Seattle Waterfront Clean Energy Strategic Plan

Item No. <u>6k_supp</u> Meeting Date: <u>June 11, 2019</u>

SWCESP March March March 19

Roadmap For Clean Energy Delivery System

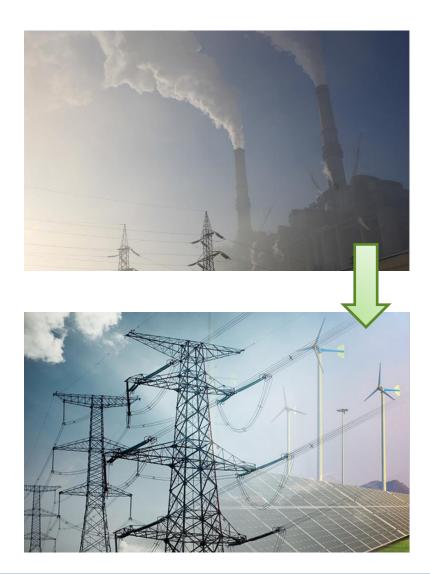


Vision



By 2050, modernize the harbor electricity grid to provide clean energy to Seattle's working waterfront to increase regional competitiveness, create jobs, improve community health, and confront climate change.

- Substitute clean energy for fossil fuels at facilities
- Define smartest investments for port-wide energy system
 - Low emission
 - Cost Effective
 - Reliable
 - Resilient



Planning Objectives

- Roadmap of infrastructure investments
- Regional technology policy
- 30 year time frame
- Shared funding sources to implement plan
- Collaborative with business, tenants, community, labor, local and state agencies

Internal and External Teams

Core Team

- Port of Seattle
- NWSA
- City of Seattle
 - Seattle City Light
 - Office of Waterfront
 - Office of Sustainability

Proposed External Partners

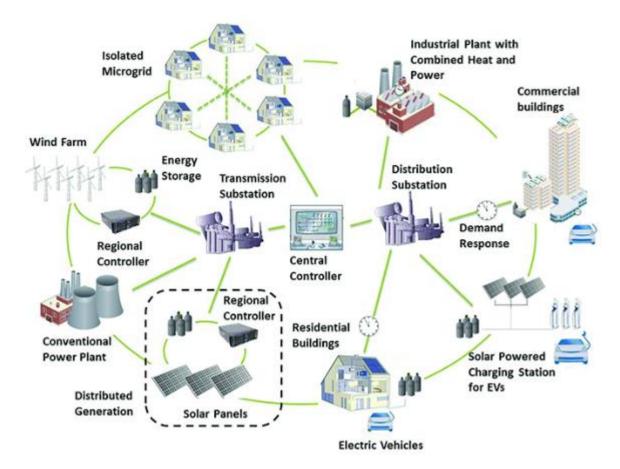
- Washington State Ferries
- Container, Cruise Tenants
- Maritime Blue
- Maritime Industry
- Harbor intensive energy users
- Labor





Scope of Work Ideas

- Understand and analyze demand needs
- Explore smart and resilient grid systems
- Centralize energy distribution substation
- Upgrade power management systems
- Create innovative supply and storage solutions
- Consider Renewable on-site and offsite solutions



Visualization purpose only – graphic does not reflect actual plans. Courtesy of Georgia Tech Climate and Energy Policy Laboratory: http://www.cepl.gatech.edu/drupal/node/43

Schedule

Project Step	Estimated completion
Internal Plan Development and Consultant Scope Definition	7/1/2019
Project planning development with external groups	8/15/2019
Data Gathering	11/15/2019
Strategy Development	3/15/2020
Develop Final Report: Blueprint for Modernized Grid	8/15/2020
Adopt Technology Policy	9/1/2020

Funds

- Total Estimated project cost = \$250,000
 - \$50,000 from Maritime Environmental Air planning
 - \$200,000 from Energy and Sustainability Committee funds
 - NWSA contribution pending
- Consultant support with expertise in energy planning, engineering and project facilitation.