

## Review and Update of the Strategic Direction

### Introduction

The Northwest Ports include four port authorities: Northwest Seaport Alliance (NWSA), the Port of Seattle (POS), the Port of Tacoma (POT) and the Vancouver Fraser Port Authority (VFPA). For 10 years, the Northwest Ports have worked collaboratively with government and industry partners to advance environmental requirements across the airshed. The Northwest Ports Clean Air Strategy (NWPCAS) has provided a mechanism to ensure that through partnered action, environmental standards are not compromised but driven forward over and above competing interests.

Consistent with the Northwest Clean Air Strategy, the Northwest Ports serving Seattle, Tacoma and Vancouver BC have facilitated uptake of cleaner technology through the following:

- Created incentive programs for ships and harbor vessels that go beyond regulations.
- Supported IMO efforts to establish the North American Emission Control Area.
- Provided infrastructure such as on-shore power supply to ships at berth.
- Provided financial assistance (via grants and port funds) to install pollution control devices. and/or replace older, polluting trucks, locomotives and cargo-handling equipment.
- Undertook pilot projects and feasibility studies.
- Established environmental requirements for trucks accessing the ports.
- Established a fee program for older, higher emission non-road equipment.
- Annually reported progress on implementation.

During 2018 and 2019, the Northwest Ports are reviewing and updating the NWPCAS, including their shared vision for clean air and limiting contributions to climate change in the Georgia Basin-Puget Sound airshed.

### Context: Emissions and economic growth

Seaport-related trade serves an important role in the economy in the Northwest. This trade currently relies heavily on fossil fuels that result in contributions to local air quality impacts and global climate change.

Over the last 10 years, overall diesel particulate matter (DPM) emissions at the Northwest Ports have decreased, and the intensity of greenhouse gas (GHG) emissions have also decreased (that is, the emissions per tonne of cargo moved). However, due to increasing throughput of goods during this same period, the overall level of GHG emissions has increased at the ports.

Current projections indicate that global trade will continue to increase, and that the Northwest Ports will also experience increased levels of trade. In this context, greater reductions in emissions are needed to achieve overall reductions in emissions.

## Context: Regulation and Policy

The Northwest Ports operate within a broader context that includes jurisdictional targets, policies and regulations relevant to trade activities undertaken at the seaports. This broader context includes:

- 195 UNFCCC members signed the Paris Agreement, which aims to keep global temperature rise this century well below 2 degrees Celsius, and pursue efforts to limit temperature increase to 1.5 degrees Celsius.
- The IPCC released a Special Report in October 2018 stating that a number of climate change impacts could be significantly reduced by limiting global warming to 1.5°C compared to 2°C. The Report also states that rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems are required to limit global warming to 1.5°C.<sup>1</sup>
- International Maritime Organization (IMO), and Federal, state, provincial and regional governments have adopted targets to significantly reduce absolute GHG emissions by 2030 and 2050.<sup>2</sup>
- NWSA, POT and POS have adopted long-term port-wide GHG reduction targets.<sup>3</sup>
- IMO and Canada and US federal governments have established increasingly stringent emission standards for new engines.<sup>4</sup>
- IMO has established limits on sulfur in fuel used by shipping for 2020.<sup>5</sup>
- Washington State and the Province of BC have established renewable fuel standards and the Province of BC has established a carbon tax.<sup>6</sup>
- Federal, state, provincial and regional governments have established air quality objectives and standards to protect the health of communities.<sup>7</sup>

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<sup>1</sup> [http://report.ipcc.ch/sr15/pdf/sr15\\_spm\\_final.pdf](http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf)

<sup>2</sup> Canada: -30% GHG emissions by 2030, from 2005  
WA State: -80% GHG emissions by 2050, from 1990  
BC Province: -80% GHG emissions by 2050, from 2007

Several regional and local governments (in BC and WA): -80% GHG emissions by 2050, from 2005 / 2007

<sup>3</sup> POS: 2030: -50% GHG emissions; 2050: carbon neutral (scope 1 and 2) and -80% GHG emissions (scope 3), from 2007  
NWSA, POT: 2030: -50% GHG emissions (scope 1, 2, 3); 2050: carbon neutral (scope 1, 2);  
-80% GHG emissions (scope 3), from 2005

<sup>4</sup> International Maritime Organization new engine regulations

US / Canada engine standards: on-road vehicles, non-road equipment, locomotives, harbor vessels

<sup>5</sup> International Maritime Organization fuel sulfur standards (ECA: 0.1% m/m 2015; global 0.5% m/m 2020)

<sup>6</sup> BC Province: Renewable fuel standard (4% diesel and 5% gasoline, 10% by 2020)  
BC carbon tax (\$35 per tonne, \$50 per tonne in 2021)

WA State: WAC 194-29-070 states that local governments (including port authorities) must use at least B5 biodiesel

<sup>7</sup> Canada: Canadian Environmental Protection Act, Canadian Ambient Air Quality Standards (PM<sub>2.5</sub> 24-hour: 28 µg/m<sup>3</sup>)  
US: Clean Air Act, National Ambient Air Quality Standards (PM<sub>2.5</sub> 24-hour: 35 µg/m<sup>3</sup>)  
BC and Metro Vancouver: Ambient Air Quality Objectives (PM<sub>2.5</sub> 24-hour: 25 µg/m<sup>3</sup>)

## Northwest Ports Vision

**The Northwest Ports will phase out emissions from seaport-related activities.** Working to phase out emissions supports clean air for our seaport communities and aligns with the international response to limit global temperature increase to well below 2 degrees Celsius this century, with the goal of limiting the increase to 1.5 degrees Celsius.

**Significant investments and new partnerships are needed to transition from the current reliance on fossil fuels to clean technologies.** The Northwest Ports will take a leadership role in this transition, facilitating and aligning port authority, government, industry and community investments and priorities while supporting seaports as hubs of economic activity.

## Objectives

The Northwest Ports will continue to collaborate across the port authorities, with partner agencies, and with stakeholders to:

- **Track progress on GHG emission reductions** in relation to the following:
  - The Northwest Seaport Alliance, Port of Tacoma and Port of Seattle targets to reduce GHG emissions by 80% by 2050, relative to 2005/2007.
  - The Port of Vancouver vision to be the most sustainable port in the world and to report a GHG emissions metric.
- **Track progress on DPM emission reductions** to reduce health impacts such as asthma and other respiratory health conditions in near-port communities, especially those disproportionately impacted by seaport-related activities.
- **Articulate pathways for each sector** (OGV, harbor vessels, rail, trucks, non-road equipment, administration) to achieve the vision, including quantifying potential emission reductions for each sectors' pathway.
- **Identify emission reduction measures** that support the transition to zero emissions as soon as possible and that continue to advance environmental standards evenly across the airshed.
- **Identify the level of investment needed** for each sector to achieve the vision and ensure emission reduction measures work to address identified investment gaps.

## Guiding Principles

The following principles will guide how participating ports will work together:

- **Evidence-based decisions:** Ports will continually strive to better understand emission sources and impacts.
- **Triple bottom line:** Ports will employ the lenses of social responsibility, environmental impact and economic value to evaluate and prioritize strategies and emission reduction measures.

- **Advocacy and leadership:** Ports will continue to demonstrate leadership within the global port community and advocate across all levels of government and international organizations to support technology advancement leading to the phase out of emissions. Ports will undertake this individually and collectively to maximize impact.
- **Collaboration with industry and government:** Ports and strategy partners will work closely with industry to understand constraints and find the best opportunities to transition to clean technology without undue strain on business, while working closely with government to align funding, incentive programs and emerging policies with emerging opportunities.
- **Collaboration with communities:** Ports and partners will work with near-port communities to identify the best opportunities to reduce local impacts.
- **Technology advancement and supporting infrastructure:** Ports will work with partners to identify suitable technologies through pilot testing, support transition to clean technologies through appropriate infrastructure investments, and give a robust signal to the marketplace to phase out emissions.
- **Accountability:** Ports will continue to be individually accountable for implementing the NWPCAS and advancing environmental performance in the airshed.
- **Ongoing learning and sharing:** Ports will continue to share lessons that support programs and technology advancement leading to the phase out of emissions among the port authorities.
- **Clear communication:** Ports will develop timely and specific messages to articulate progress in a manner that is relevant to stakeholders, and that enables stakeholders to understand their role and participate in achieving the vision.

## Scope

The scope will build from the previous strategies as follows:

- **Increasing focus on reducing greenhouse gas emissions.**
- **Continuing focus on reducing diesel particulate matter.**
- Incorporating a **longer-term outlook** for overarching vision, establishing interim and end state goals that support seaport and jurisdictional targets.
- Incorporating measures to track and reduce other pollutants:
  - **Diesel particulate matter**
  - **Black carbon** (associated with climate change)
  - **Ozone-forming pollutants**, including nitrogen oxides (NOx) and volatile organic compounds (VOC)
- Continuing to use geographic boundaries defined in the port emission inventories.
- **Including all seaport-related activities**, not just those related to movement of containers (e.g. cruise, bulk, break bulk, fishing industry, commercial and recreational marinas).
- **Increasing communication value** for internal and external audiences.
- Clarifying where participating ports will work collectively and where each port will develop individual targets, strategies and actions to implement the strategy.
- Incorporating stationary sources of emissions. (\*TBD during next Phase)

## Next steps

During this project, the Northwest Ports will develop the updated clean air strategy as follows:

- Ports and partners review, refine and **agree to an updated strategic direction**
- Ports and partners re-convene in November to develop an approach and potential **pathways for each sector to achieve the vision** → Discussion Draft #1
- Stakeholders and public provide input and ideas in response to Discussion Draft #1
- Ports and partners re-convene to consider input received, refine pathways, identify **level of investment needed to support the pathways** (where possible), and identify potential metrics for tracking progress (as relevant) → Discussion Draft #2
- Stakeholders provide input and ideas in response to Discussion Draft #2
- Ports and partners re-convene to consider input received, refine pathways, investment levels and metrics, and **define the mechanisms to support implementation of the strategy**, including: type and frequency of progress reporting, commitments for ongoing sharing, learning and collaboration, commitments for reviewing and updating measures, etc.
- Ports and partners **review and refine the final strategy document**.