TOWARD THE GREENEST CRUISE PORT IN NORTH AMERICA

The Port of Seattle is on its way to becoming the greenest port in North America, with a goal to phase out seaport-related emissions by 2050. The cruise industry is a significant economic driver in the region, contributing 5,500 jobs and nearly \$900 million each year in local business revenue. As the cruise industry grows locally, the Port recognizes its responsibility and the importance of balancing economic growth with sustainability.

The Port of Seattle is using shore power as a key environmental strategy to eliminate climate and air emissions from cruise ships while at berth in Seattle. Each time a cruise ship docks in Seattle, it takes an average of 10 hours to offload guests, load provisions, welcome new guests, and prepare for its next departure. While the ships are at berth, they still need energy to run lights, chill food, operate equipment, and power a myriad of other onboard services. A shore power connection allows cruise ships to plug into clean, landside electrical power, and turn off diesel engines while at berth. As a result, each ship that plugs in can reduce diesel emissions by 80 percent and CO₂ emissions by 66 percent on average.

The Port of Seattle has two shore power connected berths at the Smith Cove Cruise Terminal at Pier 91, and a project is underway to install a shore power connection at the Pier 66 cruise berth to be ready for use in 2024.

Today, port agreements that allow cruise ships to berth at Port of Seattle terminals require shore power capable ships to use shore power when a connection is available. The Port has also set a goal to have 100 percent of home port cruise ships in Seattle equipped with shore power capability and connect on every call by 2030 or sooner.

2022 SHORE POWER HIGHLIGHTS

- 100% of ships at Pier 91 from Holland America Line and Princess Cruises are equipped with shore power
- 23% of sailings plugged into shore power (69 of 295)
- Shore power avoided 2,000 metric tons of GHG and 0.6 metric tons diesel particulate matter.

93% of Seattle City Light's energy used for shore power comes from renewable sources like hydroelectricity, wind, and biogas. In comparision, the U.S. National average uses only 11% renewable energy.

- At Pier 91, a ship connected to shore power eliminates the emissions equivalent of an average car driving round trip from Seattle to New York 30 times
- In 2022, 50% of calls at Pier 66 were equipped with shore power. Once complete, shore power at Pier 66 is expected to eliminate an estimated 3,000 metric tons of CO₂ when homeport ships connect to landside electrical power

2023 CRUISE SEASON PREVIEW

- 289 cruise ship calls (275 calls by homeport cruise ships, 14 calls by in-transit cruise ships)
- 2 of the 3 Port of Seattle cruise berths offer shore power
- 38% (111/289) of total sailings expected to plug in to shore power



Current and Future Shore Power Installations in Seattle

Current Shorepower

Shorepower Under Construction

Planned/Future Opportunities





PARTNERING WITH THE CRUISE INDUSTRY TO PHASE OUT AIR POLLUTION AND ADDRESS CLIMATE CHANGE

Century agenda greenhouse gas reduction targets

 Port Controlled: 50% reduction by 2030 (from 2005), net zero or better by 2040

SEA Airport

 Port Influenced: 50% reduction by 2030 (from 2007), carbon neutral or better by 2050

2020 Northwest Ports Clean Air Strategy Commitments

VISION: Phase out emissions from seaport-related activities by 2050, supporting cleaner air for our local communities and fulfilling our responsibility to help limit global temperature rise to 1.5 degrees Celsius

OBJECTIVES: By 2030, install shore power to all major cruise and container berths

CRUISE IS A KEY REGIONAL INDUSTRY

Seattle's cruise industry is a major economic driver for the region, providing:

- Over 5,500 jobs
- Over \$900 million into the region's economy each season
- Each home port ship call contributes \$4.2 million to the state's economy every time it docks
- The average cruise party of 3.4 people spends \$660 in Seattle during their cruise visit, boosting local businesses



