



2022 Cruise Environmental Strategy Study Session

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Purpose for Today



1 VISION & FOUNDATION

2 ENVIRONMENTAL STRATEGY

3 LEADERSHIP OPPORTUNITIES



1

VISION & FOUNDATION





An aerial photograph of the Seattle waterfront. The city skyline is visible in the background. In the foreground, several large cruise ships are docked at piers. A large grain terminal is visible on the left side of the waterfront. A white arrow points from the text 'GRAIN TERMINAL Terminal 86' to the grain terminal. Another white arrow points from the text 'BELL STREET CRUISE TERMINAL Pier 66' to a pier in the distance. A third white arrow points from the text 'SMITH COVE CRUISE TERMINAL Pier 91' to a pier in the foreground where a large cruise ship is docked.

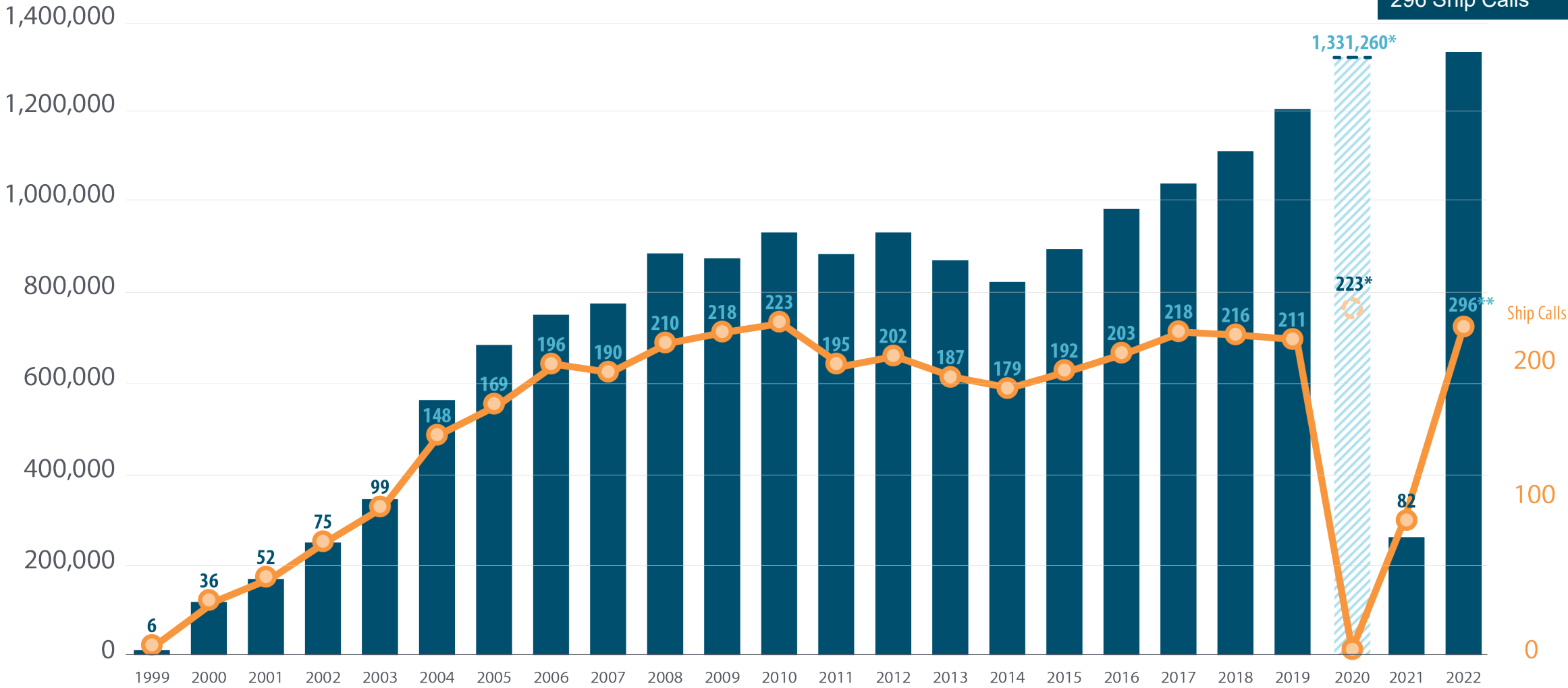
**GRAIN
TERMINAL**
Terminal 86

**BELL STREET
CRUISE TERMINAL**
Pier 66

**SMITH COVE
CRUISE TERMINAL**
Pier 91

Cruise Operations 1999-2022

2022 Estimate
 1.3M Passengers
 296 Ship Calls



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Passengers	6,615	119,770	166,815	244,905	344,922	562,308	686,978	751,074	780,593	886,039	875,433	931,698	885,949	934,900	870,994	823,780	898,032	983,539	1,071,594	1,114,886	1,208,590	0	229,060**	1,300,000**
Vessel Calls	6	36	52	75	99	148	169	196	190	210	218	223	195	202	187	179	192	203	218	216	211	0	82	205**

Estimate pre-pandemic* Estimate**

Maritime Revenue & Cruise

- Cruise revenues have grown year over year
- Seattle has been aggressive in raising Port directed fees
- Supports other Maritime & Port Central Services

	Actuals 2014	Actuals 2015	Actuals 2016	Actuals 2017	Actuals 2018	Actuals 2019	Actuals 2021	Forecast 2022
Cruise Revenue	\$12,993,430	\$14,413,620	\$15,421,861	\$17,595,810	\$18,879,880	\$22,409,725	\$9,517,055	\$28,573,859
Expenses Directly Charged to Cruise Subclasses	\$3,388,171	\$3,530,430	\$4,270,256	\$4,327,393	\$4,787,542	\$5,340,108	\$4,468,451	\$7,243,847
Net Income to Support Maritime & Port Central Services	\$9,605,259	\$10,883,190	\$11,151,605	\$13,268,417	\$14,092,339	\$17,069,616	\$5,048,604	\$21,330,012

Business Agreement Definitions

- **Tariff:** Terminal Tariff No. 5
 - Port rates, charges, rules and regulations governing dockage, passenger fees and other port directed fees.
- **Preferential Berthing Agreement:**
 - Multi year agreements
 - Preferential berthing rights in exchange for Minimum Annual Guarantee
 - Ability to add other stipulations and reporting requirements.
- **Lease:**
 - Can include unique terms, including upkeep of the property and equipment.
 - Preferential Berthing rights and a minimum Annual Guarantee.

Business Agreements



Cruise Brands	Norwegian Cruise Line, Oceania Cruises, Regent Seven Seas	Holland America Line, Princess Cruises, Carnival Cruise Line, Seabourn	Royal Caribbean, Celebrity Cruises, Silversea
Percent of Passengers	33% of passengers	39% of passengers	28% of revenue passengers
Business Agreement Type	Lease 15-year; expires in 2030 5-year extension option	Preferential Berthing Agreement Extension options through 2023	Tariff

Regional Economic Benefit



CRUISE SUPPORTS



5,500 jobs



\$900 million
annual business revenue



Tourism



Equity and Community

- Equitable Economic Cruise Investments
- Job Fairs: new in 2022
- Connecting local businesses with Cruise lines



Suppliers

- Businesses around the state supply ships



Alaska Economic Impact

“Tourism gave us the ability to transition from a timber economy to a sustainable tourism economy, allowing our community to thrive while also preserving over 7,000 acres of old growth forest.”

Russell Dick, President & CEO of Huna Totem Corporation
Icy Strait Point, Alaska

The continuation of the no sail order “...will mean 2 ½ years with no economy. Somewhere around \$330 million in lost revenue for local businesses. People are already moving away. Population is down to around 800 from 1,100 last summer. Businesses will fail. A lot of them. We lost professionals in all sectors. The municipality will run out of reserves by next August, even with the stimulus funding.”

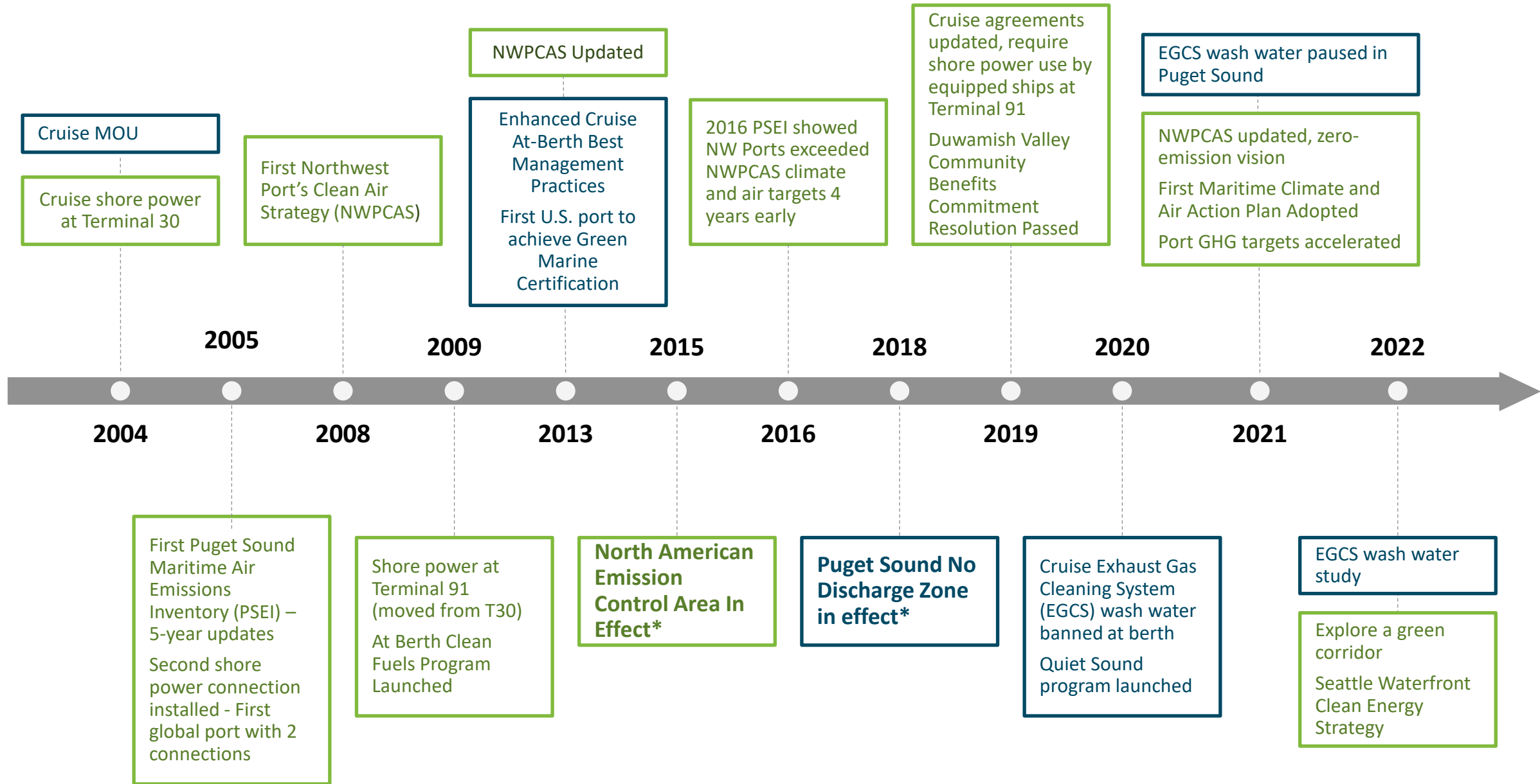
Andrew Cremata, Mayor, Skagway, Alaska

2020 Financial Impacts to Alaska

Local Community Revenue Loss	-\$98.6 million
Wages lost State and Local	-\$305 million
Lost Revenues for Local Business	-\$1.1 billion



A Legacy of Cruise Environmental Innovation and Leadership



Bold* = Regulation

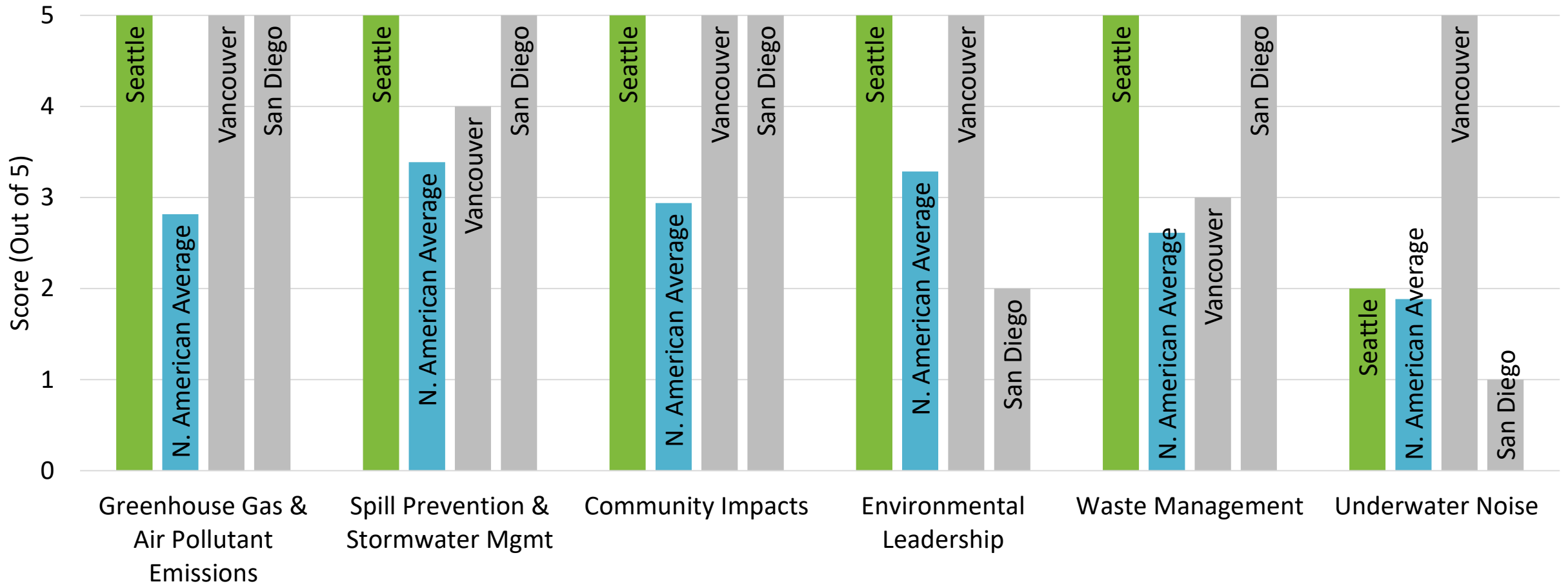
Green = Air Quality

Blue = Water Quality

Maritime Environmental Leadership in North America



Port of Seattle compared to **GREEN** MARINE-Certified West Coast Cruise Ports



2021 Scores

The Port's Tools for Transformation

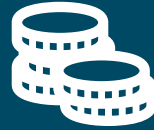
PORT OF SEATTLE



Leases,
Agreements,
Tariffs



Incentives &
Recognition



Direct
Investment



Emissions
Accounting,
Reporting



Community
Engagement

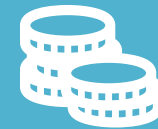
MARITIME INDUSTRY



Innovation



Partnerships



Direct Investment

POLICY & REGULATIONS

International • National • State



Advocacy



Partnerships

Waterfront Guiding Principles

1. Maximize the use of the Port's **deep-water facilities and industrial lands** to serve maritime industrial uses.
2. Expand **economic, cultural and community benefits** within Cruise Operations and Development.
3. Support **financial sustainability** of the Port of Seattle
4. Incorporate leading edge **environmental stewardship and sustainability** practices and facilities that can exceed existing regulations.
5. Facilitate improved **transportation mobility** of people and goods in the region.
6. Provide consistent excellence in **customer service** to strengthen Seattle's role as the West Coast's premier cruise port.

2

ENVIRONMENTAL STRATEGY



Charting the Course To Our Future State



Today

- Build shore power
- Improve vessel efficiency and environmental performance
- Create a Seattle Waterfront Clean Energy Strategy
- Engage and advocate at local, national, and international arenas
- Explore a Green Corridor

By 2030

- Install clean energy infrastructure
- Pilot novel propulsion
- New clean maritime fuels

By 2050

- Operate a zero-emission waterfront
- Zero-emission cruise operations

Building Blocks for a Sustainable Cruise Industry



- Voluntary agreement to prevent wastewater discharge
- Ban on scrubber discharge
- Ocean Acidification Action Plan
- Stormwater best management practices



- Quiet Sound
- Underwater Noise Mitigation & Management Plan
- Construction noise reduction and marine mammal monitoring



- Northwest Ports Clean Air Strategy
- Maritime Climate and Air Action Plan
- Community engagement
- Focus on environmental justice



- Explore a Green Corridor
- Seattle Waterfront Clean Energy Strategy
- Sustainable maritime and aviation fuels
- International engagement



- Rigorous solid waste and recycling programs
- Eliminating single-use plastics
- Terminal and on-ship energy efficiency
- Efficient vessel design

Partnering to Preserve Water Quality in Puget Sound



Water Quality Successes:

- Since 2004, cruise ships have not discharged any sewage into Puget Sound as part of the Cruise MOU
- 2020: the Port used its tariff to ban all cruise ships from discharging exhaust gas cleaning system wash water while at berth
- 2021: Cruise lines voluntarily agreed to pause wash water discharges in Puget Sound while a 3rd party studies water quality impacts
- Currently, Seattle's cruise ships exceed regulation and do not discharge anything into Puget Sound

Looking Ahead:

- Continue support for the Cruise MOU, with CLIA and Ecology
- Participate in a Puget Sound study of EGCS water quality impacts
- Continue cruise at-berth best management practices, training
- Continue to engage environmental stakeholders on water quality issues

Protecting Marine Ecosystems

Successes:

- First port to join the International Alliance for Ocean Acidification (OA) and develop an OA Action Plan
- Founding member of Quiet Sound to reduce underwater noise impacts to Southern Resident Killer Whales from large vessels

Looking Ahead:

- Developing an Underwater Noise Mitigation & Management Plan



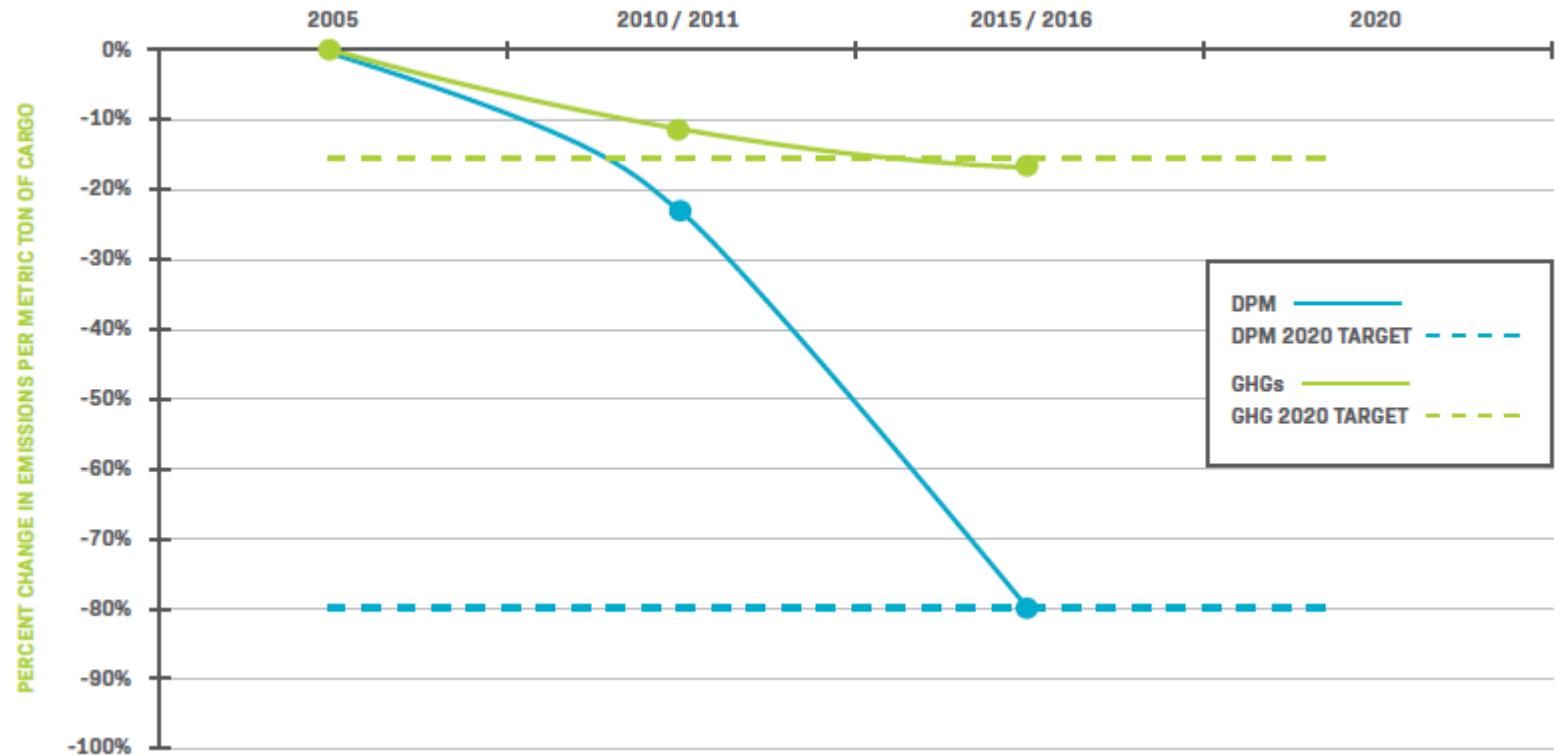
The Northwest Ports Clean Air Strategy

Phase-out emissions from seaport-related activities by 2050, supporting cleaner air for local communities and fulfilling our shared responsibility to help limit global temperature rise to 1.5°C.

Shared airshed:



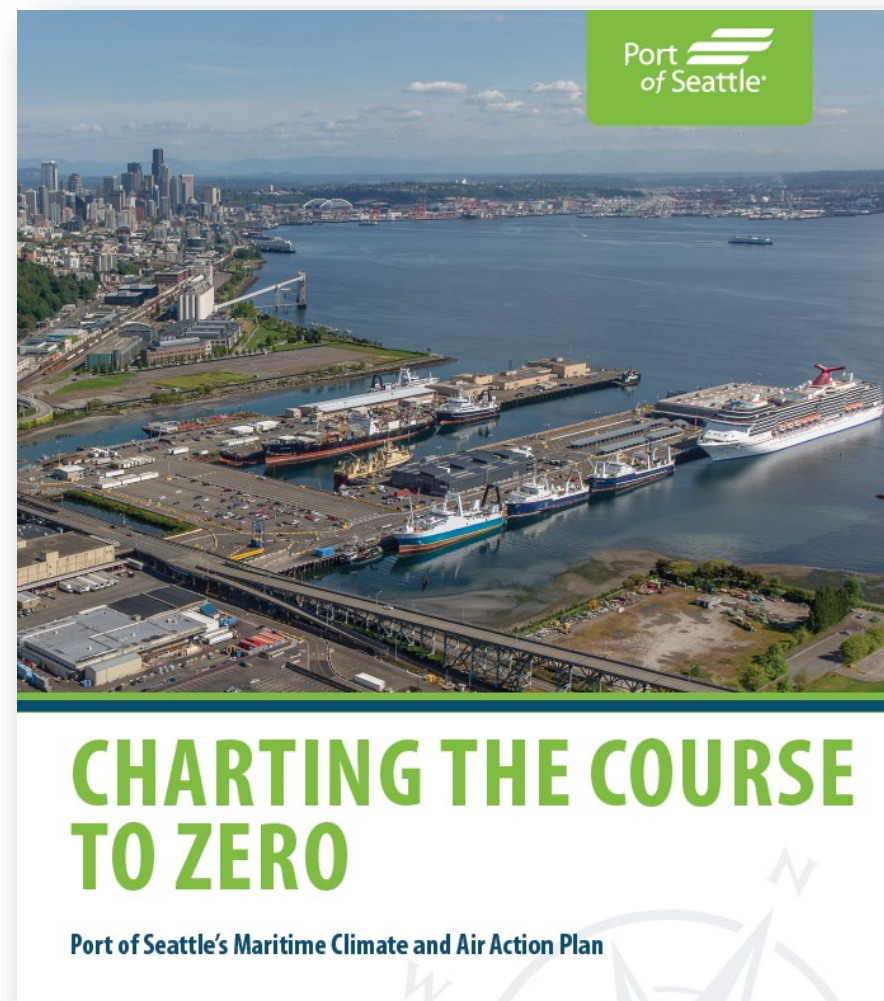
Past Progress: 2005 to 2020:



Charting the Course to Zero:

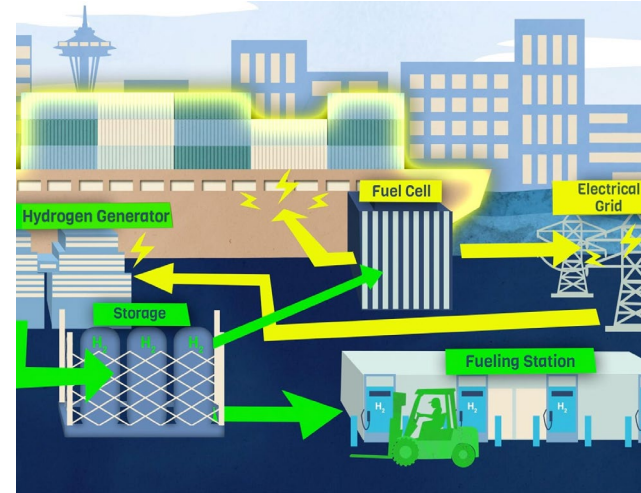
Port of Seattle's Maritime Climate and Air Action Plan

- Strategies and actions to reduce maritime GHGs 50% by 2030:
 - Install shore power at all major cruise berths
 - Reach 100% of homeport cruise vessels equipped with shore power
 - Support domestic and international efforts to phase out emissions from ocean-going vessels
 - Support continual advancements in equipment efficiency and emission reduction from vessels
- Near-term projects:
 - Complete the Waterfront Clean Energy Strategy
 - Install shore power at Pier 66
 - Pilot green lease terms
 - Develop a process for ongoing engagement with near-port communities



Planning for Ports as Clean Energy Hubs

- A collaborative effort involving NWSA, Seattle City Light and the Maritime Industry
- Investments to facilitate Port and industry transition to zero emissions fuels and technologies
- Enabling infrastructure for zero-emissions terminals
- Work with National Labs to evaluate clean hydrogen for vessel, vehicle, equipment and utility applications and large volume storage



Engaging Near-Port Communities

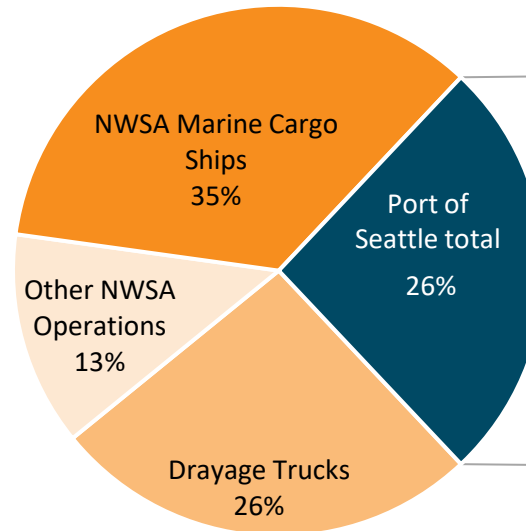
- Established the Duwamish Valley Community Benefits Commitment
- Community feedback shaped the Port's cruise environmental priorities
- Partnering in the Duwamish Valley Clean Air Program
- Developing an ongoing engagement process on climate and clean air issues informed by near-port communities
- Developing community engagement playbook of best practices



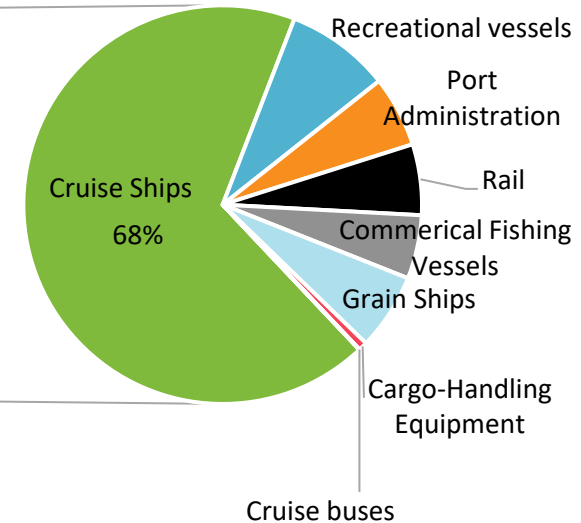
Promoting Transparency and Accountability

- Complete GHG emissions inventories annually
- Conduct Puget Sound Maritime Air Emissions Inventory every 5 years
- Collect cruise-specific emissions data
- Work collectively with partners to expand availability of cruise environmental data
- Develop annual progress reports and quarterly newsletters
- Engage community with regular environmental progress reports, and opportunities to inform cruise environmental strategies

Port-related Maritime GHG Emissions in Seattle
300,114 metric tons GHG



Port of Seattle Maritime GHG Total:
78,775 metric tons GHG



↓17%
GHG

↓84%
DPM

From Port of Seattle ocean-going vessels between 2005-2016

Achieving Our Goals

- What it will take to get to zero by 2050:
 - Focused effort on goals
 - Cross-sector partnerships
 - Supportive policy
 - New funding and/or capital
 - Investments in infrastructure, research and development
 - Available, affordable technology
 - Industry commitment
 - Workforce training
 - Community engagement and capacity building



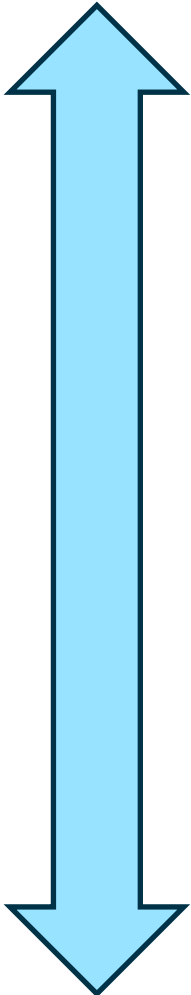
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LEADERSHIP OPPORTUNITIES

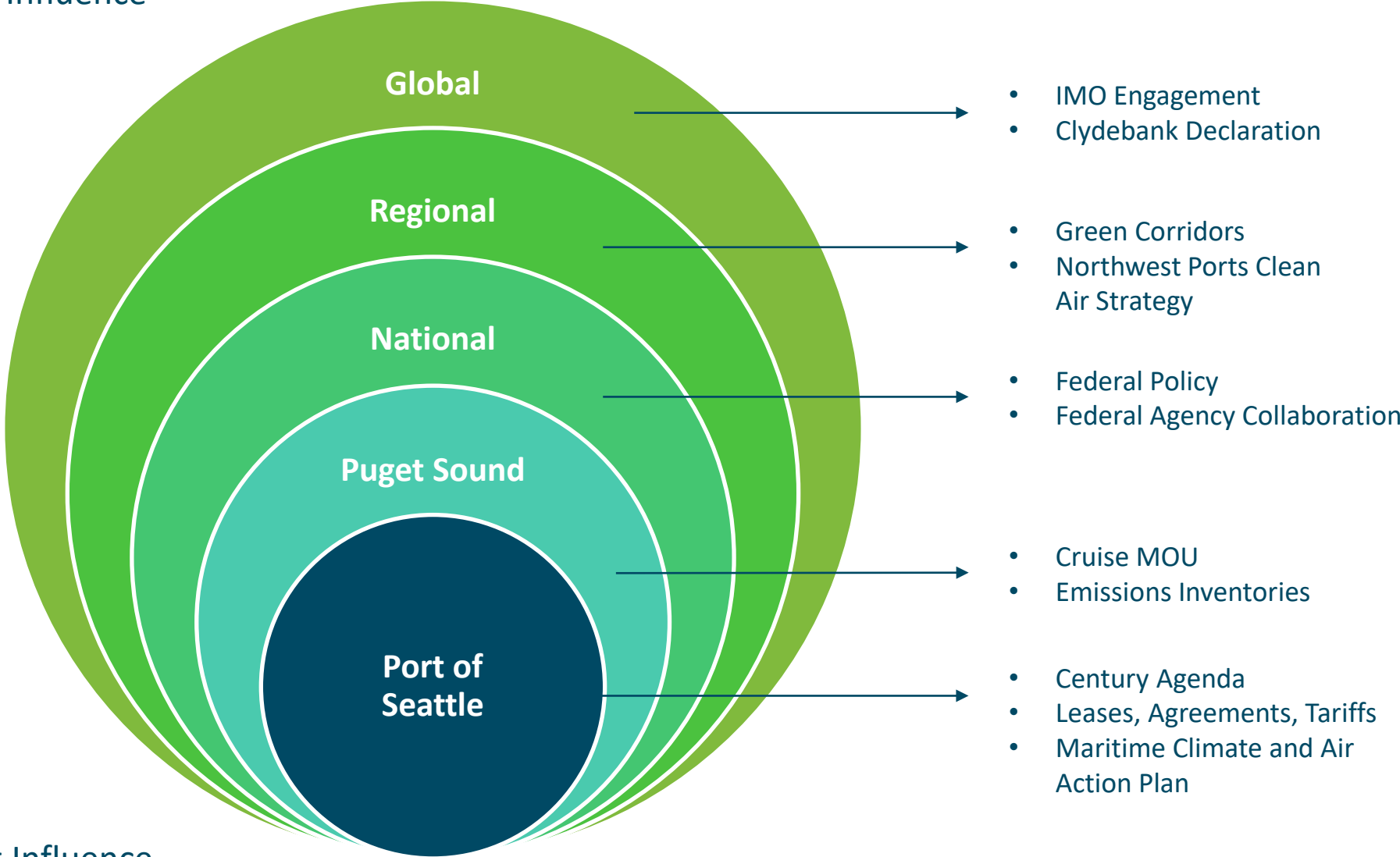


Environmental Influence and Impact

High Global Impact & Low Port Influence



Low Global Impact & High Port Influence



Engagement Opportunities

POLICY

Provide the ongoing **resources and guidance** needed for the Port to accelerate the transition to a zero-emission cruise industry in Seattle

PARTNERSHIP

Cultivate new regional, U.S. and international **partnerships** focused on maritime decarbonization and community benefits

COMMUNITY

Lead the **just and equitable** transition to zero emission and sustainable cruise future

LEADERSHIP

Leverage the Port's "Tools for Transition" to **drive sustainable change** in the Seattle to Alaska cruise market

ADVOCACY

Lead **advocacy** in domestic and international forums for Port priorities and partner with others to maximize influence

Clydebank Declaration

SIGNATORIES

Mission: “...support the establishment of green shipping corridors – zero-emission maritime routes between 2 (or more) ports...and at least 6 green corridors by the middle of this decade, while aiming to scale activity up in the following years...”

- Recognizes need for an accelerated global maritime response to climate change
- Alignment with Paris Agreement
- Signed at COP26 in November 2021

Australia	Japan
Belgium	Marshall Islands
Canada	Morocco
Chile	Netherlands
Costa Rica	New Zealand
Denmark	Norway
Fiji	Palau
Finland	Singapore
France	Spain
Germany	Sweden
Ireland	United Kingdom
Italy	United States of America

Incentives and Recognition: Encouraging Environmental Leaders

- **Past:**
 - At-Berth Clean Fuel incentive program (2009-2015) encouraged early transition to low sulfur diesel fuels ahead of regulation
- **Today:**
 - Sustainable Century Awards recognize business partners for environmental performance, education and outreach, innovation, and equity, diversity, and inclusion
- **Future:**
 - International Association of Ports and Harbors Program focused on rewarding cruise environmental performance
 - Evaluate incentives to encourage early transition to zero-emission fuels, technology or other environmental benefits



Leases, Tariffs, and Agreements: Levers to Raise Environmental Standards

- **Today:**
 - Preferential Berthing Agreement require shore power use for equipped cruise ships where a connection is available as well as weekly reporting
 - Stormwater Best Management Practices
 - Ban on exhaust gas cleaning system wash water discharge at berth and voluntary moratorium in Puget Sound pending further study
- **Future:**
 - Require homeport ships to have shore power by 2030
 - Require transition to zero-emission equipment, vehicles and cruise ships by 2050
 - Partner with cruise lines on emission reporting
 - Partner with cruise Lines on broad sustainability goals and standards for workforce development, local provisioning and other goals



Policy Advocacy: Advancing Environmental Goals through State, National, and International Engagement

- **Past:**
 - Creation of the North American Emissions Control Area
 - Passage of Clean Fuel Standard in Washington & Bipartisan Infrastructure Legislation at federal level
- **Today:**
 - Influence Clean Fuel Standard rulemaking
 - Advocacy for \$3.5B for maritime decarbonization in Build Back Better Act or smaller reconciliation package
 - Ongoing federal agency conversations re: partnership and funding
 - Participate in development of international maritime policy via International Association of Ports and Harbors
 - Engage U.S. Delegation to IMO to provide port perspectives on U.S. environmental priorities
 - Influence global discourse via Getting to Zero Coalition and other channels.
- **Future:**
 - Deliver an international engagement strategy
 - Influence international and national policy decisions that support zero-emission vision
 - Seek shared priorities with key environmental advocacy groups



Upcoming Events

- **May 16-18:** IAPH World Ports Conference
Vancouver, British Columbia
- **June 8 – 10:** Green Marine’s Green Tech
Montreal, Quebec
- **September 22-23:** Global Maritime Forum
Annual Summit, New York City
- **October 18 – 20:** GreenPort Cruise &
Congress at Port of Zeebrugge, Belgium
- **November 7-18:** UN Climate Change – 27th
Conference of Parties; Sharm el-Sheikh, Egypt
- **December 12 – 16:** Marine Environment
Protection Committee (MEPC) 79, IMO,
London, England
 - Engage with U.S. delegation ahead of session



Questions?

