



**COMMISSION
AGENDA MEMORANDUM**

Item No. 6k

ACTION ITEM

Date of Meeting June 11, 2019

DATE: May 2, 2019

TO: Stephen P. Metruck, Executive Director

FROM: Sandra Kilroy, Director, Maritime Environment & Sustainability
Paul Meyer, Sr. Program Manager

SUBJECT: Energy and Sustainability Fund: Seattle Waterfront Clean Energy Strategic Plan Consultant

Amount of this request: \$200,000 (Energy & Sustainability Fund)

Total estimated project cost: \$250,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to commit previously approved Environment and Sustainability Center of Expertise funds to support the development of a Seattle Waterfront Clean Energy Strategic Plan (SWCESP) in the amount of \$200,000.

EXECUTIVE SUMMARY

This expenditure furthers the Century Agenda Strategy 4: *Be the greenest, most energy efficient Port in North America*. In the 2018 budget the Commission directed the Executive Director to “Allocate no less than \$1,000,000 to the Environment and Sustainability Center of Expertise to implement the Energy and Sustainability Committee Policy Directives as adopted in the first quarter of 2017 by the Port of Seattle Commission.”

The Committee, in its oversight role, has reviewed the project and recommends the use of the Energy & Sustainability Funds to provide consultant support for the SWCESP. While this authorization is below the \$300,000 threshold delegation requirement, the Committee requested that these funds be explicitly authorized to provide visibility to the Commission and public.

The vision for the SWCESP is to determine our smartest investment pathways to develop and deliver a harbor-wide maritime energy distribution system and infrastructure to provide clean, affordable, sustainable and resilient energy for port, maritime, industrial and other waterfront uses now and thirty years in the future. Achieving the SWCESP vision will increase regional competitiveness, create jobs, improve community health and social equity, and address climate change.

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The SWCESP, led by Port of Seattle, will require dedicated technical input, strategic planning, management and time from a broad team including Northwest Seaport Alliance (NWSA), City of Seattle and other waterfront stakeholders, along with technical support from outside consultants with experience in grid modernization and management, utility planning, renewable energy substation and energy systems planning. The use of the requested funds will provide the needed consultant technical assistance and planning facilitation for the project manager and the internal core team.

JUSTIFICATION

The Energy and Sustainability Committee, in coordination with staff, agreed upon two attributes to guide distribution of these funds: 1) that the project leverage matching funds and in-kind support and 2) to increase partnership opportunities with government, non-governmental and/or educational institutions.

The development of the SWCESP envisions a collaborative process centered around Elliott Bay, including the container terminals managed by the NWSA, key partners including City of Seattle (Seattle City Light, Seattle's Office of Waterfront and Civic Projects, Office of Sustainability and the Environment), King County, State of Washington and private maritime operators. Other maritime transportation, business users and other public agencies may become involved with the plan development. Extension of these commitments to financing of future improvements will be explored, as appropriate.

The expenditure of these funds will provide the technical information enabling the Port to create a technology policy supported by partnerships with regional entities, businesses, and utilities. The overall planning process will also develop funding strategies with energy utilities, other partners, and future grant opportunities.

The SWCESP requires experience and technical knowledge from experts in energy planning, engineering and project facilitation to develop the detailed roadmap and well-balanced strategy for the project. The funds requested will be used for an outside consultant selected to support the project team to meet these goals. Additional engineering and financial planning support may be needed to develop more robust project rough-order-of-magnitude costs and life cycle analyses to produce a prioritized infrastructure plan.

DETAILS

Aboard ships and across Port operations, industry is moving away from fossil fuels and toward clean electricity and other clean fuel sources to meet climate change mitigation goals. To support and enable this energy transition, the Seattle's maritime industry, must take a holistic and systematic view of opportunities across the harbor and work with partners to determine cost effective, strategic opportunities for clean energy deployment and energy infrastructure management to reduce fossil fuel use. Each strategy bears the potential for energy saving and

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reduction of carbon dioxide, a significant greenhouse gas contributor. Only a systematic evaluation will result in maximum emissions reductions, identifying the optimum approach to cost efficiency, reliability and resiliency. The Seattle Waterfront Clean Energy Strategic Plan will identify the comprehensive, collaborative and innovative strategies needed over the next thirty years to provide sufficient clean electricity to reduce emissions, reduce costs, and provide reliable and resilient energy.

The project team will develop a deep body of knowledge about the waterfront power grid and will work with Seattle City Light, nearby businesses, and other agencies on load demands and grid system management. Examples of potential solutions to explore include:

- Innovative supply solutions
- Smart and resilient grid systems,
- Balance fluctuating supply and demand for electricity with storage, and
- Development of flexible demand schedules to make transmission energy use more efficient.

The final deliverable will be a blueprint that identifies a set of implementing projects, needed to modernize energy delivery and management systems, which serves Port and NWSA facilities developed in concert with businesses, City, maritime transportation, and utility energy agencies and partners that delivers on low-emission energy in the future.

Schedule

The Plan is expected to be developed over the next year and half following the proposed schedule listed below.

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	10/30/2020

Cost Breakdown

	This Request	Total Project
Consultant contract and supporting work	\$200,000	\$200,000

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Total	\$200,000	\$200,000
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ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Do not support development of a Waterfront Seattle Clean Energy Strategic Plan.

Cost Implications: \$0

Pros:

- (1) Cost savings. Conserves staff resources for other work.

Cons:

- (1) Would be a lost opportunity to create a roadmap for future energy infrastructure planning that will lead to the comprehensive, collaborative and innovative strategies needed over the next thirty years to provide sufficient clean energy to reduce emissions, reduce costs, and provide reliable and resilient energy. The Port would continue status quo energy acquisition approaches currently in place, which involve system impact studies and siloed energy demand planning in partnership with utilities.
- (2) Does not support Commission adopted 2019 Local and Regional Government Policy Priorities.

This is not the recommended alternative.

Alternative 2 – Develop a strategic plan to determine our smartest investment pathways for a harbor-wide the energy system that will be affordable, sustainable and resilient now and in the future.

Cost Implications: \$200,000

Pros:

- (1) This alternative funds development of a roadmap that includes steps, strategies, technologies, partnerships, processes and policies needed to provide clean energy to Seattle’s working waterfront over the next 30 years.
- (2) Will increase regional competitiveness, create jobs, improve community health and social equity, and address climate change.
- (3) Supports Commission adopted 2019 Local and Regional Government Policy Priorities.

Cons:

- (1) Cost of consultant and associated work to complete planning process
- (2) Significant staff effort for project that could be directed to other Port programs.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

Initial stage setting with core internal team and Somersault Consulting has begun re-evaluating the problem, developing shared values, confirming the vision, goals and establishing

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performance goals. This initial planning utilizes \$50,000 from approved Air Quality expense funds approved in the 2019 Maritime E & S department budget. The requested \$200,000 funding for technical consultant support and plan development will utilize the Energy and Sustainability Committee funding. Project funding support from NWSA is expected and will be utilized to defray the requested technical support level when explicit.

Cost Estimate/Authorization Summary

	Capital	Expense	Total
COST ESTIMATE			
Original estimate	\$0	\$0	\$0
AUTHORIZATION			
Previous authorizations for air quality program projects	0	\$50,000 ¹	\$50,000
Current request for authorization for consultant support	0	0	\$200,000 ^{2,3}
Total authorizations, including this request	0	0	\$250,000
Remaining amount to be authorized	\$0	\$0	\$0
Remaining amount to be authorized	\$0	\$0	\$0

¹ Authorized in 2019 Maritime Environment and Sustainability department air program expense budget)

² Included in Energy and Sustainability Committee funding authorization (\$1 million)

³ Additional funds from NWSA will reduce this funding level when authorized

Annual Budget Status and Source of Funds

Commission directed that money be made available in the 2018 Environment and Sustainability Center of Excellence expense funds to support and promote innovative projects that foster efforts to reduce greenhouse gases, advance sustainability efforts and promote regional collaboration. This request will use those already budgeted funds.

Financial Analysis and Summary

The development of the SWCESP will identify the comprehensive, collaborative and innovative strategies needed over the next thirty years to provide sufficient clean energy to reduce emissions, reduce costs, and provide reliable and resilient energy. SWCESP will demonstrate the Port’s regional leadership in achieving balanced economic and environmental benefits while increasing the reliability and resiliency of the ports energy delivery system. The port is providing this effort to meet Century Agenda goals and invest in a sustainable future.

Future Revenues and Expenses (Total cost of ownership)

Following completion of report, Commission may adopt the plan as a technology policy establish a future roadmap for infrastructure investment to update and modernize the port’s grid system based on policy recommendations. Those investments will likely be capital costs and be approved on a project by project basis.

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ATTACHMENTS TO THIS REQUEST

- (1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

February 28, 2017 – The Commission were briefed on adding Energy & Sustainability Committee funding in the amount of \$1,000,000.

January 8, 2019 – The Commission was briefed on the 2019 Local and Regional Government Policy Priorities, which included the Seattle Waterfront Clean Energy Strategic Plan.

January 22, 2019 – The Commission adopted the 2019 Local and Regional Government Policy Priorities, which included the Seattle Waterfront Clean Energy Strategic Plan.

April 30, 2019 – The Energy & Sustainability Committee was briefed on scope of plan and the proposal to utilize Energy & Sustainability Committee funding in the amount of \$200,000 for plan support.