



SOLAR ENERGY AT THE PORT

The installation of two solar arrays on Port properties demonstrates the Port's commitment to developing renewable energy sources and making progress towards the Century Agenda.

ENVIRONMENTAL GOALS

- For Port-owned emission sources: Reduce GHG emissions 15 percent by 2020, 50 percent by 2030 and be carbon-neutral or negative by 2050 compared to 2005
- For Port-leased emission sources: Reduce GHG emissions 50 percent by 2030 and 80 percent by 2050, compared to 2007

"Meet all increased energy needs through conservation and renewable sources"
Century Agenda Goal

SOLAR BENEFITS

- Solar energy reduces electricity bills and results in a cost savings compared to purchasing power
- Using solar power instead of fossil fuels helps to reduce CO₂ emissions and other pollutants in our atmosphere
- Investments in solar energy supports our local economy and the green tech economy in Washington
- Increases energy independence during peak demand times and in the event of an emergency
- Demonstrates Port leadership in renewable power generation
- Solar energy is a renewable resource and is available every day



Pier 69 Solar Project



Fishermen's Terminal Solar Demonstration Project

CURRENT PORT SOLAR INSTALLATIONS

Fishermen's Terminal Solar Demonstration Project (Net Shed 5)

Completed:

December 2017

The net sheds at Fishermen's Terminal are used to store fishing nets and gear for the North Pacific Fishing Fleet. Fishermen's Terminal Net Sheds 3, 4, 5, and 6 all needed new roofs, so the Port coupled solar implementation with a roof replacement as a demonstration project to gather data to inform future solar panel installations.

Project Facts:

- Includes 44 Washington-sourced Solar Panels on Net Shed 5
- Designed and installed by A&R Solar

Project Impact:

- During the first year of operation, the array produced over 18,000 kWh, a 60 percent increase over the initial projections of 11,000 kWh for the entire year
- The net shed takes 10,000 kWh per year to power, so the electricity produced renders Net Shed 5 "net zero," with any remaining energy produced distributed to other buildings within the Fishermen's Terminal boundary
- The array is also expected to reduce greenhouse gas emissions by 365 pounds a year, which is equivalent to the power needed to charge over 21,000 smartphones

Pier 69 Solar Project

Completed:

April 2019

The solar array was installed on the roof of Port of Seattle's headquarters, a three-story 191,000 square foot-structure that was built in 1931 by American Can Company, a salmon cannery. The facility was purchased by the Port in 1988 and later remodeled and renovated. The sloped metal-clad roof faces directly south making Pier 69 the ideal location to install a solar array.

Project Facts:

- Jointly funded by the Port of Seattle and a grant from the Washington State Department of Commerce
- Monocrystalline PV panels were constructed in Washington
- Designed and installed by Puget Sound Solar

Estimated Impact:

- Designed to generate approximately 127,000 kWh annually
- Offset GHG emissions by 1.8 Metric Tonnes annually, which is equivalent to over 4,400 miles driven by an average passenger vehicle
- Projected to save \$10,000 in energy costs per year

PORT SOLAR LOCATIONS

