Summary of Northwest Ports Clean Air Strategy Implementation Plans for the Tacoma Harbor

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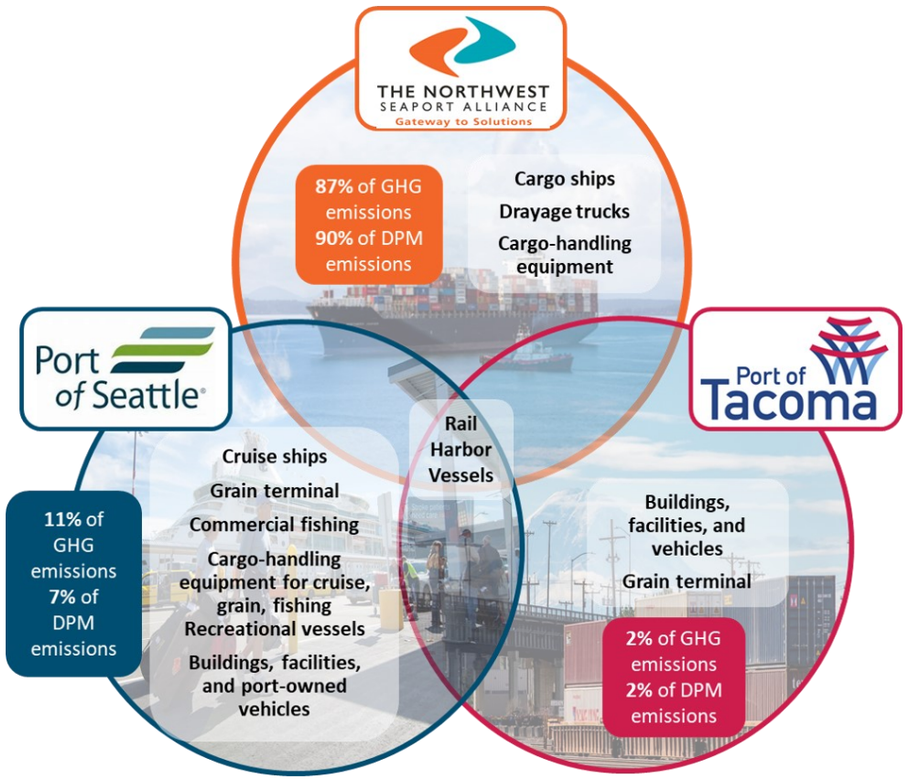
The Northwest Ports Clean Air Strategy (Clean Air Strategy) is a collaborative effort between the Ports of Tacoma, Seattle, Vancouver, B.C., and The Northwest Seaport Alliance that sets a vision to phase out emissions from seaport-related activities throughout the Georgia Basin-Puget Sound airshed by 2050. Each of the ports have developed implementation plans in support of the Clean Air Strategy specific to their own operations.

Page two of this document provides an overview of the Port of Tacoma's and The Northwest Seaport Alliance's implementation plans. In the first five years, efforts will focus on cleaning up the existing fleets, improving efficiency, infrastructure planning and development, and deployment of zero-emission technologies where feasible.

The Port of Tacoma (Port) and The Northwest Seaport Alliance (NWSA) are considered "landlord" ports, meaning we do not directly operate the marine, commercial, and industrial properties ourselves. Instead, we lease land to private businesses who directly manage their own operations, equipment, vehicles and contracts with customers, shipping lines and/or trucking companies. Therefore, the Port and NWSA do not have direct control of our tenant's equipment or day-to-day operations on Port properties, but instead negotiate operating requirements when new lease agreements are signed. Within the Port's direct control are actions to reduce and eliminate emissions from Port-owned equipment, buildings, facilities and fleets.

Achieving the Clean Air Strategy vision will require action, engagement and partnership between the Port and NWSA across all their industry stakeholders including terminal operators, ocean carriers, tug operators, rail operators, real estate tenants, governments, agencies, and near-port communities.

Sources of GHGs (greenhouse gasses) and DPM (diesel particulate matter) from operational sectors within the Ports of Tacoma, Seattle and the Northwest Seaport Alliance.



**The Northwest Seaport Alliance manages the marine cargo operations at the Ports of Tacoma and Seattle.*

Background materials: The 2020 Northwest Ports Clean Air Strategy and the Port of Tacoma and Northwest Seaport Alliance Implementation Plans can be found at: www.portoftacoma.com/environment and nwseaportalliance.com/environment

12/2021

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Port of Tacoma

THE NORTHWEST SEAPORT ALLIANCE

Ocean Going Vessels

- Install shore power at Husky Terminal by end of 2023 **(estimated emission reductions of 3900 tons GHGs and 1.2 tons DPM annually)**
- Work with marine terminal operators to incorporate shore power usage requirements by capable vessels into lease agreements
- Implement shore power at two additional international container terminals by 2030 **(estimated emission reductions of 3800 tons GHGs and 1.2 tons DPM annually)**
- Explore development of "clean vessel" incentive programs and advocate for stronger international policies to reduce emissions from international vessels

Cargo Handling Equipment

- Replace six diesel yard tractors with electric, zero-emission technology **(estimated emission reductions of 670 tons GHGs and .33 tons DPM annually)**
- Require that new equipment used on Port property meets EPA Tier 4 equipment standards **(Tier 4 equipment emits over 85% less DPM than older emission standards)**
- Work with tenants on other zero-/near-zero emission cargo handling equipment projects (**goal of 25 pieces of zero/near-zero equipment operating in the gateway by 2025)**

Trucks

- Expand clean truck program, requiring 2007 or newer engines, to domestic container terminals by 2025 **(newer truck engines emit 90% less DPM than older models)**
- Expand scrap & replace incentive program **(goal of replacing 50 additional trucks by 2025; 450 trucks have been replaced through this program since 2008)**
- Continue to implement infrastructure and technology improvements to decrease waiting, idling and transit times
- Promote statewide transition to zero-emission trucks through collaboration, infrastructure planning and demonstrations **(goal of ten zero-emission trucks demonstrated by 2025)**
- Convene and lead a "clean truck collaborative" group to promote and organize the development/implementation of zero-emission truck technology and infrastructure

Tugs & Trains

- Work with rail operators and agency partners to improve locomotive energy efficiencies and encourage repowers of the oldest switching locomotives serving the Port
- Support the Puget Sound Clean Air Agency's tug repower program and advocate for more funding opportunities to support tug repowers
- Support operating partners in completing one locomotive and one tug repower project by end of 2025 **(estimated emission reduction of .2 tons DPM annually)**

Facilities & Vehicles

- Make energy efficiency and lighting updates at three Port-owned buildings and facilities by 2022 (**upgrades will lower energy use by more than 60% annually)**, begin planning to identify additional energy efficiency projects
- Transition 15 administration vehicles to plug-in hybrid or electric by 2030 and entire fleet of 120 vehicles by 2050 (**emission reduction of 80 tons GHGs annually**)
- Develop/implement a policy and program incorporating sustainable building practices in new Port-owned buildings and major remodel projects
- Develop/implement a policy and program to help port tenants identify and finance energy efficiency and clean energy improvements

Strategy-wide

- Complete the South Harbor Electrification Roadmap, evaluating infrastructure needs for transitioning to zero-emission technologies on port property
- Collaborate on development/implementation of port-related clean air and climate solutions with near-port communities, marine terminal operators and industry partners
- Better understand the port's relationship to environmental health disparities experienced by near-port communities in the Tacoma harbor
- Pursue and support grant applications for port, tenant and industry-partners efforts to implement clean technology
- Advocate for local, state, federal and international policies/programs to advance the goals of the Northwest Ports Clean Air Strategy

**GHGs = greenhouse gasses. DPM = diesel particulate matter. Gateway = marine cargo facilities at the Ports of Tacoma and Seattle*