

## Port of Los Angeles “Shore to Store” Project

The Port of Los Angeles and our partners are proud to implement this first phase in a long-term industry collaboration to scale a Zero-Emission framework for goods movement throughout California. This project consists of three major components, each combining with ongoing demonstrations at the Port to showcase a snapshot of the Zero-Emission supply chain of the future, and will provide a model by which freight facilities can structure their operations.



Ten hydrogen fuel cell electric Class 8 on-road trucks will be developed through a collaboration between Kenworth Truck Company and Toyota Motor North America. Second, Shell Oil North America will build and operate two large capacity hydrogen fueling stations in Wilmington and Ontario California, forming the basis of a network of hydrogen infrastructure in Southern California. Finally, the Port of Hueneme will demonstrate two electric yard tractors, the first pieces of zero-emission equipment at their facility.

**Dates:** 03/21/2019 – Spring 2021  
**Grantee:** Port of Los Angeles  
**Partners:** Toyota Motor North America, Kenworth Truck Company, Shell Oil Products, Port of Hueneme, South Coast Air Quality Management District, National Renewable Energies Laboratory

**Grant Amount:**  
CARB Contribution: \$41,122,260  
Matching Funds: \$41,426,612  
Project Total: \$82,548,872



### Vehicles/Equipment Funded

- Ten hydrogen fuel cell electric Class 8 on-road trucks, developed by Toyota and Kenworth
- One large capacity hydrogen fueling station in Wilmington, CA
- One large capacity hydrogen fueling station in Ontario, CA
- Two electric yard tractors at the Port of Hueneme

### Lessons Learned

- Extensive pre-deployment testing can reveal vital issues before demonstration begins.
- Anticipate extra time for permitting for Hydrogen fueling projects. Hydrogen production/storage is still new to the area.

### Status Updates

- First truck delivery in March 2020. Five trucks in service by April 2020.
- First hydrogen station began construction December 2019. Hydrogen Stations scheduled for completion by October 2020.
- Port of Hueneme Yard Tractor delivered August 2020.

