions & targets

Every 5 years:

- Conduct an emissions inventory to track status of meeting emission reduction goals

Targets for Ocean-Going Vessels

Actions	2015 Targets	2020 Targets	Reduces	
			DPM	GHG
Vessels surpass Emission Control Area (ECA) requirements	Early compliance with 2015 ECA 0.1% fuel-sulfur level (or equivalent) while hoteling before Jan 1, 2015	Ports track number of vessels improvements (Tier 3 marine engines, cleaner fuel, shorepower, & other emission-reduction technologies)	✓	✓
Ports & carriers join port-designed or 3rd-party certification programs promoting continuous improvement	Ports and 10% of vessel calls	Ports and 40% of vessel calls	✓	✓

Lessons Learned: OGV

- Largest contributor to airshed
- ECA will provide significant reductions
- POS's At-Berth Clean Fuels program incentivizes lower-sulfur fuel before ECA mandates
- LNG and Shore-power have potential reductions in DPM emissions but are more complex and expensive projects



Targets for Harbor Vessels

Actions	2015 Targets	2020 Targets	Reduces	
			DPM	GHG
Strategy Partners (S.P) conduct annual outreach to port-related harbor vessel companies & recognize best practices and engine upgrades	S.P. conduct outreach & 50% of harbor vessel companies report best practices and engine upgrades	S.P. conduct outreach & 90% of harbor vessel companies report best practices and engine upgrades	✓	✓
Ports & harbor vessels join port-designed or 3rd-party certification programs that promote continuous improvement	Ports and 10% of harbor vessels	Ports and 40% of harbor vessels	✓	✓

Lessons Learned: Harbor Vessels

- Engine replacements
 - Most common and successful projects
 - Expensive
 - Require grants unless existing engine fails
- Most vessel owners are not used to grant restrictions
 - Competitive bid process
 - Scrapping old engines
- Require strict oversight to meet grant deadlines



Targets for Locomotives

Actions	2015 Targets	2020 Targets	Reduces	
			DPM	GHG
Switcher locomotive owners/operators participate in a fuel-efficiency program	100% owners/operators institute a program	100% owners/operators achieve performance objectives of chosen program	✓	✓
Switcher locomotive operators upgrade or replace unregulated engines (engine replacements Tier2 or better)	10% of unregulated locomotive engines	20% of unregulated locomotive engines	✓	✓

Lessons Learned: Locomotives

- Engine replacements
 - Like harbor vessels, most successful projects and most expensive.
 - Stronger resistance to projects, with or without grants
- Anti-idling technology for locomotives:
 - Installed on most locomotives in our region (on new engines or as retrofits)
 - Some grants covered 50 to 100% of initial costs
 - Incredible fuel savings—rail companies miss out if they don't invest in it



Targets for Cargo-Handling Equipment

Actions	2015 Targets	2020 Targets	Reduces	
			DPM	GHG
CHE meets Tier 4 interim (T4i) emission standards or equivalent	50% of equipment	80% of equipment	✓	✓
Ports & terminals have fuel-efficiency plans in place that promote continuous improvement	Ports and 50% of terminals	Ports and 100% of terminals	✓	✓

Lessons Learned: Cargo-Handling Equipment

- DPF retrofits

- Pre- and post-installation training improves chance of success
- Require significant follow up support
- Work well *if terminal is invested in proactively maintaining their equipment*



- Idle-reduction retrofits

- If programmed correctly, provide fuel savings and warm starts with fewer emissions
- Co-benefits include: better battery life and fewer maintenance issues

Targets for Trucks

Actions	2015 Targets	2020 Targets	Reduces	
			DPM	GHG
Trucks meet or surpass EPA emission standards for model year 2007	100% of trucks by the end of 2017		✓	✓
Ports, terminals, and trucks have fuel-efficiency plans in place that promote continuous improvement	Ports	Ports, terminals, and 50% of trucks	✓	✓

Lessons Learned: Trucks

- Incentivized scrap and replace programs are the best option for Pacific Northwest
 - Owner/operators don't have significant capital to buy replacements
 - Programs require significant administrative resources
 - Funding sources to-date have included Ports, state environmental agencies, and CMAQ; DERA also an option
- Effective retrofits are not available at the low temperatures and high horse power



Targets for Port Administration

Actions	2015 Targets	2020 Targets	Reduces	
			DPM	GHG
Ports own and operate cleaner vehicles/ equipment & have fuel-use reduction plans promoting continuous improvement	Ports report use of cleaner vehicles and equipment and other relevant information	Ports increase use of cleaner vehicles and equipment	✓	✓
Ports apply clean construction standards to engines used on port-led construction projects	Ports adopt clean construction practices for port-led projects, & enact a plan for Tier 2 engine emission reqts.	Ports continue to apply clean construct. practices for port-led projects, & enact a plan for Tier 4 engine emission reqts.	✓	✓
Ports facilitate energy studies and conservation projects at port-owned and/or tenant facilities	Each port conducts 3 energy studies	Each port completes 3 energy conservation projects	✓	✓

Pilot Projects

- Each port will evaluate or engage in at least one pilot study or demonstration project per year
- Port currently partnering with Puget Sound Clean Air Agency on CNG-conversion pilot for dray trucks

Lessons Learned: Overall

- Collaboration:
 - Getting three ports to agree on goals is challenging, but unifying once accomplished
 - Successful collaboration lays a foundation for more ambitious goals
 - International port collaboration is even more difficult due to differing regulatory structures
- Politics:
 - Sometimes the largest-emitting sector isn't the one to which the public, and thus leaders, pay the most attention
 - Incentivizing voluntary actions usually takes money; having a multi-port strategy helps with grant applications and helps leaders commit funds

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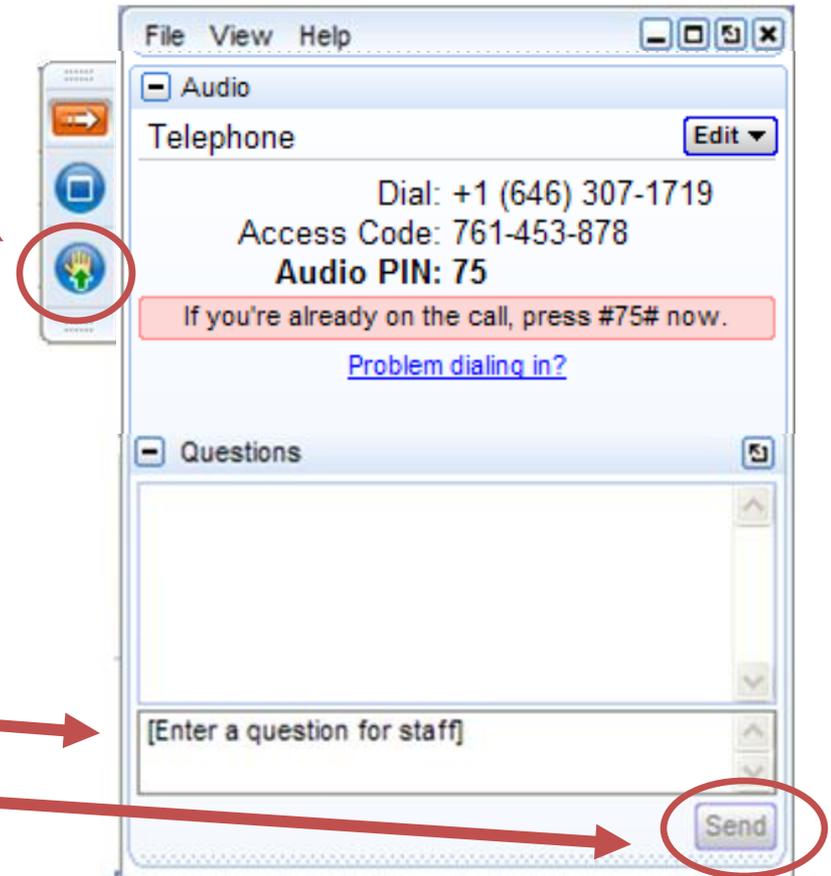
**Reade Kidd, Director
International Logistics
The Home Depot**

Q&A Participation Instructions

By default, you are in listen-only mode (muted).

If you would like to verbally ask a question or comment during the Q&A session, click the ***raised hand button***. We will unmute your phone line and announce your name when it is your turn to speak. ****Please make sure your phone is unmuted on your end.***

You may also submit a question by typing into the ***Enter a question for staff box*** and click the ***Send button***. Staff will read and answer these questions as time allows.



Questions and Answers

- **Raise your hand to speak**
- **Please state your name and company/
organization**
- **To allow others an opportunity to speak please
limit responses to 60 seconds**

Follow Up

Please join us—

National Port Stakeholders Summit

Hilton Baltimore

Baltimore, Maryland

Tuesday, April 8, 2014

Hosted by the EPA's Office of Transportation and Air Quality, this Summit will bring together leaders from industry, government, community groups, and others with a shared interest in promoting healthy air at and around ports. The goal is to advance strategies that support more sustainable ports while encouraging economic growth.

Find out how to register for the National Summit and about EPA's Ports Initiative at: www.epa.gov/otaq/ports

Please contact us at talkaboutports@epa.gov to ask a question or to submit a comment