



---

# Climate Action Plan

---



Port of Vancouver USA





# THE PORT OF / *Possibility*

## Our Vision

Our port builds a community connected to a world of economic opportunity that supports a healthy environment, trade and living-wage jobs.

## Our Mission

The port's mission is to provide economic benefit to our community through leadership, stewardship and partnership in marine, industrial and waterfront development.

Clean air, sustainability and protecting our environment.





# Introduction

The Port of Vancouver USA (the port) has developed a Climate Action Plan (CAP) to help protect the health of the economy, our community and the environment. The CAP serves as a roadmap for the port to reduce greenhouse gas (GHG) emissions through various policies and actions. The CAP provides a clear path for the port to reduce emissions consistent with state and federal targets.

You can read more about our ongoing initiatives on our [Clean Air webpage](#).

Developing a CAP was identified as a key strategy in the port's [Strategic Plan](#) and is another step in the port's continuing commitment to environmental stewardship. Other efforts through the port's [WE CAN! Sustainability Program](#) include creating sustainable design standards, supporting the growth of renewable energy, and integrating sustainable transportation measures.

## About the Climate Action Plan

This CAP is a comprehensive plan that identifies specific actions the port can take over the coming years to reduce GHG emissions and meet the port's emissions reduction goals as well as state and federal targets, thereby mitigating the negative effects of climate change. The CAP also identifies and describes any co-benefits that may occur as the result of GHG reduction actions, such as improved air quality, health benefits, operational cost savings, lower water use, and waste reduction.

---

GHGs are gases that trap the sun's heat. As more GHGs build up in the atmosphere, the earth's temperature increases, contributing to climate change. Some of the most common GHGs include:

- Carbon dioxide
  - Methane
  - Nitrous oxide
  - Fluorinated gases
  - Water vapor
-





---

# Process and Outcomes

---

## STAKEHOLDER OUTREACH AND INVOLVEMENT

Stakeholder feedback has been essential to the development of the port's CAP. The port sought input from the public, port customers and tenants, and port staff and leadership. Feedback was incorporated into the reduction targets and proposed climate actions.

Several tools were utilized for stakeholder outreach and to gain feedback, many offered in both English and Spanish, including:

- Dedicated [CAP webpage](#)
- Frequently asked questions document
- Project-specific email list
- News releases
- Social media channels
- Postcards
- Dedicated email account for comments/questions
- Online feedback forms/surveys to collect stakeholder ideas
- Presentations and public workshops

On July 13, 2021, the commissioners unanimously voted to authorize the chief executive officer to develop and implement a final Climate Action Plan.

---

**Feedback from stakeholders and the public is reflected in both the emissions targets and the specific strategies and actions proposed.**

---

## GREENHOUSE GAS INVENTORY

The port completed a GHG inventory of port-owned and controlled activities for calendar year 2019, the year reflecting the most recent available data. The port conducted its first such inventory in 2005, which serves as its baseline year for GHG emissions, and a second inventory in 2008, which serves as a comparison year. The port's inventory relied on the methodology from the World Research Institute's (WRI) protocol for GHG inventories and the latest mobile emission models from the U.S. Environmental Protection Agency.

There are three general categories, or scopes, of GHG emissions, per this methodology. These are known as Scope 1, Scope 2 and Scope 3 emissions. Scopes 1 and 2 are emissions that are associated with

activities that the port owns or has full operational control over, while Scope 3 emissions are those that are not a direct result of the port's own operations.

Scope 1 emissions included those from the port's vehicle fleet and mobile equipment fuel consumption and stationary engines emitting on site. Scope 2 emissions included those that result from the production of purchased energy (electricity, natural gas, etc.) for port-controlled operations and buildings from a utility provider.

---

**A GHG inventory is an accounting of the amount of GHGs discharged into the atmosphere and the sources of those emissions.**

---



Scope 3 emissions refer to other activities occurring in and around the port, from sources not owned or directly controlled by the port. Examples of these activities include transportation of goods (trains, vessels, cargo handling equipment, trucks and harbor craft), energy use by port tenants (heating/cooling, lighting, etc.), and employee travel and commuting. Scope 3 emissions were not part of the inventory but are addressed elsewhere in the CAP (e.g., potential GHG reduction actions).

**CARBON REDUCTION TARGETS**

Washington State has set statewide targets to reduce carbon emissions by 95% below 1990

levels by the year 2050, and in early 2021, the Biden administration announced federal targets to achieve carbon neutrality by the same year. There are also interim targets at the state and federal levels – 45% and 50% reductions by 2030, respectively. The port’s goal is to exceed or meet the state and federal targets for GHG emissions reductions of the port’s Scope 1 and 2 emissions (based on its 2005 baseline). The port will also take actions to support the reduction of Scope 3 emissions, those that are not a direct result of the port’s own operations, but emissions the port may influence or guide.



**Our Climate Commitment:**  
Meet or exceed state and federal targets for GHG emission reductions:

**CARBON NEUTRAL**  
by 2050  
*and*  
**45% to 50%**  
reduction of 2005 emissions by 2030





# Proposed Climate Actions

After evaluating the results of the GHG inventory and establishing carbon reduction targets, the port worked with the public, tenants, and technical experts to create a “menu” of GHG reduction actions that the port can take over the coming years.

## ACTIONS AND ASSOCIATED MEASURES FOR EMISSIONS REDUCTION

The CAP consists of four overarching actions, and several associated measures that will support reduction targets for the port’s Scopes 1 and 2 emissions. In addition, the port developed multiple actions and measures relating to the port’s Scope 3 emissions – those emissions that are not a direct result of the port’s own operations. The full list of actions and measures are shown in the following pages.



## IDENTIFYING CO-BENEFITS

Co-benefits from the port’s GHG reduction actions can help improve the environment and make a difference in the lives of people that work or live near the port. Examples of co-benefits, and why they are important, include:

**Air Quality Benefits:** Reduces particulate matter in the air resulting from burning of fuels

**Waste Reduction:** Reduces landfill volumes and truck hauling trips on local roadways

**Water Conservation:** Conserves a resource that is under stress in our region

**Operational Cost Savings:** Enables additional investment and saves taxpayer dollars

**Health Benefits:** Reduces asthma and other diseases associated with poor air quality or increases opportunities for physical activity

**Community Benefits:** Provides opportunities for new jobs, training, or education

**Partnership Opportunities:** Enables a greater cost efficiency by sharing resources and best practices between organizations and companies

**Reduced Congestion:** Reduces the number of single-occupancy vehicles and/or freight trucks on the roads



# ACTIONS AND STRATEGIES

## IMPLEMENTATION TIMELINE

Near-Term = By 2025  
 Mid-Term = By 2035  
 Long-Term = By 2050

## GHG REDUCTION POTENTIAL

Low = <100 MTCO<sub>2</sub>e  
 Medium = 100-300 MTCO<sub>2</sub>e  
 High = >300 MTCO<sub>2</sub>e










## TOTAL COST RANGE

(Includes cost savings anticipated as a result of a measure)

Low = <\$100K  
 Medium = \$100K-500K  
 High = >\$500K

## CO-BENEFITS

-  Air quality benefits
-  Waste reduction
-  Water conservation
-  Operational cost savings
-  Health benefits
-  Community benefits
-  Partnership opportunities
-  Reduced congestion

Initiative	Implementation Timeline			GHG Reduction Potential	Total Cost Range	Co-benefits
	2025	2035	2050			
<b>SCOPE 1 AND 2 MEASURES</b>						
<b>Action: Develop Sustainable Design &amp; Construction Standards</b>						
Apply sustainability standards to new construction projects.				Low	Low	
Develop sustainable construction standards such as low-carbon concrete and asphalt, low-emission construction vehicles, construction waste reduction, and materials reuse.				Low	Low	
<b>Action: Pursue Energy Efficiency Retrofits</b>						
Expand lighting retrofits program.				Low	Low	
Install occupancy sensors, building controls, programmable thermostats and smart meters.				Low	Low	
Replace aging heating, ventilation and air conditioning (HVAC) units with energy-efficient technology.				Low	Medium	
<b>Action: Promote Renewable Energy Use</b>						
Explore renewable energy opportunities, including on-site solar power generation, small-scale wind generation, geothermal energy, and replacement of natural gas.				High	High	
<b>Action: Upgrade or Replace Fossil-Fueled Vehicles and Equipment</b>						
Electrify or hybridize diesel- and gasoline-powered vehicles and equipment.				Medium	High	
Install electric vehicle charging infrastructure.				Medium	High	
Replace use of diesel with low-carbon fuels, such as biodiesel, renewable diesel and hydrogen.				Medium	Medium	



# ACTIONS AND STRATEGIES

## IMPLEMENTATION TIMELINE

Near-Term = By 2025  
 Mid-Term = By 2035  
 Long-Term = By 2050

## GHG REDUCTION POTENTIAL

Low = <100 MTCO2e  
 Medium = 100-300 MTCO2e  
 High = >300 MTCO2e

## TOTAL COST RANGE

(Includes cost savings anticipated as a result of a measure)

Low = <\$100K  
 Medium = \$100K-500K  
 High = >\$500K

## CO-BENEFITS

-  Air quality benefits
-  Waste reduction
-  Water conservation
-  Operational cost savings
-  Health benefits
-  Community benefits
-  Partnership opportunities
-  Reduced congestion

Initiative	Implementation Timeline			GHG Reduction Potential	Total Cost Range	Co-benefits
	2025	2035	2050			
<b>SCOPE 3 MEASURES</b>						
<b>Action: Reduce Emissions from Employee Commute</b>						
Work with C-TRAN to provide transit service to the port.				Low	Low	
Provide transit subsidies to employees.				Low	Low	
Install bicycle infrastructure, such as secure parking and showers, to promote bicycle commuting.				Low	Low	
Support effective carpool options.				Low	Low	
Promote telecommuting through enhanced virtual work infrastructure and policies.				Low	Low	
<b>Action: Reduce Business Travel Emissions</b>						
Offset emissions from business-related air travel and promote use of virtual meetings where feasible.				Low	Low	
Promote use of low-carbon ground transport options for business travel.				Low	Low	
<b>Action: Reduce Emissions Related to Solid Waste</b>						
Provide recycling services and infrastructure.				Low	Low	
Develop a waste reduction plan.				Low	Low	
<b>Action: Reduce Emissions Related to Water Use</b>						
Promote the use of green infrastructure to manage stormwater.				Low	Medium	
Explore water system efficiencies.				Low	Medium	



# ACTIONS AND STRATEGIES

## IMPLEMENTATION TIMELINE

Near-Term = By 2025  
 Mid-Term = By 2035  
 Long-Term = By 2050

## GHG REDUCTION POTENTIAL

Low = <100 MTCO<sub>2</sub>e  
 Medium = 100-300 MTCO<sub>2</sub>e  
 High = >300 MTCO<sub>2</sub>e



## TOTAL COST RANGE

(Includes cost savings anticipated as a result of a measure)

Low = <\$100K  
 Medium = \$100K-500K  
 High = >\$500K

## CO-BENEFITS

-  Air quality benefits
-  Waste reduction
-  Water conservation
-  Operational cost savings
-  Health benefits
-  Community benefits
-  Partnership opportunities
-  Reduced congestion

Initiative	Implementation Timeline			GHG Reduction Potential	Total Cost Range	Co-benefits
	2025	2035	2050			
<b>SCOPE 3 MEASURES</b>						
<b>Action: Develop Sustainable Design and Construction Standards</b>						
Develop sustainability standards for new construction projects on port property.				Medium	Medium	
Develop sustainable construction standards, such as low-carbon concrete and asphalt, low-emission construction vehicles, construction waste reduction, and materials reuse, for projects occurring on port property.				Medium	Medium	
<b>Action: Create Incentives and Partnerships</b>						
Explore carbon reduction in collaborations on agreements with tenants/customers.				High	High	
Pursue partnerships, incentives and grant opportunities to support tenant/customer energy efficiency, equipment electrification and other carbon-reduction initiatives.				High	Medium	
Emphasize and increase marketing efforts to pursue innovative business opportunities and renewable, clean energy projects.				High	High	
<b>Action: Promote Tenant Energy Efficiency Initiatives</b>						
Promote lighting retrofits by tenants.				Medium	Low	
Promote installation of occupancy sensors, building controls, programmable thermostats and smart meters by tenants.				Medium	Low	
Promote replacement of aging HVAC units with energy-efficient technology in tenant facilities.				Medium	High	



# ACTIONS AND STRATEGIES

## IMPLEMENTATION TIMELINE

Near-Term = By 2025  
 Mid-Term = By 2035  
 Long-Term = By 2050

## GHG REDUCTION POTENTIAL

Low = <100 MTCO<sub>2e</sub>  
 Medium = 100-300 MTCO<sub>2e</sub>  
 High = >300 MTCO<sub>2e</sub>

## TOTAL COST RANGE

(Includes cost savings anticipated as a result of a measure)

Low = <\$100K  
 Medium = \$100K-500K  
 High = >\$500K

## CO-BENEFITS

-  Air quality benefits
-  Waste reduction
-  Water conservation
-  Operational cost savings
-  Health benefits
-  Community benefits
-  Partnership opportunities
-  Reduced congestion

Initiative	Implementation Timeline			GHG Reduction Potential	Total Cost Range	Co-benefits
	2025	2035	2050			
<b>SCOPE 3 MEASURES</b>						
<b>Action: Promote Renewable Energy Use by Tenants</b>						
Support on-site renewable energy generation by tenants.				High	High	    
Encourage tenants to replace natural gas use with low-carbon/renewable alternatives.				High	Medium	   
Explore communitywide renewable generation partnerships and opportunities.				High	High	    
<b>Action: Promote the Upgrade of Fossil-fueled Tenant Vehicles and Equipment</b>						
Promote the electrification and hybridization of diesel- and gasoline-powered vehicles and equipment.				Medium	High	    
Install common use electric vehicle charging infrastructure.				Low	Medium	    
Promote the replacement of diesel with low-carbon fuels, such as biodiesel, renewable diesel and hydrogen.				Medium	Low	    
Evaluate the use of fuel cells for heat and power, mobile equipment and locomotives.				Medium	High	    
Promote the use of clean trucks and low-carbon drayage vehicles.				Medium	High	    
<b>Action: Promote Lower Carbon Marine Operations</b>						
Evaluate the use of shore power options for vessels visiting the port.				High	High	   
Facilitate the development of a terminal equipment inventory to help target new investments and grant opportunities.				Medium	Low	    



# ACTIONS AND STRATEGIES

## IMPLEMENTATION TIMELINE

Near-Term = By 2025  
 Mid-Term = By 2035  
 Long-Term = By 2050

## GHG REDUCTION POTENTIAL

Low = <100 MTCO<sub>2</sub>e  
 Medium = 100-300 MTCO<sub>2</sub>e  
 High = >300 MTCO<sub>2</sub>e


















## TOTAL COST RANGE

(Includes cost savings anticipated as a result of a measure)

Low = <\$100K  
 Medium = \$100K-500K  
 High = >\$500K

## CO-BENEFITS

-  Air quality benefits
-  Waste reduction
-  Water conservation
-  Operational cost savings
-  Health benefits
-  Community benefits
-  Partnership opportunities
-  Reduced congestion

Initiative	Implementation Timeline			GHG Reduction Potential	Total Cost Range	Co-benefits
	2025	2035	2050			
<b>SCOPE 3 MEASURES</b>						
Encourage visits by cleaner or more fuel-efficient vessels.				Medium	Medium	   
Explore partnerships to promote shipping via the river system for eastbound cargo.				Medium	Low	    
<b>Action: Reduce Emissions from Rail Operations</b>						
Promote idle reduction by rail vehicles/equipment (including locomotives).				Low	Low	    
Evaluate the development of infrastructure to support electric locomotives for on-port switching operations.				Medium	High	  





# Implementation

The port will implement selected actions and measures and monitor overall progress toward meeting the port's climate targets. Staff will recommend reduction actions during the port's annual budget review and Commission approval process, and the selected actions will be implemented in alignment with the port's strategic plan. Periodic progress updates will be provided, and the CAP webpage updated to inform progress towards the port's climate targets.

This plan is a living document. Rising to meet the challenge of climate change will require us to periodically review and add or adjust actions and measures, to make sure we take advantage of new technologies, best practices, and changing market conditions as we move toward our 2030 and 2050 targets. The ability to evaluate and adjust the document, actions and measures in a flexible and

---

**Considerations for how implementation strategies are chosen and prioritized include the potential for emissions reduction, cost and alignment with current sustainability initiatives.**

---

nimble way will be essential to our success.

With this Climate Action Plan, the Port of Vancouver USA is on the way to becoming carbon neutral by 2050. Thank you to everyone who provided feedback, shared your ideas and supported the port through this process. We look forward to making the port, our region and the world a more sustainable place.







Port of Vancouver USA

**CONSULTANT TEAM**

**RAMBOLL**



---

**CONTACT US**

info@portvanusa.com | 360-693-3611

3103 NW Lower River Road | Vancouver, WA 98660

[www.portvanusa.com](http://www.portvanusa.com)

**FOLLOW US**

    @portvanusa

**2021**

