Item Number: 10d Meeting Date: October 26, 2021 **ORDER 2021-10:** AN ORDER OF THE PORT OF SEATTLE COMMISSION to endorse the Executive Director's acceleration of the carbon emission reduction targets of the Port of Seattle. **PROPOSED OCTOBER 26, 2021**

Introduction

The impacts of climate change are evident across ecosystems and cultures around the world. The August 2021 declaration by the UN Secretary General called the latest Intergovernmental Panel on Climate Change (IPCC) report a "Code Red for humanity" and underscores the urgent need for action. That same report also emphasized that human actions still have the potential to determine the future course of climate and that the worst outcomes of climate change can be avoided or limited with strong and sustained reductions in emissions of carbon dioxide and other greenhouse gases (GHG).

The Century Agenda calls for the Port of Seattle to reduce air pollutants and carbon emissions, and sets the target for those reductions. For those GHG emissions the Port directly and indirectly controls (Scope 1 and 2), the target is currently a reduction of 50 percent below 2005 levels by 2030 and to be at least carbon neutral by 2050. Similarly, the Century Agenda sets an objective and target for the Port's GHG "influenced emissions" (Scope 3) of 50 percent below 2007 by 2030 and 80 percent below 2007 by 2050.

The Port is making strong progress toward these targets, particularly due to the purchase of renewable natural gas (RNG) to heat Seattle-Tacoma International Airport (SEA) and to fuel shuttle buses. Significant emission reductions have also been achieved in the Port's maritime operations due in large part by international and national maritime regulations of fuel quality, increased use of shore power by cruise vessels, as well as by innovations in vessel and equipment efficiency.

 While the Port's aggressive carbon reduction initiatives have already achieved a 50 percent reduction in portwide Scope 1 and 2 GHG emissions, the IPCC report makes it clear that the world needs to accelerate progress to meet the urgency of the climate crisis. In response, the Port of Seattle will be modifying its targets to meet that global call for action. Furthermore, the changes necessary to achieve accelerated targets will also prepare the Port of Seattle and its partners for an economy reliant on renewable sources of energy rather than fossil fuels. In addition, those preparations will result in improvements to environmental and community health, as well as greater competitiveness given the increasing pressure on businesses to reduce their carbon footprint.

 Therefore, the Commission is fully supportive of the Executive Director's recommendation to update the Century Agenda objectives and targets to be net-zero or better on Scope 1 and 2 emissions by 2040, and carbon neutral or better on Scope 3 emissions by 2050. This change to our emission reduction targets sends a clear market signal to industry and other Ports to partner with us in the transition to clean fuels.

TEXT OF THE ORDER

To recognize the urgency of action needed to address climate change, the Port Commission hereby formally endorses the Executive Director to update the Port of Seattle's Century Agenda GHG reduction targets to the following:

1) Scope 1 and 2 - Port [Directly and Indirectly] Controlled Emissions:

- **a.** 15% below 2005 levels by 2020
- **b.** 50% below 2005 levels by 2030
- c. Net-zero or better by 2040

2) Scope 3 – Port Influenced Emissions

- **a.** 50% below 2007 by 2030
- **b.** Carbon neutral or better by 2050

STATEMENT IN SUPPORT OF THE ORDER

The Port of Seattle has a goal to be the greenest and most energy-efficient port in North America and the Port's operating divisions are implementing GHG reduction plans to that end.

Recent Aviation Division reduction efforts include:

- (1) Signing a 10-year contract in Q2 2020 to supply renewable natural gas (RNG) to fuel both the boilers and Rental Car Facility (RCF) bus fleet at SEA
- (2) Using renewable diesel in diesel fleet vehicles
- (3) Procurement of Green Direct electricity for our Puget Sound Energy electricity accounts
- (4) Providing airlines access to preconditioned air

Also, staff are partnering with the National Renewable Energy Laboratory (NREL) to evaluate alternatives for updating the central mechanical plant with low-carbon fuels and advanced technologies. Similarly, Aviation's Facilities and Infrastructure team continues to implement energy saving projects throughout the terminal including lighting and heating ventilation and cooling (HVAC) system upgrades.

In addition, the Aviation Division continues to develop partnerships and initiatives to reduce Scope 3 emissions, such as advocating for policies (e.g., Clean Fuels Standard) in Washington, providing airlines access to pre-conditioned air to reduce aircraft auxiliary power unit run-times and electric infrastructure for airlines to convert their diesel tug fleet. The Port is also conducting

economic and technical research on infrastructure needs, feedstock availability, and production facility costs for sustainable aviation fuel (SAF). A joint study with King County evaluating the feasibility of using municipal solid waste as a feedstock for SAF will be underway in 2022.

Lastly, the Aviation Division is developing several initiatives to reduce carbon emissions from passenger vehicles driving to and from SEA, such as evaluating policy incentives to encourage ground transportation service providers to transition to electric vehicles (EV) and use renewable fuels, working with King County Metro on digital ticketing for transit, and installing EV charging stations across SEA facilities.

- Recent Maritime reduction efforts include:
 - (1) Provision of shorepower for cruise ships
 - (2) Improved equipment efficiency

Upcoming Maritime/Economic Development Division (EDD) GHG reduction efforts include implementing the objectives within the 2020 Northwest Ports Clean Air Strategy and the strategies in the Port's implementation plan, *Charting the Course to Zero: Port of Seattle's Maritime Climate and Air Action Plan* (MCAAP).

The MCAAP identifies emission reduction actions by 2025 and by 2030 for each source of maritime-related emissions to achieve a 50 percent reduction in GHG emissions by 2030 and remain on course to phase out seaport-related emissions by 2050. Key commitments include:

- (1) Utilize partnerships with community, industry, and government to reduce emissions
- (2) Transitioning 100 percent of Port-owned light-duty vehicles to electric models or use renewable fuels
- (3) Eliminating fossil natural gas use in Port-owned buildings
- (4) Installing shore power at all cruise ship berths
- (5) Reaching 100 percent of homeport cruise ship calls connecting to shore power
- (6) Addressing key constraints to deploy infrastructure for zero-emissions equipment, locomotives, vehicles, vessels, and building through the completion and early implementation of the Seattle Waterfront Clean Energy Strategy.

Reaching the new GHG reduction targets endorsed by this Order will require additional investment and commitment from Port staff and partners. The Aviation team is already moving in this direction with many projects underway. Although there will be some cost increases due to compressing the implementation schedule, it is unlikely that moving the target up by ten years will change the budget dramatically; however, the Port will need to commit financial and other resources to ensure the organization remains on track to meet its goals.

For Maritime and EDD, given that the Port's Maritime and EDD emissions have increased in recent years, achieving an accelerated GHG reduction target of net-zero Scope 1 and 2 GHG emissions by 2040 will require several conditions and significant additional effort.

 (1) Accelerate the elimination of fossil natural gas HVAC systems in Port-managed properties and at all Port properties.

(2) Purchase renewable natural gas for HVAC and domestic hot water systems within their useful life or prohibitively expensive to electrify.

- (3) Purchase renewable electricity from Seattle City Light and/or invest in additional onsite renewable energy production ahead of the Clean Energy Transformation Act deadline.
- (4) Accelerate implementation of the Sustainable Fleet Plan to deploy EV charging across waterfront properties and purchase electric vehicles.

The Maritime team expects that changing the GHG targets will result in significant new urgency to prioritize capital projects with carbon reduction opportunities—which in today's market, without a uniform price on carbon, come at an incremental price above the conventional approach. Accelerating decarbonization will put pressure on the capital budget immediately and the Port must not forgo any opportunities to eliminate emissions as they arise in the annual budget. Under the Sustainable Evaluation Framework, this may mean prioritizing approaches and technologies that eliminate emissions over options that may carry a lower cost but also lower emissions reductions. In addition to capital expenditures, achieving the goals 10 years earlier will likely require additional staff support or increased use of outside services.

Partnerships will be essential to achieve changes in Scope 3 emissions goals, and we will need to rely significantly on major federal and international policy changes, increased public and private sector incentives, and additional technological innovation and advancements. For Aviation, the Port can continue to reduce emissions by:

- (1) Advocating for state and national policies that strengthen tailpipe standards for carbon emissions, support initiatives to require all vehicles sold in the U.S. to be EV and install charging infrastructure.
- (2) Increasing environmental performance requirements for TNCs and taxis through service agreements and expand those requirements to all ground transportation providers at SEA.
- (3) Continuing to lead in developing SAF although feedstocks for this fuel may be limited, particularly as those feedstocks compete with other on-road renewable fuels (e.g., renewable diesel).

For Maritime, the Port can influence maritime-related Scope 3 emissions by:

- (1) Completing the installation of shore power at Pier 66 and working with the cruise lines to reach 100 percent of homeport cruise ships equipped with shore power by 2030 and a 100 percent connection rate.
- (2) Completing and implementing the Seattle Waterfront Clean Energy Strategy, which will create a roadmap to decarbonize maritime operations in Seattle.
- (3) Partnering with the NW Seaport Alliance to identify ways the Seattle Homeport can contribute to meeting the Alliance's goals for the North Harbor.
- (4) Engaging at the national and international levels to strengthen standards to support sustainable maritime fuels and the transition to zero-emission technologies.
- (5) Implementing green leasing policies that incorporate sustainability best practices into landside leases.