

# Port of Los Angeles Zero-Emission Truck Incentives Program

## 2022-2025 INVESTMENT PLAN

This three-year investment plan is intended to guide the Port of Los Angeles's (Port) allocation of revenues from the Clean Trucks Fund (CTF) Rate to support the Zero-Emission (ZE) Truck Incentives Program. This document establishes the near-term objectives of the CTF investments, describes priority targets for spending over the three-year span, and defines the pathways and programs that will be used to disseminate the funds, understanding that more detailed guidelines for each pathway are forthcoming.

### Introduction

As part of the 2017 Clean Air Action Plan Update (CAAP) with the Port of Long Beach, the Port of Los Angeles has set a goal to transition 100% of the drayage truck fleet to ZE by 2035. This goal has since been adopted by the State of California through Executive Order N-79-20, resulting in a coordinated multi-agency push to transform the port trucking fleet to ZE on an ambitious timeline. A technology transition of this magnitude requires significant investments in trucks, infrastructure, technology advancement, and workforce development with active engagement from a cross-section of public and private stakeholders.

The State is moving quickly to ensure the availability of ZE drayage trucks and supportive infrastructure through regulations and various financial incentives, with the California Air Resources Board (CARB) committing nearly \$570 million in 2022 alone for ZE trucks and buses. Likewise, the Ports have adopted several strategies to support the ZE transition, chief among them a new CTF Rate (Rate) of \$10 per container. This Rate is intended to incentivize the turnover to ZE drayage trucks and to assist operators financially in purchasing the more expensive technologies and infrastructure. The Port of Los Angeles will begin collecting the Rate on April 1, 2022, through December 31, 2034. The rate is expected to generate roughly \$45 million annually during this initial Spending Plan's 3-year term, although amounts will fluctuate with cargo volumes and decrease over time as the population of rate-exempt ZE and Low NOx trucks<sup>1</sup> grows.

With potential revenues of approximately \$135 million over the next three years, the ZE Truck Incentives Program is poised to become one of the largest and most stable funding sources dedicated to ZE drayage trucks serving San Pedro Bay. While the State has committed record levels of funding to ZE transportation, these incentives are dispersed across multiple sectors, including transit, rail, passenger cars, and off-road equipment, and across the state, forcing Port fleets to compete for these funds with no guarantee of success. The ZE Truck Incentives Program laid out in this plan are reserved for Port drayage operators, can be stacked/matched with other grant programs (subject to restrictions imposed by those grant programs), and are designed to accelerate the number of ZE drayage trucks beyond what the existing State and regional grant programs could achieve.

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<sup>1</sup> CTF Rate exemptions in the POLA Tariff: ZE trucks are permanently exempt. Low NOx trucks purchased, registered in the PDTR and put into service by December 31, 2022, will receive exemption from the CTF Rate up through 2027. (POLA Tariff No. 4, Sec. 20, Item 2030)



This investment plan provides clarity and transparency as to the distribution of CTF revenues and the funding priorities over the next three years.

## **Purpose of the ZE Truck Incentives**

The ZE Truck Incentives Program is designed to support the transition to ZE drayage trucks using CTF rate proceeds. This transition will require investments in ZE trucks, supportive charging and fueling infrastructure, workforce development, and additional technology advancement.

All money collected from the CTF Rate will exclusively fund programs that provide incentives to drayage operators currently serving the San Pedro Bay Ports Complex to secure ZE drayage trucks (battery-electric or hydrogen fuel-cell) and the charging/fueling infrastructure that directly supports operation of those ZE trucks. This investment will directly benefit the cargo owners actively moving goods via truck to and from the Port in accelerating the adoption of ZE trucks. Many cargo owners have established, in response to consumer demand, corporate social responsibility (CSR) policies that address environmental and societal concerns integrated into their freight operations logistics.<sup>2</sup> An example of this is the recent Green Shipping Corridor, which targets the phasing in of low, ultra-low, and zero-carbon fueled ships through the 2020s, with the world's first zero-carbon trans-Pacific container ships introduced by 2030 by qualified and willing shipping lines.<sup>3</sup> The CTF Rate spending plan below provides guidance to Port staff to develop the spending pathways to complement and enhance the already extant public funding programs from federal, state, and local government agencies to best leverage the CTF revenues in order to meet the Port's CAAP goal of being served by a 100% ZE drayage fleet by 2035 and CSR policies established by cargo owners.

## **Guiding Principles**

To inform the funding priorities and programmatic approach described in this investment plan, the Port relied on several guiding principles: efficiency, equity, consistency, and flexibility.

### *Efficiency*

Given the aggressive timeline to achieve a ZE drayage fleet, the Port must distribute funds efficiently and expeditiously. Several programs already exist to support ZE trucks, and leveraging these programs allows the Port to allocate funding quickly and through established administrative structures while most efficiently leveraging public funds across various sources. As such, this investment plan capitalizes on existing State or Port funding programs to distribute CTF proceeds efficiently.

### *Equity*

The costs, complexities, and opportunities around ZE trucks should not unfairly burden or benefit one group over another. ZE trucks are significantly more expensive than diesel trucks. This investment plan

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<sup>2</sup> <https://www.epa.gov/smartway/introducing-corporate-social-responsibility-freight-and-logistics> By reducing reliance on fossil fuels, "More efficient freight transportation can help improve air quality and mitigate climate change by cutting emissions. It also reduces costs, demonstrating the 'people, profit and planet' principles fundamental to a good company."

<sup>3</sup> <https://www.c40.org/news/la-shanghai-green-shipping-corridor/>



seeks to minimize disproportionate impacts to small fleets and independent owner-operators already facing low wages and tough working conditions. Every effort has been made in this investment plan to ensure equitable allocation of incentives for small fleets and independent drivers.

#### *Consistency*

As stated earlier, many programs already exist to support ZE trucks, and the Port's ZE Truck Incentives are designed to mirror these well-established allocation procedures. Maintaining consistency with the State's approach for its Long-Term Heavy-Duty Investment Strategy<sup>4</sup> and Clean Transportation Incentives will facilitate stakeholder engagement in the planning process and access the incentives. Consistency also ensures that Port incentives align with State funding programs that value equity and benefits for disadvantaged communities.

#### *Flexibility*

ZE trucks as a market sector are still in their infancy, and much uncertainty remains around the technological details, infrastructure, costs, workforce impacts, and operational needs. The Port must retain the flexibility to adjust funding priorities and spending amounts to address unforeseen gaps. This investment plan is a snapshot of today's anticipated needs, but priorities may shift, and the Port has built flexibility into the allocation process to adjust quickly if needed.

### **Allocation Process**

This investment plan provides overall program details and spending priorities for the next three years. It is informed by a robust stakeholder outreach process to solicit feedback on potential programs and near-term targets as well as by State efforts, such as the Long-Term Heavy-Duty Investment Strategy. Guided by this investment plan, the Port will develop an annual spending plan to allocate Rate revenues to specific incentive pathways. This allocation process is described below.

#### *Annual Spending Plan*

Rate revenues are based on the volume of containers moved by trucks subject to the Rate, and as such, will vary from year to year. No later than June of each year, the Port will project the amount of CTF revenue anticipated in the subsequent fiscal year; this number is a projection only, and actual revenues may be higher or lower than the projection. The Board of Harbor Commissioners will adopt an overall budget for the ZE Truck Incentives Program based on the projected Rate revenues as part of the Port's normal budgeting process, typically in June of each year.

At that time, Port staff will present to the Board a report that summarizes the previous year's actions. The presentation will include the total number of trucks funded under CTF programs; a summary of any targeted funding solicitations or technology advancement projects initiated or in progress; the total funds collected and spent over the previous year from the Rate; and both participant and stakeholder feedback. Staff will describe the proposed annual budget for each ZE Truck Incentives pathway consistent with the three-year investment plan and the total CTF budget approved by the Board.

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<sup>4</sup> [https://ww2.arb.ca.gov/sites/default/files/2021-10/fy21-22\\_fundingplan\\_appendix\\_d.pdf](https://ww2.arb.ca.gov/sites/default/files/2021-10/fy21-22_fundingplan_appendix_d.pdf)



Once the annual budget is set, funds are expended according to the guidelines for each pathway. Disbursement of incentive dollars for specific project(s) will require contracts or other agreements subject to Board approval.

Given the uncertainty of actual Rate revenue collection and the uptake of incentives, Port staff will request the authority to retain the ability to shift funds among pathways mid-year in order to better achieve the purpose and guiding principles of the ZE Truck Incentives Program and Rate.

#### *Investment Plan*

Every three years, the Port will conduct a comprehensive update of the investment plan through a rigorous stakeholder outreach process, taking into account progress made over the previous three years, anticipated future needs, and alignment with State efforts, such as CARB's Long-Term Heavy-Duty Investment Strategy and regulations. Working with its many partners, the Port will develop funding priorities for the next three years to inform subsequent allocations.

### **Funding Pathways**

This section provides an overview of the funding pathways for this investment cycle. The pathways are consistent with the purpose of the Rate, and they will be developed in alignment with the guiding principles set forth in this investment plan. Additionally, these pathways address the range of issues related to accelerating transition of the drayage fleet to ZE trucks: commercialized ZE drayage truck deployments, support for the necessary associated charging and fueling infrastructure, continued technology advancement to improve truck and infrastructure performance; and innovative approaches to rapid truck deployment that cut across all of these issue areas. Detailed guidelines will be established for each pathway within the first year of rate collection.

#### ***Port of Los Angeles Truck Vouchers***

This pathway will be designed to complement CARB's successful Hybrid and ZE Truck and Bus Voucher Incentive Project (HVIP), which provides first-come, first-serve, point-of-sale vouchers for ZE trucks. Port funds will be used to help Licensed Motor Carriers (LMCs) in the Ports Drayage Truck Registry buy ZE drayage trucks in order to increase the number of ZE trucks beyond what would be funded under HVIP alone. Port funds could be used to increase the HVIP incentive amount for drayage trucks and/or fund additional drayage trucks that would not receive vouchers under HVIP due to State budget constraints. Port funds would supplement – not supplant – State HVIP funding. The POLA Truck Voucher pathway takes full advantage of HVIP's existing administrative structure to distribute funds efficiently and quickly. This program will be managed by CALSTART. More information about HVIP can be found at [www.californiahvip.org](http://www.californiahvip.org).

#### ***Small Fleet Support***

In previous stakeholder outreach efforts, a clear need for programs dedicated to the support of small fleets and independent owner-operators (IOOs) has been repeatedly articulated to the Port. Large scale "one size fits all" programs may unintentionally disadvantage smaller companies without the knowledge and robust capabilities and internal capacity necessary to prepare for and manage complicated grant



approval processes. As such, the Port intends to select a third-party administrator through a competitive process to develop and implement a targeted program in support of small fleets and IOOs. This program would provide financial incentives and other support beyond what is available through the other incentive pathways to help small fleets and independent owner-operators transition to ZE trucks. This support could include financial incentives to purchase a ZE truck, installation of required infrastructure, and/or assistance in securing access to charging or fueling infrastructure, as well as innovative ways to ease the transition for small fleets, such as higher per-truck incentives, additional funds for trading in/scraping old trucks, performance incentives for higher utilization, and/or having the Small Fleet Support administrator support applicants in securing funds from other grant programs, such as HVIP, AB 617, and Carl Moyer. While small fleets are still eligible to apply for all of the other ZE Truck Incentives pathways, this Small Fleet Support will be specifically designed to provide specific support for, and be exclusively available to, small fleets and independent operators. At this time, the Port considers a fleet “small” if it operates five or fewer trucks at the Port. The selected administrator will develop specific implementation details with input from the Port and stakeholders.

### ***Infrastructure Match***

This pathway would provide funds to help drayage LMCs install or obtain charging and fueling infrastructure. It is envisioned that this pathway will be modeled off existing programs such as Southern California Edison’s Charge Ready Transport program ([www.sce.com/crt](http://www.sce.com/crt)) and the California Energy Commission’s Energize Commercial Vehicles Project launching in 2022 and will be developed in collaboration with the Los Angeles Department of Water and Power. This program can complement the POLA Truck Vouchers, HVIP, and other grant programs that provide flat per-vehicle incentives without including infrastructure.

### ***Advanced Truck Technologies and Innovative ZE Truck Concepts***

These two related pathways will provide opportunity for the Port to fund targeted zero emission truck projects on a flexible basis, similar to the Port’s ongoing efforts under the successful Technology Advancement Program (TAP). The TAP, a joint program with Long Beach, is focused on clean technologies and associated infrastructure for port-related mobile sources that operate in and around ports and has funded several clean truck efforts over the last 15 years. These pathways will build on the experience the Port has gained in administering the TAP, leading to the following options:

- The first pathway provides funds for the Port to pursue a particular promising technology advancement project or demonstration concept. Funds will be allocated to specific projects through a competitive process, such as a Request for Proposal or Notice of Funding Availability. Examples of projects anticipated under this program are advanced charging infrastructure installations, and advanced efficiency projects. Any existing and/or proposed ZE truck projects approved through the Technology Advancement Program (TAP), a joint program with the Port of Long Beach, would also use these funds.
- The second pathway is designed to support innovative proposals that accelerate ZE truck deployment in ways beyond new technology developments or direct equipment deployment. Such proposals may involve comprehensive fleet-level approaches, workforce development, or



demonstration of new and cutting-edge initiatives to advance the transition of the drayage truck fleet to ZE. This program is discretionary. Under this pathway, applicants with a specific proposal would send the information directly to the Port in no prescribed format. Promising projects that present a clear path to benefiting the Port within the limitations of the CTF at the sole discretion of the Port, would advance to the Board for approval. For example, a team could present a project concept to build and lease mobile charging stations for ZE drayage trucks, or procure and sublease ZE trucks on a monthly basis with controlled charging or fueling sites available to then sublessees, or similar structures that do not directly align with the above described pathways and do not necessarily involve technology advancement project(s). This program provides flexibility for the Port to encourage innovative ZE truck projects that would otherwise go unfunded and allows the Port to act on these projects quickly and efficiently. Guidelines and restrictions for this pathway will be developed with input from stakeholders.

## **Funding Priorities**

This investment plan defines estimated allocations for each pathway over the next three years. The funding targets reflect the Port's best projections of CTF revenue and the understanding of today's needs and priorities, though they represent a snapshot in time. Given the uncertainty of the next three years, these targets are expected to be updated through the annual budgeting process and are provided here as a point of relative prioritization.

The funding priorities reflect this investment plan's guiding principles and the administrative realities of launching such a significant new incentive program. Some of the ZE Incentive Program pathways will be able to distribute funding almost immediately while others will require more time to develop thoughtfully and with stakeholder input.

In the first year, the Port proposes to direct \$5 million to Advanced Truck Technologies, and all remaining funding to the Truck Voucher Program. With the HVIP structure and program administrator already in place, the Port can disburse funds efficiently to fleets who are ready and able to act on it. This quick infusion of funding advances the ZE truck transition while giving the Port time to develop guidelines for the other pathways, some of which require additional actions from other agencies, such as Energllze, which has not yet launched. If CTF revenues exceed the demand for the Truck Voucher Program, the Port staff can reallocate funding to other priorities mid-year with the goal of distributing funding to where it is needed most.

In the second and third years, the Port proposes to continue to fund the Truck Voucher Program at a high level but also to activate its other pathways, presuming there is funding availability and sufficient demand. The Port plans to allocate higher shares of funding to the Infrastructure Match and Small Fleet Support pathways (roughly 10%-20% of total CTF revenues) with smaller shares to Advanced Truck Technologies and Innovative ZE Truck Concepts, which is commensurate with the project types and expected funding needs for those categories.

Higher allocations for infrastructure and small fleets align with the Port's principles of efficiency, equity, and consistency. Infrastructure will be critical for fleets that receive funds through HVIP, and by the 2023-2024 fiscal year, Energllze should be fully implemented, streamlining the administrative process and



making it easier for the Port to disburse funds efficiently. As these new incentive programs come online, small fleets will need help accessing them. The Port intends to spend no less than 10% of the total Rate proceeds each year through the Small Fleet Support pathway. For independent operators and small fleets, these extra funds provide a much-needed benefit over and above the other incentives. The Port intends to increase funding for Small Fleet Support as needed to ensure equity among all fleet operators.

The following table identifies the three-year funding priorities based roughly on an annual projected budget of \$45 million. Allocations are presented in ranges, and they should be used for relative comparison only. The intent of this table is to provide a sense of the Port’s relative priorities over the next three years with the understanding that investments could shift to leverage near-term opportunities and to give time for meaningful program development.

**Anticipated Three-Year Funding Priorities for ZE Truck Incentives**

	FY 22-23		FY 23-24		FY 24-25	
	Dollars	% Total	Dollars	% Total	Dollars	% Total
Truck Vouchers	\$40 million	89%	\$35 million- \$45 million	80%-100%	\$25 million- \$35 million	60%-80%
Infrastructure Match	-	-	up to \$10 million	up to 20%	up to \$10 million	up to 20%
Small Fleet Support	-	-	\$4.5 million- \$10 million	10%-20%	\$4.5 million- \$10 million	10%-20%
Advanced Truck Technologies	\$5 million	11%	up to \$4.5 million	up to 10%	up to \$4.5 million	up to 10%
Innovative ZE Truck Concepts	-	-	up to \$4.5 million	up to 10%	up to \$4.5 million	up to 10%

*Note:* This table is for relative prioritization only. Percentages may not add up to 100%, and the total annual funding allocations may exceed \$45 million;