

FACT SHEET



METROPOLITAN
TRANSPORTATION
COMMISSION



PORT OF OAKLAND GREEN POWER MICROGRID PROJECT

Caltrans, Metropolitan
Transportation Commission,
Port of Oakland

Project Location:

The Project is in the San Francisco Bay Area in Alameda County within the Port of Oakland complex, along the Primary Highway Freight System. Key access roads include Maritime Street, Adeline Street, Middle Harbor Road, 7th Street, West Grand Avenue, Interstate (I) 880 and I-80.

Project Scope:

The proposed Project would enable the Port to support a high number of electric vehicles, increase the renewable energy mix available to the Port and surrounding communities, increase the Port's current zero emission vehicle (ZEV) capacity from 50 pieces of equipment to approximately 1,000 pieces of equipment, support grid optimization through load shifting and better demand management, support the local community by providing power during periods of excess solar generation, modernize onsite and local grid connections, provide back-up renewable shore power to vessels berthed at the Port, significantly increase the Port's capacity to support grid-connected refrigerated containers, improve air quality and health outcomes in neighboring communities, and support critical climate objectives.

Project Cost:

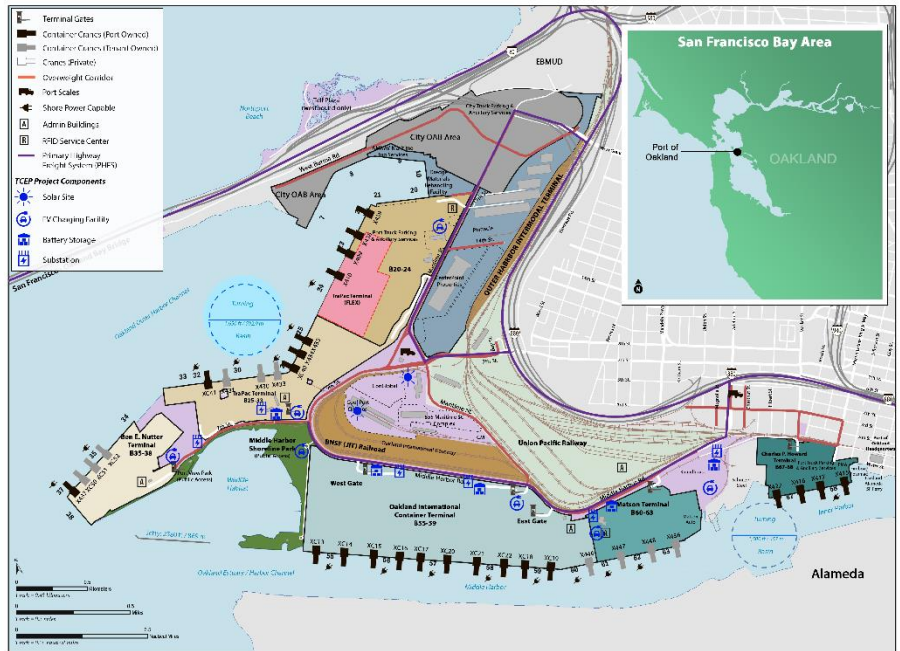
Total Project Cost	Total TCEP Request (PSE, CON)	Matching Funds
\$60,000,000	\$42,000,000	\$16,000,000

Project Schedule:

PA&ED	PS&E	RTL	R/W	CON
2023	2023	2024	N/A	2024

Project Benefits:

Providing the electrical infrastructure improvements in the Green Power Microgrid Project to support zero-emissions equipment and operations is essential to decarbonizing the third-busiest container port complex in the State and delivering related air quality, community health, and jobs benefits. The project will support the

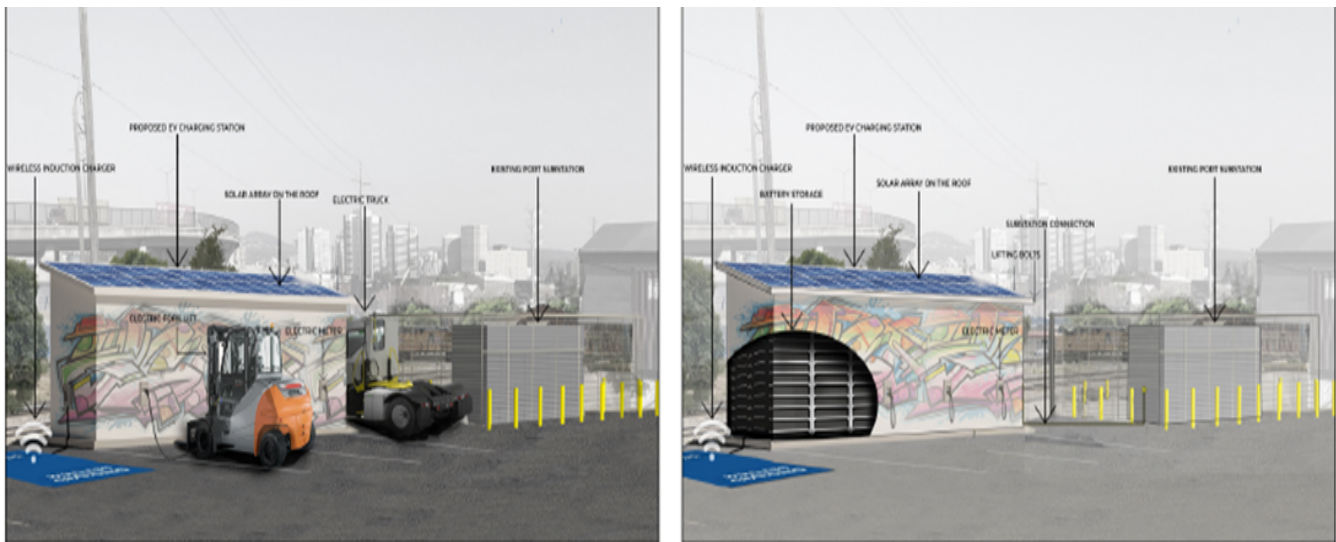


Project location map

region and State's efforts to achieve emissions reduction, air quality, and climate goals. It will also provide backup power and climate resilience to insulate the Port of Oakland from the impacts of unreliable electric power supply. Additionally, excess power produced by the Port could be fed back to surrounding communities.

Project components include:

- 145 heavy duty/Class 8 electrical vehicle chargers at 7 locations for yard, dockside, and transit vehicle use, increasing the number of ZEVs that can be supported from 50 to 1,000
- Solar generation infrastructure for increased capacity for electric vehicles, other facilities, and equipment
- Battery storage capacity at 6 locations for clean energy storage, charging for vehicles during rolling blackouts or other electric grid power supply problems, and capacity expansion for electric vehicles
- 6 substation upgrades for electric grid modernization to support the Port's transition to zero-emissions, accommodate future ZEV needs, as well as Port and potential community resiliency



Solar Array, Battery Storage, and Electric Truck Charging Renderings

Key Project Benefits



Emissions and GHG Reduction



Climate Resiliency



Goods Movement and Economic Vitality



Community Health



Job Creation