

**CITY OF LOS ANGELES
HARBOR DEPARTMENT**

**CLEAN TRUCK ZERO EMISSION
FUNDING PROGRAM**

REQUEST FOR INFORMATION

Released: October 30, 2020



TABLE OF CONTENTS

1.	INTRODUCTION.....	3
1.1	The Port of Los Angeles	3
1.2	Purpose and overview of RFI	3
2.	PROGRAM DESCRIPTION	6
2.1	Background	6
2.2	Proposed Program and Objectives	7
2.3	Preliminary feedback from stakeholders	8
3.	CONTENTS OF RFI RESPONSE	10
3.1	Contents.....	10

APPENDICES

Appendix A Port of Los Angeles Monthly Gate Move Analysis Reports (September 2019 through August 2020)

1. INTRODUCTION

1.1 The Port of Los Angeles

The City of Los Angeles Harbor Department (Harbor Department) operates the Port of Los Angeles (POLA), Southern California’s gateway to international commerce, which is located in San Pedro Bay, 20 miles south of downtown Los Angeles. This thriving seaport not only sustains its competitive edge with record-setting cargo operations, but is also known for its groundbreaking environmental initiatives, progressive security measures and diverse visitor-serving, recreational and educational facilities.

POLA encompasses 7,500 acres, covers 43 miles of waterfront and features 27 cargo terminals, including container, dry and liquid bulk, breakbulk, warehouse and automobile facilities. Combined, these terminals handle approximately 176 million metric revenue tons of cargo annually. In 2019, POLA moved 9.3 million Twenty Foot Equivalent Units (TEUs), maintaining its rank as the number one container port in the United States.

The Harbor Department has a strong commitment to developing innovative strategic and sustainable operations that benefit the economy and the quality of life for the region and the nation it serves. As the leading seaport in North America in terms of shipping container volume and cargo value, POLA generates 954,000 regional jobs and \$35 billion in annual wages and tax revenues. A proprietary department of the City of Los Angeles (City), the Harbor Department is self-supporting by shipping services revenues and does not receive taxpayer dollars.

1.2 Purpose and overview of RFI

Purpose of RFI

In 2017, the San Pedro Bay Ports (SPB Ports) adopted the 2017 Clean Air Action Plan (CAAP) Update, which established a goal of 100% zero emission (ZE) drayage trucks serving POLA and the Port of Long Beach (POLB) (together, the SPB Ports) by 2035. This Request for Information (RFI) seeks to solicit information from engaged industry and stakeholder participants with potential solutions for strategies to accelerate the deployment of ZE trucks in the SPB Ports (the Clean Truck ZE Funding Program, or Program).

RFI schedule

The schedule for this RFI will be as follows:

Release of RFI	Friday, October 30, 2020
Questions Due	by 4pm PT on Thursday, November 19, 2020
Question Responses Posted	Thursday, December 10, 2020
Responses Due	by 4pm PT on Thursday, January 7, 2021

Q&A process

Submit questions regarding this RFI to Tricia Carey at tcarey@portla.org by the time and date listed in schedule above. Answers to questions will be posted via LABAVN.

Submission of RFI response

Submit RFI responses to Tricia Carey at tcarey@portla.org by the time and date listed in the schedule above.

Reference Information

Respondents should refer to the following links for additional information in preparing a response to this RFI:

1. Clean Air Action Plan Information (<https://cleanairactionplan.org>)
2. San Pedro Bay Ports Clean Truck Program Information (<https://cleanairactionplan.org/strategies/trucks>)
3. Port of Los Angeles Clean Truck Program Information (<https://www.portoflosangeles.org/environment/air-quality/clean-truck-program>)
4. Port of Los Angeles Monthly Gate Move Analysis (published monthly) (<https://kentic.portoflosangeles.org/getmedia/452bad8c-4e16-490f-bab6-155b061866bb/POLA-Monthly-Gate-Move-Analysis>). Refer to Appendix A for historical reports.
5. Port of Los Angeles Statistics (<https://www.portoflosangeles.org/business/statistics>)

Disclaimer

This RFI shall not limit any rights of the City. The City reserves all of its rights, including, but not limited to, its right to elect not to procure the products or services that are the subject of this RFI, and to procure them from a vendor that has not responded to this RFI. The Harbor Department shall not be obligated to respond to any submittal nor shall it be legally bound in any manner whatsoever by the receipt of a submittal. The City makes no representation that a contract will be awarded to any responded to this RFI. The Harbor

Department, at its sole option, may contact respondents to get clarifications and/or to obtain additional information as part of the RFI process.

Respondents are solely responsible for all expenses associated with responding to this RFI. The Harbor Department accepts no financial responsibility and will not be liable in any way for any costs incurred by respondents in replying to the RFI, including, but not limited to, costs associated with researching and preparing the submission.

Respondents are advised that all documentation submitted in response to this RFI will be considered property of the Harbor Department and may become available as public record and be released without further notification.

2. PROGRAM DESCRIPTION

2.1 Background

2017 Clean Air Action Plan Update

In 2017, the SPB Ports adopted the 2017 Clean Air Action Plan (CAAP) Update, which established a goal of 100% ZE drayage trucks serving the SPB Ports by 2035.

The 2017 CAAP Update also proposed that, following promulgation by the State of California of its Omnibus heavy-duty engine standard, among other conditions, all heavy-duty trucks would be charged a Clean Truck Fund Rate (Rate) to enter the SPB Ports' terminals, with exemptions for ZE trucks and potentially exemptions for other clean trucks (yet to be determined). The 2017 CAAP Update states that funds collected through the assessment of the Rate would be used for trucking initiatives, including incentives to the trucking industry for purchase of ZE trucks.

Clean Truck Fund Rate

In March 2020, the Boards of Harbor Commissioners of the SPB Ports (Boards) approved setting the amount of the Rate at \$10 per TEU. The SPB Port staffs plan to seek approval from their Boards to commence the Rate collection in a future tariff action (following other contingent events identified in the 2017 CAAP Update), as well as consider the details around the use of these funds, including what portion of these Rate collections would be allocated to this Program.

Rate exemptions will apply to all ZE trucks. Other clean trucks may be eligible for a Rate exemption, however the exemption amount and period of time that such an exemption would be applicable has yet to be determined by the Boards.

The Rate is expected to be charged to beneficial cargo owners that move loaded containers in and out of Port terminals with trucks that do not qualify for a Rate exemption. It is anticipated that combined Rate collections from the SPB Ports may be up to \$90 million in the initial year (based on pre-COVID estimates of future cargo volumes).

State of California Actions

Aligned with the objectives of SPB Ports' CAAP goal, the California Air Resources Board (CARB) Advanced Clean Truck (ACT) rule was adopted in June 2020. Under the ACT rule, every new truck sold in California must be ZE by 2045. The ACT rule requires truck manufacturers to sell ZE trucks at an increasing percentage, among different truck segments, of their annual in-state sales from 2024 to 2035. By 2035, ZE truck sales must be at least 40% of truck tractor sales. CARB's next rulemaking will focus on its Advanced Clean Fleet Rules, which will include in-use requirements for different truck fleets, including one for the state's port drayage fleets.

On September 23, 2020, Governor Newsom signed an Executive Order that will result in CARB developing regulations to mandate that all drayage truck operations be ZE by 2035,

and that all operations of medium-duty and heavy-duty vehicles be 100% ZE by 2045, where feasible. CARB staff are working on a rule that would require all drayage trucks in the State of California to be ZE by 2035. If CARB approves this rule, it would align all drayage operations in the State of California with the goal the SPB Ports adopted in the 2017 CAAP Update.

The Executive Order further requires state agencies, in partnership with the private sector, to accelerate deployment of affordable fueling and charging options to ensure the necessary infrastructure is in place to support ZE vehicles.

Port Drayage Truck Registry

As of July 2020, there were approximately 1,200 licensed motor carriers (LMCs) with current concession agreements to dispatch trucks for port operations at POLA and approximately 2,200 LMCs with registration agreements at POLB. Together, these concessionaires and registrants have approximately 17,500 trucks registered in the Port Drayage Truck Registry (the Registry), with about 12,000 calling once a week. Diesel-powered trucks make up 95% of the Registry, with the remaining 5% powered by liquefied natural gas (LNG), compressed natural gas (CNG), or battery electric. More than 60% of the trucks in the Registry are compliant with USEPA 2010 Heavy Duty Vehicle emissions standard (the cleanest current regulatory requirement).

2.2 Proposed Program and objectives

The SPB Ports are seeking to identify opportunities to help reach our goal of 100% ZE drayage trucks in the SPB Ports by 2035.

Other funding sources may include federal or State funding and incentive programs (e.g. California's Hybrid and ZE Truck and Bus Voucher Incentive Project or HVIP, VW Mitigation Trust, Low Carbon Fuel Standard, etc.), contributions from other public agencies, incentives from utility providers (e.g. Southern California Edison's SCE Charge Ready Program, etc.), private investments or other potential in-kind investments, contributions or non-monetary incentives.

The SPB Ports are currently considering options for the implementation and administration of this Program, including options that use (i) internal resources; (ii) private-sector partner(s); (iii) public sector partners; or (iv) a combination of these options.

In contemplating options that involve private-sector partner(s), consideration will be given to options that (i) demonstrate an alignment of interests between the SPB Ports and the private-sector partner(s); and (ii) utilize innovative approaches to:

- Achieve the goal of 100% ZE trucks by 2035;
- Accelerate the deployment of ZE trucks at the SPB Ports prior to 2035;
- Optimize funding sources and financing tools to support the Program;
- Decrease costs associated with ZE technologies and supporting infrastructure;

- Maintain competitive total cost of ownership (TCO) for use of ZE trucks;
- Maintain efficient operations at the SPB Ports; and
- Allocate, manage and mitigate risks associated with the Program (including the reasonable allocation of risk between the SPB Ports and private sector partner(s)).

2.3 Preliminary feedback from stakeholders

The following is provided as background to potential responders. This information is based on feedback from stakeholders that have provided input through clean truck program outreach, including information gathered at a finance forum held in September 2020 by the Harbor Department and Mayor Garcetti's Office. The following challenges have been raised by trucking company stakeholders (i.e., the potential users of the Program):

- **Charging/fueling infrastructure considerations:**
 - **Public infrastructure:** Current shortage of available public charging and/or fueling infrastructure. Efforts are underway to develop adequate public charging infrastructure and additional charging stations may be required across the region.
 - **Implementation timing:** The deployment of charging infrastructure typically requires a considerable lead-time for planning and investment by utilities and third-parties, as well as permitting requirements which may vary across the region.
- **Owner-operator / fleet considerations:**
 - **Varying fleet sizes:** The Registry includes owners with fleet sizes varying from individual owner-operators to larger fleet owners with over 100 trucks.
 - **Drayage truck prices:** Prices in the secondary/tertiary diesel drayage truck market range from \$40,000 to \$60,000, while a USEPA 2010 emissions compliant diesel truck costs approximately \$125,000 brand new and a new ZE truck may cost \$350,000-\$500,000.
 - **Drayage truck driver financial capacity:** Drayage operators are generally paid by the load (referred to as a "turn"). As of the date of this RFI, operators in the SPB Ports typically average about 2 turns a day. Feedback received from smaller owner-operators is that they can afford up to \$1,250 per month on truck financing expenses (this does not include additional operational expenses, such as insurance, fueling, maintenance, etc.).
 - **Truck operator creditworthiness:** If able to obtain financing, owner-operators typically incur higher cost of finance due to lower credit scores.

- **Tax implications of grants and incentives:** Grants and incentives can create a significant tax imposition on truck drivers, reducing their attractiveness to owner-operators.
- **Truck lifetime:** Fleets tend to replace diesel trucks more frequently than owner-operators. Fleets may replace trucks every 5-7 years or 500,000 miles, while owner-operators are more likely to drive until the end of the useful life of the truck, which may be over 13 years or 800,000 miles.
- **ZE operational uncertainty:**
 - **Insurance:** Availability and cost differential.
 - **Delivery and maintenance:** Timing of truck delivery and access to maintenance facilities and affordable replacement parts.
 - **Charging costs:** Costs associated with infrastructure installation, equipment and charging rates.
 - **Charging cycles:** Frequency and duration of charging cycles and its impact on daily operations.
 - **Access to parking and charging infrastructure:** Access to parking within a suitable range of operations and with appropriate charging facilities on site.

In order to have a robust and effective Program, the Port will ultimately seek a comprehensive solution that accounts for these issues.

3. CONTENTS OF RFI RESPONSE

3.1 Contents

The Harbor Department seeks input into the development of a comprehensive solution that will provide opportunities for larger trucking fleets as well as owner-operators. Feedback from respondents should consider the issues outlined in Section 2.3, along with the reference information identified in Section 1.1, in providing feedback on the following items in their RFI response.

1. Respondent information

- a. Company name.
- b. Authorized contact.
- c. Contact email, phone number, website.
- d. Brief company overview.
- e. Interest and potential role in the Program.

2. Commercial considerations

- a. Describe feasible Program model(s), including business approach and/or asset management approach, proposed contractual relationships, flow of funds, roles and responsibilities of each participant and key Program stakeholders.
- b. Describe the timeline of proposed Program from implementation through 2035.
- c. Describe how proposed models could accelerate deployment of ZE trucks at the SPB Ports prior to 2035.
- d. Describe goals or metrics that the Program administrator would be measured against in achieving the Program's objectives.
- e. Describe how this model addresses the issues raised in Section 2.3 of this RFI document, with particular focus on how the solution addresses the needs of the full spectrum of owner-operators.
- f. The 2017 CAAP Update envisioned the use of Rate collections to incentivize deployment of other clean trucks and equipment in the near term while transitioning towards 100% ZE emission trucks by 2035. Describe how incentivizing other types of clean trucks for a short period of time during the initial stages of Rate collection would impact the Program to incentivize the adoption of ZE trucks.

3. Technical considerations

- a. Describe how the Program would evolve as technology advances over the term of the Program.

- b. Describe potential approach to accelerate production of ZE trucks and timeline to bring production to scale (including source of production assumptions).
- c. Describe how the proposed model anticipates implementation of charging infrastructure – including strategies around delivery timing, access, location of charging infrastructure, permitting, etc.

4. Financing/funding considerations

- a. Describe public and non-public funding sources that are available for proposed solution (in addition to the Rate collected).
- b. Describe what level of involvement, if any, is required of the SPB Ports or other parties to secure proposed funding.
- c. Describe innovative solutions to maximize available funding for the Program.
- d. Describe how respondent intends to integrate grants / incentives into the Program and how end-user tax implications may be addressed.
- e. Describe how your model addresses ZE truck price fluctuation resulting from ZE technology advancement over the term of the Program.
- f. Describe proposed credit enhancement approaches, such as utilizing existing or potential future risk pooling vehicles to improve credit and lower cost of financing for operators.
- g. Describe how the Program would be responsive to a fluctuation in net Rate collections.

5. Other

- a. Describe key factors that would influence private sector interest (or disinterest) in being involved in the delivery of the Program.
- b. Describe key risks to the success of the Program and how the proposed model proposes to address/mitigate these.
- c. Describe other key opportunities to be realized through the Program (and risks to the realization of such opportunities).
- d. Any other pertinent information that should be considered in the development and/or implementation of the Program.