

Case Study of the San Pedro Bay Ports' Clean Air Action Plan (CAAP)

THE 2017 CLEAN TRUCK PROGRAM (CTP)

About the Case Study

The Clean Air Action Plan (CAAP) at the Ports of Los Angeles and Long Beach, collectively known as the San Pedro Bay Ports (SPBP), is a groundbreaking program. The Case Study of the San Pedro Bay Ports' Clean Air Action Plan 2006-2018 provides a summary of the CAAP's background and history followed by three focused discussions on environmental justice and levers of community influence; technologies and practices for development and deployment; and the 2017 Clean Truck Program (CTP). Best practices and lessons learned presented in the case study include the importance of community-port collaboration, conducting emission inventories, setting quantified emissions targets, supporting technical innovations, and developing partnerships with industry and government.

Updating the CTP

The CTP is one of the Ports' most impactful programs. The 2006 CAAP set target dates to either replace or retrofit trucks to meet or exceed the EPA 2007 on-road air pollutant emission standards. The 2010 CAAP revision in turn implemented new California state requirements on an accelerated timeline, drawing on financial support from grants, incentives, and bulk purchase pricing to help the industry comply.

"The CAAP process created markets and technology much faster than it would have otherwise. The Ports couldn't obtain emission reductions without the technology elements in the CAAP."

—Joseph Lyou, Executive Director, Coalition for Clean Air



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With the success of the CTP, the Ports wanted to continue the program while adapting it to support the 2017 CAAP Update's new goals, advancements in zero- and near-zero-emission truck technologies, and new state and local greenhouse gas emission reduction targets (but fewer "backstop" regulations that would have enabled strict fleet turnover requirements). The updated CTP relies on an upcoming California regulatory deadline, economic incentives and disincentives and the resulting accelerated truck fleet turnover to move toward a greater share of near-zero-and zero-emission truck cargo moves at the ports.

2017 CTP update milestones and deadlines

- 2018: New trucks entering the Ports Drayage Truck Registry (PDTR) must have a 2014 engine model year or newer. Existing trucks already registered in the PDTR can continue to operate.
- 2020: All heavy-duty trucks are charged a rate to enter the Ports' terminals, with exemptions for trucks that are certified to meet a near-zero standard or better.
- **2023:** New trucks entering the PDTR must have engines that meet the near-zero-emission standard or better. Existing trucks already registered in the PDTR can continue to operate.

Lessons Learned for Ports

The 2017 revision of the CAAP CTP provides a useful case study for ports outside of California because it was developed as an independent port initiative with fewer corresponding state or federal regulatory requirements than the original 2006 CTP.

Ports can:

- Set firm and reasonable goals and deadlines for implementing clean truck strategies (e.g., zero emissions by 2035), and provide a flexible framework that leaves room to investigate questions and develop measures.
- Devote resources to technology development and demonstration through partnerships with technology developers; equipment manufacturers; truck fleet and terminal operators; and regional, state, and federal agencies.
- Conduct assessments to evaluate the technical readiness level of near-zero- and zeroemission technologies.

Additional Resources

The <u>EPA Ports Initiative</u> has several additional resources for improving air quality from trucks at ports including the following.

- Drayage Truck Best Practices to Improve Air Quality
- Drayage Truck Replacements Improve Air Quality in the Mid-Atlantic
- Massport Truck Replacement Program