

Ports Energy Collaborative California Energy Commission January 2016

Overview

With a growing awareness of the economic and environmental challenges facing California's ports, the California Energy Commission (the Commission) initiated an effort to engage with various ports throughout California as they develop and implement sustainable practices. In March 2015, the Commission and five ports spanning northern to southern California kicked off the Ports Energy Collaborative. The Ports Energy Collaborative provides a forum for the Commission and the ports to come together to discuss important energy issues, mutual challenges, and opportunities for transitioning to alternative and renewable energy technologies.

Recognizing the diversity among ports, the Ports Energy Collaborative allows the Commission the opportunity to coordinate collectively and individually with the participating ports to identify and implement energy solutions that will meet the needs of the ports while helping attain California's climate and clean air goals. The Ports Energy Collaborative works on key projects in areas including but not limited to energy conservation and efficiency measures, renewable generation, and zero- and near-zero emission vehicles and equipment.

Port Participants

Port of Hueneme · Port of Long Beach · Port of Los Angeles · Port of Oakland · Port of San Diego

Background

California's ports serve as a major gateway for the import and export of goods for the nation, are a major component of the state's freight sector, and are critical to California's economy. Goods movement through California's ports accounts for over 40 percent of the state's containerized imports, supports nearly half a million jobs, and results in an estimated \$9 million in tax revenue.¹ The freight sector is vital to California's economy, however, the pollution associated with goods movement is a significant contributor to unhealthy air quality and has negative environmental impacts locally, regionally, statewide, and beyond. In 2011-2012 California's freight sector accounted for nearly half of diesel particulate matter, 45 percent of the nitrogen oxides (NOx), and six percent of the green-house gas emissions in the State. For this reason cleaning up the freight sector is critical to meeting the California's climate and clean air goals.²

Accelerating the transition of California's ports to more efficient and less polluting technologies represents a large undertaking and will require coordination with a variety of stakeholders including but not limited to the ports, terminal operators, technology providers, and a number

¹ California Ports Authority. <http://californiaports.org/economic-benefits/>

² California Air Resources Board . *Sustainable Freight Pathways to Zero and Near-Zero Emissions – Discussion Document*. April 2015. Available at <http://www.arb.ca.gov/gmp/sfti/sustainable-freight-pathways-to-zero-and-near-zero-emissions-discussion-document.pdf>

of state agencies. In July 2015, Governor Brown issued an Executive Order (B-32-15) directing coordination among state agencies to develop and implement the California Sustainable Freight Action Plan which is currently under development. Projects resulting from the Ports Energy Collaborative will complement and accelerate implementation of the California Sustainable Freight Action Plan.

Current Efforts

The Ports Energy Collaborative has identified and initiated the following projects to focus on over the next 12 to 18 months.

- *MD-HD Vehicle Demonstrations* – The Commission is working with the participating ports to identify and develop transportation project concepts that will provide near-term emission reductions.
- *Clean Energy Measures* – The Commission has developed a contract to review and analyze potential measures that could be adopted at California ports to improve energy efficiency and increase the use of renewable energy or low emission generation technologies to support the electricity needs of the ports.
- *Joint Command and Control Center* - The Port of Long Beach’s Joint Command and Control Center represents a critical point of failure and requires resiliency as it is vital to ensuring port security and operations. The Commission and the Port of Long Beach are coordinating to scope a pilot project for the facility that may include a combination of power generation, storage, and a microgrid.
- *Lighting Enhancements* – The Commission is coordinating with the Port of Hueneme to identify and secure funding that will support upgrading their high mast lighting system for improved efficiency and energy savings.
- *Electric Truck Charging Standardization* – The Port of Los Angeles initiated a working group including representatives from the Ports of LA and Long Beach, the Energy Commission, the Air Resources Board, the South Coast Air Quality Management District, and US EPA to develop proposed standards for electric truck charging outlets.

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