



## Everport Advanced Cargo Handling Demonstration 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

The Port of Los Angeles in conjunction with the project partners will demonstrate pre-commercial zero emissions cargo handling equipment. The Everport Advanced Cargo Handling Demonstration project expands on existing demonstrations of zero emission goods movement technologies by taking the next step toward implementation of a zero emission pathway for loading and unloading cargo throughout an entire marine container terminal. The project is funded in part by a \$4,524,000 grant from California Energy Commission's Alternative and Renewable Fuel and Vehicle Technology Program.



### Project Partners

- California Energy Commission
- Everport Terminal Services Inc.
- BYD Motors Inc.
- Taylor Machine Works Inc.
- Cavotec

### Vehicles & Equipment Funded

- 2 battery electric top handlers
- 3 electric yard tractors
- Charging Infrastructure
- Smart Charging System

## Taylor battery-electric top handlers



## Project Components

The project will demonstrate two (2) Taylor battery-electric top handlers, three (3) BYD Motors next generation electric yard tractors and associated charging infrastructure, including the Cavotec Smart Charging System. The top handlers will be charged with standard electric vehicle support equipment (EVSE) and the yard tractors will utilize the Smart Charging System to demonstrate another approach for charging zero emission cargo handling equipment. The Port of Los Angeles will design and construct the necessary electrical infrastructure to deliver power to all pieces of equipment. The electrical infrastructure will provide enough charging capacity to support an additional 25 battery-electric yard tractors.

## Contact

For more information, contact Marine Environmental Supervisor Teresa Pisano at (310) 732-3057 or [tpisano@portla.org](mailto:tpisano@portla.org).



## Taylor battery-electric top handlers