



Green Omni Terminal Project

In 2006, the Port of Los Angeles in partnership with the Port of Long Beach adopted the Clean Air Action Plan (CAAP), which was updated in 2010 and 2017 (<https://cleanairactionplan.org>). The CAAP identifies strategies to reduce air pollution from every source including ships, trucks, trains, harbor craft, and cargo handling equipment. Successful technology demonstrations of near-zero and zero emission technologies may accelerate the availability of clean technologies that are necessary to implement existing strategies outlined in the CAAP or to develop future control measures, alternatives, or mitigation measures.

Project Summary

In 2016, the City of Los Angeles Harbor Department (Port of Los Angeles) entered into agreements with the California Air Resources Board (CARB) and Pasha Stevedoring and Terminals (Pasha) to test pre-commercial zero and near-zero emission technologies to promote sustainable goods movement. The Green Omni Terminal project serves as the first step in transitioning the Pasha terminal to a zero-emission terminal and encouraging the development of sustainable movement of goods throughout the southern California region. The project is funded in part by a \$14.5 million grant from CARB's Air Quality Improvement Program and Low Carbon Transportation Greenhouse Gas Reduction Fund Investments. This project was supported by the "California Climate Investments" (CCI) program. The project will be completed by the end of 2023.



Demonstration Partners

- Pasha Stevedoring & Terminals
- Burns & McDonnell
- BYD Motors
- Transportation Power, Inc. (TransPower)
- PermaCity Construction Corp
- Clean Air Engineering Maritime

Vehicles & Equipment Funded

- 2 battery-electric Class 8 on-road trucks
- 4 battery-electric yard tractors
- 3 battery-electric 21-ton forklift repowers
- 1 At-berth Vessel Emission Control System (ShoreKat)
- 1 solar powered microgrid



TransPower battery-electric drayage truck



TransPower battery-electric yard tractor

Project Components

This project incorporates zero emissions vehicles and cargo handling equipment to move goods from ships through the terminal to clean truck transportation to their final destinations, while making terminal operations more resilient and sustainable through the incorporation of onsite solar power and battery storage into a microgrid.

An at-berth vessel emissions control system (ShoreKat) is integrated into the project to address the vessel emissions at the terminal. A one-megawatt rooftop solar photovoltaic array added to the terminal will supplement current power usage and help eventually meet 100% of the electricity demands for terminal operations.

Contact

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Battery storage system installation pads



Assembled ShoreKat system on trailer