ITEM NO: 7a Supp (REVISED July 22, 2013)

DATE OF MEETING: June 25, 2013

Draft Northwest Ports Clean Air Strategy 2013 Update

2013 Northwest Ports Clean Air Strategy Update

- Background
- Proposed 2013 Strategy Update
  - Timeline
  - Emission-reduction goals
  - Performance targets by sector
  - Pilot Projects

Background on Northwest Ports Clean Air Strategy

- Development of the 2008 Strategy, including integration of the 2005 Puget Sound Maritime Air Emissions Inventory
- Port partners: Ports of Seattle, Tacoma and Metro Vancouver, B.C.
- Regulatory partners: US EPA, WDOE, PSCAA, Environment Canada, Metro Vancouver
- Actions taken since adoption of the Strategy

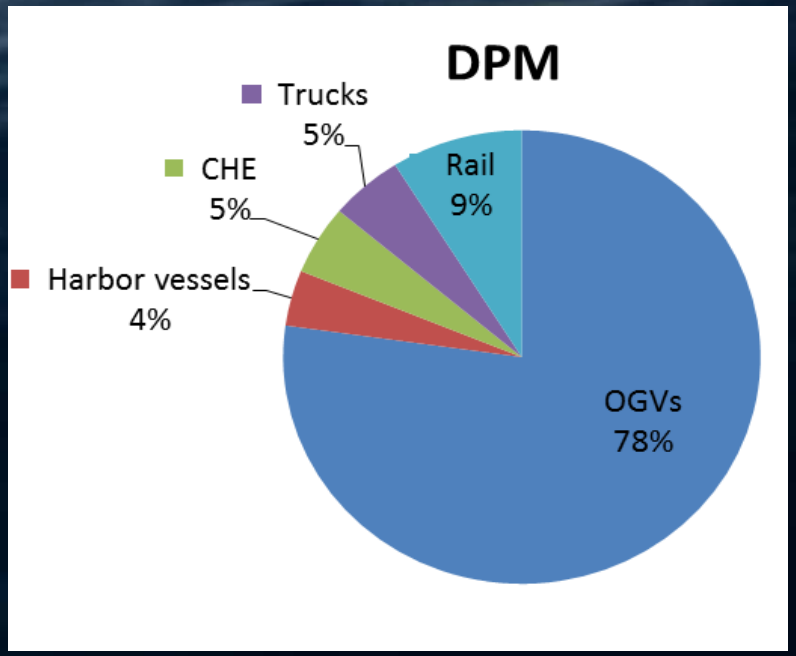
Timeline for Strategy Update

- Jan 2012 – May 2013: partners developed draft
- Sept 2012 – May 2013: stakeholder outreach
- June 11 – July 26, 2013: public comment, open houses
- August – tbd: address comments; finalize Strategy; request Commission adoption

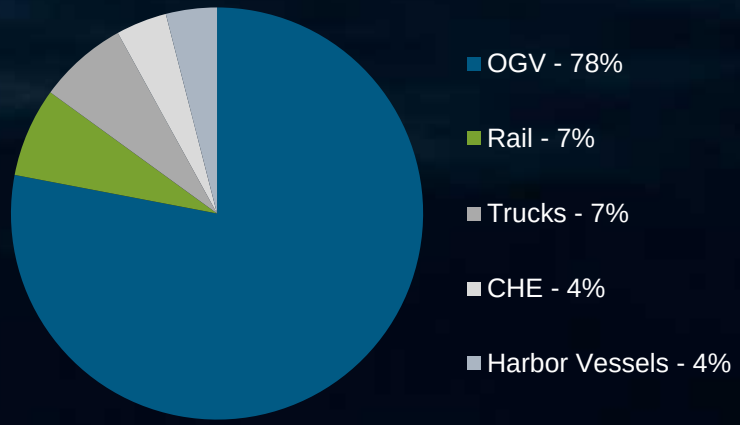
Emission-Reduction Goals (from 2005 Baseline)

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

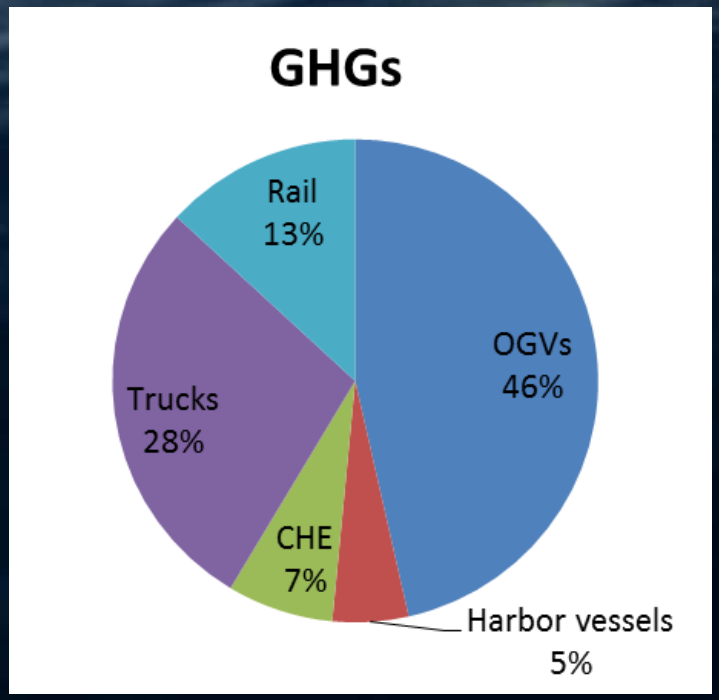
DPM Emission Breakdown from the Three Ports vs. POS only

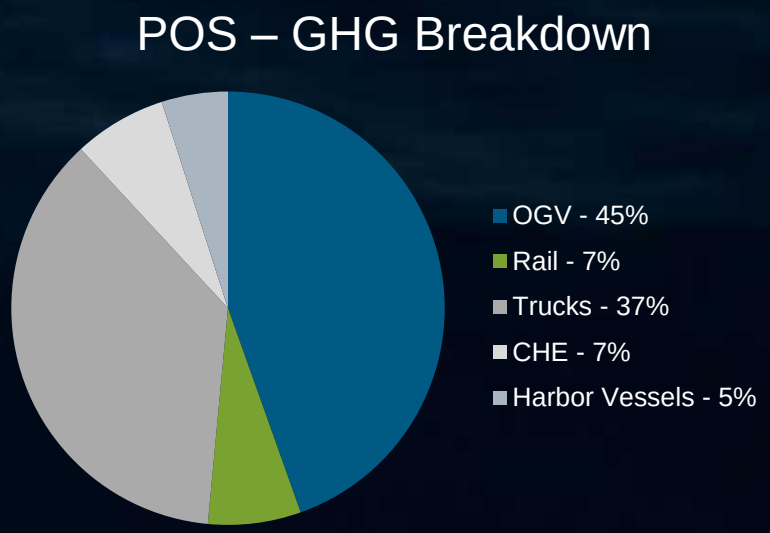


POS only – DPM breakdown



GHG Emissions Breakdown from the Three Ports vs. POS only





Pilot & Demonstration Projects

- Important for advancing new and existing technology and best practices
- Each port will engage in at least one pilot/demonstration project each year
- Results will be shared with stakeholders & included in annual progress reports

Targets for Ocean-Going Vessels

Actions	2015 Targets	2020 Targets	Reduces	
			DPM	GHG
Vessels surpass ECA requirements	Early compliance with 2015 ECA 0.1% fuel-sulfur level (or equivalent) while at berth	Ports track number of vessels with Tier 3 marine engines, shore power use, cleaner fuel, and other emission-reduction technologies	✓	✓
Ports and vessels participate in port-designed or third-party certification programs that promote continuous improvement (such as Environmental Ship Index, Green Marine, Clean Cargo Working Group, or others)	Ports and 10% of vessel calls	Ports and 40% of vessel calls	✓	✓

Targets for Harbor Vessels

Actions	2015 Targets	2020 Targets	Reduces	
			DPM	GHG
Strategy partners conduct annual outreach to port-related harbor vessel companies and recognize best practices and engine upgrades	Partners conduct outreach and 50% of harbor vessel companies report best practices and engine upgrades	Partners conduct outreach and 90% of harbor vessel companies report best practices and engine upgrades	✓	✓
Ports and harbor vessels participate in port-designed or third-party certification programs that promote continuous improvement (such as Environmental Ship Index, Green Marine, Clean Cargo Working Group, or others)	Ports and 10% of harbor vessels	Ports and 40% of harbor vessels	✓	✓

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 and terminals have fuel-use reduction plans in place that promote continuous improvement	Ports and 50% of terminals	Ports and 100% of terminals	✓	✓

Targets for Locomotives

Actions	2015 Targets	2020 Targets	Reduces	
			DPM	GHG
Switcher locomotive owners/operators participate in a fuel-efficiency program	100% of owners/operators institute a program	100% of owners/operators achieve performance objectives of chosen program	✓	✓
Switcher locomotive operators upgrade or replace unregulated engines (engine replacements will be Tier 2 or better)	10% of unregulated locomotive engines	20% of unregulated locomotive engines	✓	✓

Targets for Port Administration

Actions	2015 Targets	2020 Targets	Reduces	
			DPM	GHG
Port own and operate cleaner vehicles and equipment and have fuel-use reduction plans in place that promote 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 (such as AAPA, EPA Best Practices for Clean Diesel Construction, or equivalent best management practices)	Ports institute clean construction best practices for port-led projects, including idle-reduction and Tier 2 engine emission requirements	Ports apply clean construction best practices for port-led projects, including idle reduction and Tier 4 engine emissions requirements	✓	✓
Ports facilitate energy studies and conservation projects at port-owned and/or tenant facilities to identify and address energy conservation opportunities in building systems, processes, and yard lighting	Each port conducts 3 energy studies	Each port completes 3 energy conservation projects	✓	✓

Targets for Trucks

Actions	2015 Targets	2020 Targets	Reduces	
			DPM	GHG
Trucks meet or surpass EPA emission standards for model year 2007	80% of trucks	100% of trucks (by 2017)	✓	
Ports, terminals, and trucks have fuel-use reduction plans in place that promote continuous improvement (e.g., USEPA SmartWay, Transport Canada Truck Reservation Systems Program)	Ports	Ports, terminals, and 50% of trucks	✓	✓

Follow-up on Commission Motion to Accelerate Clean Air Goals

- December 4, 2012: Commission briefing; not compelled to accelerate based on input from staff
- NWPCAS partners will not be accelerating clean truck program goal
- Follow-up with truck driver outreach; consensus to recommend not accelerating clean truck program goal
  - financial impacts on truck owners
  - less Port of Seattle work
  - potential inconsistency with Port of Tacoma requirements
  - truck emissions have reduced 53% since 2005 and are 7% of Port's emissions