

APPENDIX D | GLOSSARY AND ACRONYMS/ABBREVIATIONS

Actions: Specific and measurable steps needed to implement emission reduction strategies described in this Plan. Actions are grouped in 5-year increments

Air pollutants: Natural and human-made substances in the air we breathe that negatively impact human or environmental health. Air pollutants of most concern to ports include particulate matter, ozone-forming pollutants (nitrogen oxides and volatile organic compounds) and sulfur oxides.

Biodiesel: Diesel fuel made from waste oils and fats, rather than petroleum

B20: Diesel fuel with 20 percent biodiesel content and 80 percent petroleum diesels

Blue carbon: Carbon dioxide captured and stored in ocean and nearshore habitats

Carbon-neutral: Making no net release of carbon dioxide to the atmosphere; allows emissions to be offset with a reduction, including purchase of carbon offsets

Carbon sequestration: The process of trapping or capturing carbon dioxide in plants, sediments, water or underground, thus removing it from the atmosphere

Century Agenda: The Port of Seattle's 25-year strategic plan to stimulate economic development while remaining committed to social and environmental responsibility

CHE: Cargo-handling equipment

CO₂: Carbon dioxide, the primary greenhouse gas that traps heat in the atmosphere. Carbon dioxide enters the atmosphere through burning of fossil fuels used in for energy and transportation, from burning of solid waste and other organic materials, and from certain chemical reactions. In this Plan, the term CO₂ is generally synonymous with greenhouse (GHG) emissions.

CO₂e: Carbon dioxide emissions

DHW: Domestic hot water used in buildings. The water is heated by electricity, natural gas, or other forms of energy.

Emissions Inventory: A detailed estimate of air emissions (either air pollutants or greenhouse gases) that one or more sources produces over a certain period. Port emission inventories usually estimate pollutants in tons or metric tons of pollutant per year.

EV: Electric vehicle

Fossil fuel: Carbon-based fuels from fossil hydrocarbon deposits, including oil, diesel, gasoline, bunker fuel used by ships, coal, propane, and natural gas

Greenhouse gas (GHG) emissions: Gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of thermal infrared radiation emitted by the Earth's surface, the atmosphere itself, and by clouds.³³ GHGs included

³³ IPCC, [Data Distribution Center Glossary](#).

in port inventories are carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). In this Plan, the term GHG is generally referring to CO₂.

HV: Harbor vessels, including tugboats, bunker fuels used by ships, and diesel and gasoline commercial fishing vessels, and recreational vessels

HVAC: Heating, ventilation, and air conditioning for buildings

kWh: Kilowatt-hour; unit of energy used to describe electricity consumption or production

LED: Light emitting diode, a type of high efficiency light bulb

Lifecycle emissions: Emissions that result from the extraction, processing, and transport of the fuel or technology prior to its final use, in addition to those that are emitted at the tailpipe

The Plan: Port of Seattle's Maritime Climate and Air Action Plan (this Plan) which includes actions relating to the Maritime, Economic Development and Corporate divisions and excludes the Northwest Seaport Alliance and the Port of Seattle's Airport Division and its operations and emission sources

Maritime Activity: A category of the Port's maritime emission sectors; includes ships, harbor craft, recreational vessels, locomotives, trucks, and cargo-handling equipment that are not owned by the Port but are used on and around the Port's cruise terminals, grain terminal, marinas, and industrial properties. These are GHG Scope 3 sources.

MT: Metric ton, the unit of measure used to account for climate and air pollution magnitudes

Net-zero: Refers to a state in which the carbon dioxide released into the atmosphere from a company's activities is balanced by an equivalent amount being removed (excluding carbon offsets)

NWSA: The Northwest Seaport Alliance, a separate port authority formed in 2015 by a marine cargo operating partnership between the Port of Seattle and the Port of Tacoma

Northwest Ports Clean Air Strategy: Northwest Ports Clean Air Strategy (2020 Strategy), a regional, multi-port and multi-agency plan to reduce air pollutant and greenhouse gas emissions from seaport-related sources first established in 2008

OGV: Ocean-going vessels such as cruise ships and grain ships that exit Puget Sound as part of their domestic or international itineraries

Plug load: Energy used by equipment that is plugged into electrical outlets

Port-managed properties: Properties occupied by port staff or leased to tenants, but that remain primarily managed by the port

Port Maritime Administration: A category of the Port's maritime emission/carbon capture sources that are under direct control or strong guidance of the Port; includes Port-managed and tenant-managed buildings and campuses, fleet vehicles and equipment, remediation projects, habitat restoration, solid waste management, employee commuting, and business air travel. Includes GHG Scopes 1 – 3 sources.

Priority Actions: Key short-term ready-to-implement actions to be completed in 1 – 3 years that are first steps to enable or accelerate future actions

Renewable diesel: Renewable fuel made from plant or animal-based fat. Renewable diesel is chemically the same as fossil diesel and is a “drop-in” fuel capable of replacing fossil diesel without engine modifications. Renewable diesel and biodiesel are made from similar sources but by different chemical processes.

Renewable energy: Any form of energy from solar, geophysical, or biological sources that is replenished by natural processes at a rate that equals or exceeds its rate of use.³⁴ Examples include sunlight, wind, rain, tides, waves, geothermal heat, and some hydroelectricity.

Scope 1 emissions: GHG emissions from sources that are owned or controlled by the organization, also referred to as direct emissions

Scope 2 emissions: GHG emissions from the consumption of purchased electricity, steam, or other sources of energy (e.g., chilled water) generated upstream from the organization

Scope 3 emissions: GHG emissions that are a consequence of the operations of an organization but are not directly owned or controlled by the organization. These are also referred to as indirect emissions.

Strategies: Recommended approaches to reduce air pollutant or GHG emissions

SWCES: Seattle Waterfront Clean Energy Strategy

Tenant-managed properties: Properties leased by tenants from the Port or owned by tenants through ground leases where the lease terms limit the port's control over building management, which is primarily in the tenant's control

Ton: 2000 pounds, also called a Short Ton

Ton, Metric: 1000 kilograms or 2,204.6 pounds

Zero emissions: For this Plan and the 2020 Northwest Ports Clean Air Strategy, use of technologies and fuels that result in no tailpipe emissions, recognizing that emissions may still occur when looking at the full lifecycle. Tailpipe emissions refers to chemicals released as a result of burning a fuel to operate an engine (e.g., gasoline, diesel, biofuels). Electric- and hydrogen-fueled engines have zero tailpipe emissions.

³⁴ IPCC, [Data Distribution Center Glossary](#).