Working Together Towards a Low Carbon Future
AAPA Energy and Environment Seminar

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Canada’s largest and most diversified port:
- 27 major marine cargo terminals
- 16 municipalities
- Several Coast Salish First Nations
- 3,129 vessel calls in 2015
Vision

To be the world’s most sustainable port

COLLECTIVE ACCOUNTABILITY

ENERGY EFFICIENCY

MEANINGFUL DIALOGUE

THRIVING communities

ECONOMIC PROSPERITY THROUGH trade

SHARED ASPIRATIONS

HEALTHY environment
Port-related air emissions

**PM$_{2.5}$**
- Rail
- Truck
- CHE
- Marine

**GHG**
- Rail
- Truck
- CHE
- Marine

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<th>Year</th>
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VFPA Air Program

- Partnerships
  - Northwest Ports Clean Air Strategy

- Incentives
  - EcoAction Program for Ships and the Blue Circle Award

- Fees
  - Non-Road Diesel Emissions Program

- Enabling
  - Climate Smart Training
What is Climate Smart?

- Building capacity within businesses to manage and reduce emissions of GHGs
  - GHG inventory development
  - GHG/waste/cost reduction strategy identification and implementation
  - Communication of results
VFPA-Climate Smart Partnership

• Kicked off in 2015
  • 3 x half day training sessions
  • 11 businesses participated
    • Pulp/paper/wood manufacturing and handling facilities
    • Container terminals and off-dock facility
    • Dredging operation
    • Liquid, dry and break bulk terminals
    • Tug and Ferry operations
    • Rendering plant

• Improved GHG ranking in Green Marine Program
  • Voluntary initiative through which ship owners, terminals, shipyards and ports track and report improvements to environmental performance

• Building on success, launching 2016 program this Fall
2015 Port of Vancouver Cohort Results

- 85,077 tonnes of CO2-e measured
- 2,788 tonnes of CO2-e reduced
- 11% average reduction in emission intensity to date
- $670,000 aggregated annual cost savings
2015 Cohort Case Study - Catalyst Paper

- Surrey Distribution Centre
  - Replaced 4 aging propane lift trucks with electric lift trucks
  - Projected annual cost savings of $84,000
  - Projected CO2-e reduction of 169 tonnes
  - Projected payback period of < 6 months
2015 Cohort Case Study-Neptune Terminals

- 3% reduction in absolute emissions
- 21% reduction in emission intensity
- 10% reduction in natural gas usage
- 10% reduction in electricity consumption
- 17% reduction in fuel use per tonne throughput
- 24% increase in throughput
Where do we go from here?

• Reflect... on both what has been achieved and the challenge ahead / how far there is left to reach our goals.

• Evolve... our thinking and our initiatives by working with others.

• Explore... opportunities and solutions to advance our vision.

• Partner... At each step to create better outcomes / maximize results.
Thank you.

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