### **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 starting now. 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.

Eliminating at-berth emissions by switching a ship's engines to using clean electricity is a major strategy for phasing out air emissions. 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 myriad of other onboard services. A shore power connection allows cruise ships to plug into cleaner, 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 CO<sub>2</sub> emissions by 66 percent on average.

Port of Seattle has two shore power connected berths at the Smith Cove Cruise Terminal at Pier 91 and a project is underway to expand shore power to the Pier 66 cruise berth.

Today, 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 homeport cruise ships in Seattle come equipped with shore power capability and connect on every call by 2030 or sooner.

#### **2021 SHORE POWER HIGHLIGHTS**

- 93% of Seattle City Light's energy used for shore power comes from renewable sources like hydroelectricity, wind and biogas.
   In comparison, the U.S. National average uses only 11% renewable energy
- 100% of ships at Pier 91 from Holland America Line and Princess Cruises are equipped with shore power
- At Pier 91, a ship connected to shore power eliminates the emissions equivalent of an average car driving from Seattle to New York 30 times
- The Port expects to deliver a new shore power connection at Pier 66 in 2023. In 2021, 42% of calls at Pier 66 were equipped with shore power. Once complete, shore power at Pier 66 could eliminate an estimated 1,000 metric tons of CO<sub>2</sub> with home port ships connecting to landside electrical power.

#### **2022 CRUISE SEASON PREVIEW**

- 296 cruise ship calls (281 calls by homeport cruise ships, 15 calls by in-transit cruise ships)
- 55 percent of all homeport calls equipped to use shore power (154 of 281)
- 2 of the 3 Port of Seattle cruise berths offer shore power
- Shore power is expected at Pier 66 in 2023, making all three cruise berths shore power capable.
- 55 percent of all home port calls at the Smith Cove Cruise Terminal at Pier 91 are equipped with shore power and expected to connect (101 of 184)
- 100 percent of Holland America Line and Princess Cruises ships calling at Pier 91 are shore power capable.



# **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
- 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 homeport ship call contributing an average \$4.2 million to the state's economy
- The average cruise party of 3.4 people spends \$660 in Seattle during their cruise visit, boosting local businesses



