PORT of vancouver

Working together toward a low emission future

Christine Rigby
Environmental Specialist-Air Emissions

March 21, 2018
Canada’s largest and most diversified port:
- 136 million tonnes of cargo (2016)
- 27 major marine cargo terminals
- 16 municipalities
- Several Coast Salish First Nations
- 3,105 vessel calls in 2016
2015 Port Emission Inventory

Air pollutant emissions and cargo throughput, 2010-2030

GHG emissions and cargo throughput, 2010-2030
Black Carbon

Greenhouse gases with black carbon over a 100-year timeframe, 2010-2030*

Greenhouse gases with black carbon over a 20-year timeframe, 2010-2030*

*CO₂e 100-year timeframe values: CH₄ at 28, N₂O at 265, black carbon at 900.

*CO₂e 20-year timeframe values: CH₄ at 84, N₂O at 264, black carbon at 3,200.
Example scenario comparison view

GHG Emissions by Scenario (annual tonnes CO\textsubscript{2}e)
Collaboration

- Container Truck Licensing System Environmental Requirements
- Non-Road Diesel Emissions Program
- Climate Smart Tenant Training and Certification Program
- Northwest Ports Clean Air Strategy
- Shore Power Program
- ECHO Underwater Noise Program
- EcoAction Vessel Incentive Program
- International Collaboration on Vessel Emissions Reduction
• Port of Vancouver-led
• Emphasis on underwater noise and endangered whales
• First port in world to develop vessel underwater noise criteria for financial incentives
• 2017 vessel slow down trial
  • Clear link between vessel speed and underwater noise
EcoAction Program and Blue Circle Award

EcoAction Award Levels

Silver
$0.061/GRT
SAVE 35%

Gold
$0.050/GRT
SAVE 47%

Bronze
$0.072/GRT
SAVE 23%
International Collaboration on Vessel Emissions Reduction

“The value of the whole is greater than the sum of the parts.”

-Aristotle, 384-322 BC
Why work together?

- International shipping is complex
- Ports operate in relative isolation
  - Opportunity for benefits
- **Goals:**
  - Increase the number of cleaner vessels calling participating ports
  - Increase the number of these vessels in the global fleet
  - Improve user experience
Considerations

Value-added
Cumulative
Meaningful
Effective
Inclusive
Scalable
Efficient
Accessible
Reputation
Competition
Data confidentiality
Possible Mechanisms

- Marketing and communications platform
- Route planner
- Incentive application portal
- Central data management system
### 2018-2019 Work Plan

<table>
<thead>
<tr>
<th>Phase</th>
<th>Action</th>
<th>Timeline</th>
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<tbody>
<tr>
<td>Phase I</td>
<td>Quarterly informal work group calls</td>
<td>January, April, July, October</td>
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<tr>
<td></td>
<td>Request for Proposals</td>
<td>April 2018</td>
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<tr>
<td></td>
<td>Finalize methodology and project plan</td>
<td>May 2018</td>
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<tr>
<td></td>
<td>Finalize terms of reference and project governance/membership</td>
<td>June 2018</td>
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<td>Stakeholder engagement</td>
<td>July-October 2018</td>
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<td>Develop and validate proposed solution</td>
<td>September-November 2018</td>
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<td>Present findings to project partners and stakeholders</td>
<td>December 2018</td>
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<tr>
<td>Phase II</td>
<td>Based on methodology proposed by consultant in Phase I</td>
<td>January-July 2019</td>
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Where do we go from here?

• Invitation to participate
  • 1:1
  • Quarterly, informal teleconferences
  • Advisory group
  • User group
  • Project team
Thank you

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