SAN PEDRO BAY PORTS | CLEAN AIR ACTION PLAN



SAN PEDRO BAY PORTS CLEAN AIR ACTION PLAN

July 2017 DRAFT CAAP 2017 UPDATE

Chris Cannon Director of Environmental Management Port of Los Angeles

Heather Tomley Director of Environmental Planning Port of Long Beach

Outreach To Date

Environmental Regulatory Agencies

Community

Environmental Organizations

Railroads

Marine Terminal Operators

Shipping Lines

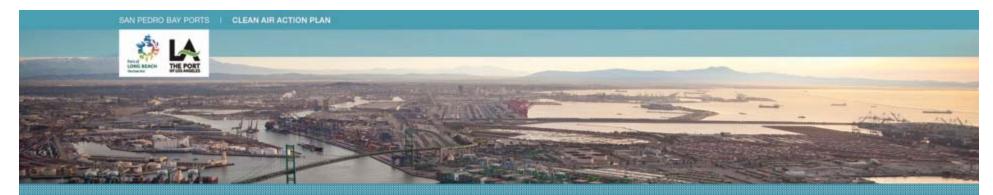
Greater Los Angeles Business Community

Trucking Industry



Goals:

- Revise CAAP strategies based on comments from stakeholders, input from staff and legislative/regulatory updates
- Provide additional information in support of proposed strategies



Recurring Themes

feasibility assessments accountability infrastructure interim targets technology U more detail SU regulatory coordinati zero-emissions more time to plan stakeholder process community health economic competitiveness transparency emission reductions



- Modify Vessel Speed Reduction Program to incentivize only 40 nm participation
- o Incentivize energy-efficiency improvements on ships
- Impose differential rate system to incentivize newer vessels
- Incentivize harbor craft repowers to Tier 3 and Tier 4
- o Establish a terminal equipment idling reduction program



- Expand use of on-dock rail
- o Develop charging standards for cargo-handling equipment
- o Develop a Green Terminal Program
- o Identify and implement supply chain efficiency incentives
- o Develop infrastructure plans
- o Develop and implement energy strategies



THE POR



Original	New Proposed
Require ZE terminal equipment by 2030 (includes feasibility assessments every five years).	Participate in development of CARB's regulation to achieve up to 100% ZE for CHE by 2030, and accelerate where feasible (includes feasibility assessments every three years).



At-Berth Emission Reduction Strategy

Original	New Proposed
Incentivize at-berth emission reduction technologies for non-regulated ships.	Incentivize at-berth emission reduction technologies and participate in CARB's regulation to achieve up to 100% reductions in at-berth emissions by 2030, and accelerate where feasible.

SAN PEDRO BAY PORT CLEAN AIR ACTION PLA



Clean Trucks Program

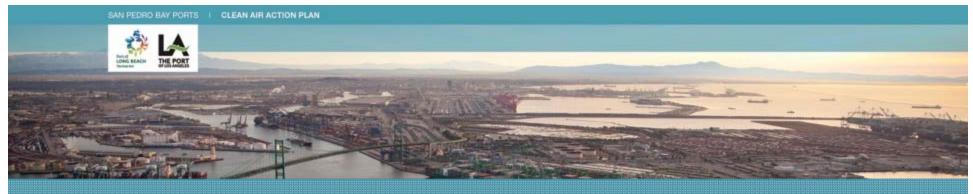
Original

2018: Fee on trucks 10 years old or older

- 2020: Trucks must be MY lacksquare2010 +
- 2023: New trucks entering lacksquareservice must be NZE (contingent on establishment of NZE engine standard)
- 2035: Trucks to be zero emissions

New Proposed

- 2018: New trucks entering service must be MY 2014+
- 2023: New trucks entering service ۲ must be NZE; Initiate rate structure with exemptions for NZE and ZE trucks (contingent on establishment of NZE engine standard)
- 2035: Goal for all trucks to be ZE: modify rate structure to exempt only ZE trucks



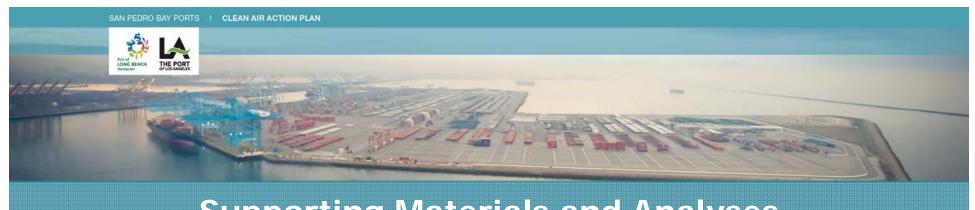
Clean Trucks Program

- Feasibility assessments every 3 years beginning in 2018
- Waive registration fee for ZE trucks
- By 2020, in partnership with the State and trucking industry, launch a pilot smog check program for heavyduty trucks in San Pedro Bay to identify and eliminate gross polluters
- ZE truck pilot deployment at scale (e.g. 50-100 trucks)
- Starting immediately, secure incentive funding to accelerate introduction of NZE and ZE trucks



Universal Truck Appointment System

Original	New Proposed
Work with terminal operators to give preferential access to zero- and near-zero-emission trucks.	By 2020, adopt a universal appointment system to improve overall efficiency and minimize truck turn times.



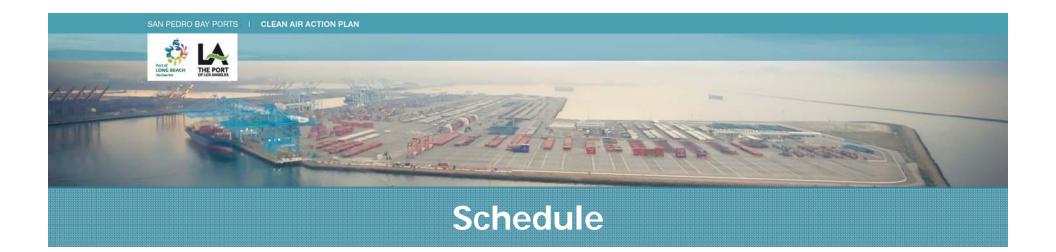
Supporting Materials and Analyses

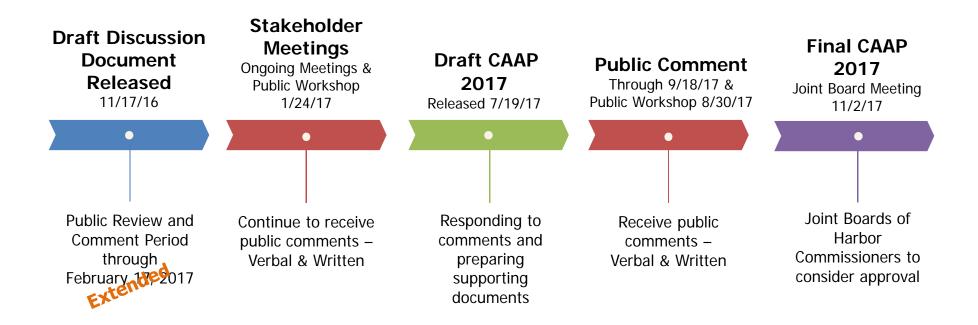
- o Framework for Feasibility Assessments
- o Preliminary Cost Estimates for Select CAAP Strategies
- o Economic and Workforce Considerations
- Potential Emission Reductions from Select CAAP Strategies
- o Bay-Wide Ocean Going Vessel Tier Forecast



Incremental Cost Estimates

	Low End	High End
Trucks		
Near-Zero Emissions	\$1,002,000,000	\$1,026,000,000
Zero-Emissions	\$2,927,000,000	\$8,289,000,000
Cargo-Handling Equipment		
Equipment	\$914,000,000	\$2,105,000,000
Infrastructure	\$2,166,000,000	
At-Berth Emission Reduction Technologies	\$138,000,000	
Incentive Programs for Ships	\$137,000,000	
Technology Demonstration & Development	\$22,000,000	
TOTAL	\$7,306,000,000	\$13,888,000,000







For More Details

Draft CAAP 2017 available at:

www.cleanairactionplan.org

Please provide comments:

caap@cleanairactionplan.org