

## DOCKETED

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*Comment Received From: Heather Tomley*

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**Port of Long Beach Comments on the 2017-18 ARFVTP Investment Plan**

*Additional submitted attachment is included below.*



November 2, 2016

Submitted Electronically:

<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=16-ALT-02>

Re: Port of Long Beach Comments on FY 2017-18 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program

To the Members of the California Energy Commission:

The Port of Long Beach (Port) appreciates the opportunity to comment on the California Energy Commission's (CEC's) FY 2017-18 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP). The Port has worked aggressively, in partnership with terminal operators and the maritime goods movement industry, to reduce emissions from port-related operations. Funding assistance programs such as ARFVTP are critical to help transition to cleaner equipment, and thus advance our clean-air goals.

The Port has been very appreciative of CEC's interest in accelerating cleaner technologies and fuels at seaports in particular, and encourages more solicitations focused on the seaport sector. In looking ahead to the next fiscal year, the Port sees a significant opportunity to push the pace of zero- and near-zero emissions (ZE/NZE) technology development and deployment, particularly related to cargo-handling equipment (CHE) and trucks. As evidenced by recent grant applications and technology demonstrations, we believe there is a very real, near-term opportunity to transform the roughly 1,200 pieces of CHE that operate at the Port in close proximity to disadvantaged communities. That being the case, we offer the following comments on the FY 2017-18 ARFVTP investment plan.

First, the Port recommends increasing funds for advanced freight and fleet technologies. The ARFVTP investment plan identifies \$18 million for advanced freight and fleet technologies, which includes the cutting-edge technology development and demonstrations necessary to transition the goods movement sector to zero emissions. Although the Port appreciates the dedication of funds to this category, we believe this level of funding underestimates the near-term opportunities to accelerate ZE cargo-handling and drayage truck technologies, and we encourage CEC to increase this category beyond \$18 million.

Port cargo-handling equipment in particular is a category ripe for ZE technology development and current demonstrations have shown great promise, for example, by providing critical information to better understand the performance capabilities of battery-electric yard tractors. Additionally, real-world projects such as Port of Long Beach's Middle Harbor Terminal, which uses automated port equipment and advanced logistics to slash emissions, make the case for investments in advanced container-handling strategies.

To date, however, there has been relatively little funding for such demonstrations. Within the

next year, the Port sees an opportunity to demonstrate different types of low-emission yard tractors to provide more options for end users, to pilot advanced logistics technologies, and to develop ZE top handlers, which make up 10% of our CHE inventory. Much of this technology development has already begun. Additional investments could tip the balance to encourage greater levels of investment and commitment by technology developers to advance more ZE options for cargo-handling equipment, including different technologies and types of equipment, and to move toward commercialization.

The Port understands these technologies will be very expensive to develop. A ZE top handler prototype could cost upwards of \$1 million, and automated port equipment and logistics strategies could greatly exceed that number. The air quality benefits, however, are potentially significant. To accelerate real change in this industry, the Port strongly urges CEC to increase the proposed FY2017-18 amount of \$18 million for advanced freight and fleet technologies, in order to take advantage of the immediate opportunities and to provide near-term air quality benefits to local communities.

Also, the Port urges CEC to increase investments in heavy-duty alternative fuel infrastructure. The Port commends CEC's investments in alternative fuel infrastructure for the light-duty sector and believes this funding has played a pivotal role in accelerating adoption of zero-emissions passenger cars. The Port strongly urges CEC to give similar consideration to infrastructure investments for the heavy-duty sector.

The Port believes that infrastructure is fundamental to carrying ZE technologies to market. Without the necessary fueling or charging infrastructure, the private industry will be reluctant to make early investments in this equipment and these vehicles. Heavy-duty infrastructure presents its own set of challenges and requires unique solutions. Additionally, the costs are expected to be significant. For these reasons, the Port believes CEC is well positioned to lead the charge for this sector.

Additionally, the Port asks CEC to consider funding not just charging stations or fueling outlets but also the far more significant costs of upstream equipment such as substations, transformers, electrical conduit, and lines to bring additional power down to port terminals and other charging facilities. So as not to hamper the pace of zero-emissions development, the Port recommends boosting funds for ZE infrastructure and allowing upstream equipment as an eligible expense.

The Port appreciates the opportunity to provide comments on the FY 2017-18 ARFVTP Investment Plan, and we thank you for letting us provide input throughout this process. We look forward to continuing to work with you on advancing our shared clean air goals.

Sincerely,

Heather A. Tomley  
Director of Environmental Planning  
Port of Long Beach