SAN PEDRO BAY PORTS | CLEAN AIR ACTION PLAN



SAN PEDRO BAY PORTS CLEAN AIR ACTION PLAN

July 2017 DRAFT CAAP 2017 UPDATE

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Outreach To Date

Environmental Regulatory Agencies

Community

Environmental Organizations

Railroads

Marine Terminal Operators

Shipping Lines

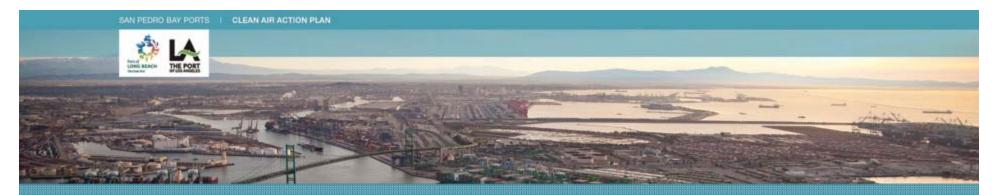
Greater Los Angeles Business Community

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



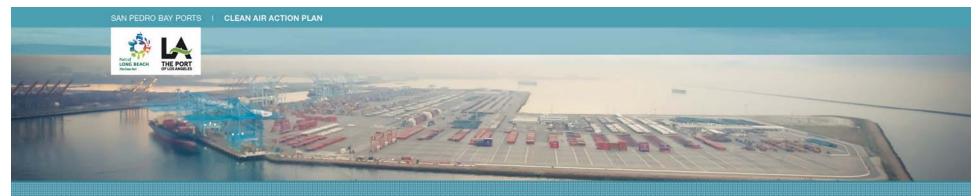
- Expand use of on-dock rail
- o Develop charging standards for cargo-handling equipment
- o Develop a Green Terminal Program
- o Identify and implement supply chain efficiency incentives
- o Develop infrastructure plans
- o Develop and implement energy strategies



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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.

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Clean Trucks Program

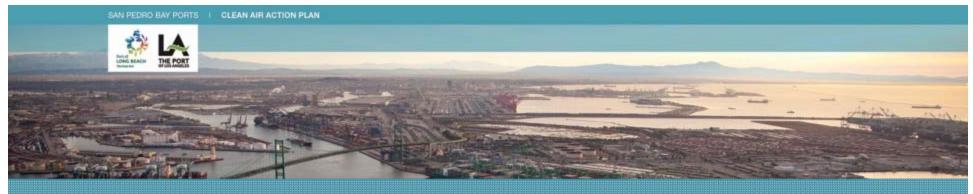
Original

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



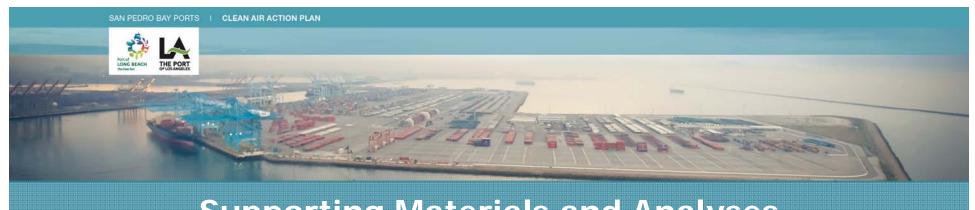
Clean Trucks Program

- 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.



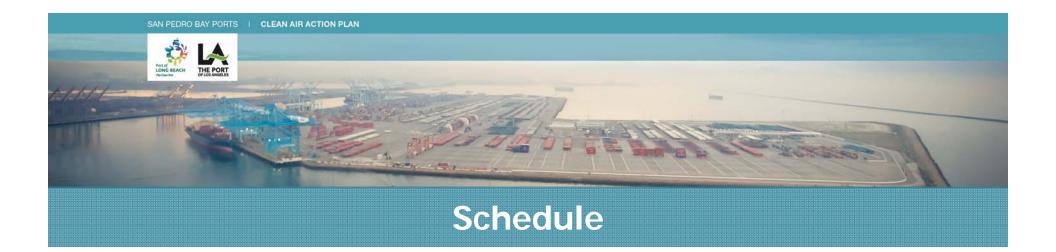
Supporting Materials and Analyses

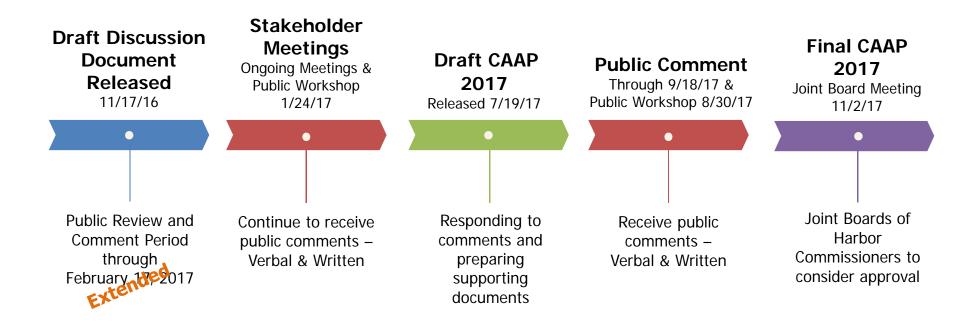
- o Framework for Feasibility Assessments
- o Preliminary Cost Estimates for Select CAAP Strategies
- o Economic and Workforce Considerations
- Potential Emission Reductions from Select CAAP Strategies
- o Bay-Wide Ocean Going Vessel Tier Forecast



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:

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