



## 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 Class 8 on-road trucks will be developed through a partnership 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



Current Toyota/Kenworth Truck

### Vehicles/Equipment Funded

- Ten hydrogen fuel cell 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

- Anticipate extra time for permitting for the first-of-its-kind projects. Hydrogen fueling is still new to the area, and the permitting process is extensive.
- Anticipate extra time for initial grant contracting and subsequent subrecipient agreements.

### Status Updates

- Grant agreement approved by the Board of Harbor Commissioners on March 7<sup>th</sup>.
- First truck delivery is scheduled for summer of 2019.
- Hydrogen stations are scheduled for completion in Spring of 2020..

