



**COMMISSION**  
**AGENDA MEMORANDUM**

**Item No.** 7b

**BRIEFING ITEM**

**Date of Meeting** April 23, 2019

**DATE:** April 2, 2019

**TO:** Stephen P. Metruck, Executive Director

**FROM:** Elizabeth Leavitt, Senior Director, Environment and Sustainability  
Paul Meyer, Senior Manager, Maritime Environment and Sustainability

**SUBJECT:** Environment and Sustainability in Capital Projects

**EXECUTIVE SUMMARY**

The Port of Seattle prioritizes high standards of environmental sustainability, serving the welfare and the interests of our community. Every capital project the Port undertakes reflects our environmental values. Some projects have environmental benefit as their main purpose, such as remediating legacy contamination, restoring or creating habitat, conserving energy or reducing greenhouse gas emissions. Even for projects principally driven by commercial or customer service objectives, we seek in every case to minimize adverse environmental impacts and to advance goals such as conserving energy, minimizing construction waste, conserving water and minimizing adverse impacts. Advancing our environmental objectives in all our work reflects the ethos of the Pacific Northwest and the values of our community. This briefing highlights three example projects: Pier 69 Solar Panels, International Arrivals Facility (IAF) and North Satellite Renovation (NSAT).

**EXAMPLE PROJECTS**

Pier 69 Solar Panels is an example of a project undertaken to convert energy supply to a renewable source. The IAF and NSAT are major projects with multiple environmental and sustainability features which the Port is documenting by pursuing Leadership in Energy and Environmental Design (LEED) certification.

***Pier 69 Solar Panels***

The solar array was installed on the roof of Port headquarters, a three-story 191,000 square foot-structure that was built in 1931. The sloped metal clad roof exposes directly to the south making Pier 69 the ideal location to install the solar array.

The Project received grant funds from the State Department of Commerce offsetting half the construction costs. The Monocrystalline PV panels were constructed in Washington and installed by local Puget Sound Solar, support the local and Green Tech economy in the state. The system is designed to generate approximately 127,000 kWh annually resulting in an offset

Meeting Date: April 23, 2019

of greenhouse gas emissions by 1.8MtCO<sub>2</sub> annually and operational savings of approximately \$10,000 in energy costs per year.

***International Arrivals Facility***

The IAF replaces overcrowded and outdated international arrivals space in the basement of the South Satellite with a world-class facility capable of processing 2,600 passengers per peak hour and a Minimum Connect Time (MCT) of 75 minutes. The project is pursuing LEED V4 Silver certification. Features of the IAF project include:

- (1) Design maximizes daylight to interiors while controlling glare
- (2) Ground location of mechanical equipment enables sloped roof shape to improve daylighting and views
- (3) Enhanced indoor air quality strategies
- (4) Energy savings with LED lighting, roofing material
- (5) Low-flow plumbing fixtures and outdoor water use reduction
- (6) Construction waste management and recycling
- (7) Enhanced commissioning procedures.

***North Satellite Renovation***

The North Sea-Tac Airport Renovation (NorthSTAR) Program is a collaborative effort of the Port and Alaska Airlines (AS) to improve traveler experience and customer service. The North Satellite (NSAT) Modernization project is the largest segment of the NorthSTAR Program, expanding of the North Satellite from 12 to 20 contact gates, modernizing the existing North Satellite facility, and expanding the baggage system to accommodate the satellite expansion. Like IAF, North Satellite Renovation is pursuing LEED Silver certification. Environmental features of the project include:

- (1) Water conservation through rainwater capture and low-flow toilet fixtures
- (2) Energy savings 17% below code through
  - a. LED lighting
  - b. Daylight optimization
  - c. Insulation and glass
  - d. Electric motor efficiency
- (3) 95% of construction waste diverted from landfills.

**ATTACHMENTS TO THIS BRIEFING**

PowerPoint Presentation

**PREVIOUS COMMISSION ACTIONS OR BRIEFINGS**

None