DOCKETED	
Docket Number:	21-ALT-01
Project Title:	2021-2022 Investment Plan Update for the Clean Transportation Program
TN #:	239908
Document Title:	Pacific Environment Comments - Need for Port Electrification to support zero emission marine vessel
Description:	N/A
Filer:	System
Organization:	Pacific Environment
Submitter Role:	Public
Submission Date:	9/30/2021 4:18:42 PM
Docketed Date:	9/30/2021

Comment Received From: Teresa Bui
Submitted On: 9/30/2021
Docket Number: 21-ALT-01

Need for Port Electrification to support zero emission marine vessel

Additional submitted attachment is included below.

PACIFIC ENVIRONMENT

September 30, 2021

Patrick Brecht
Investment Plan Project Manager
California Energy Commission

Re: Clean Transportation Program's 2021-2023 Investment Plan Update - Need for Shorepower and Green Hydrogen Infrastructure

Dear Patrick,

Thank you for the opportunity to comment on California Energy Commission's (CEC) Clean Transportation Program's 2021-2023 Investment Plan Update. We urge CEC to fund $125 million for port infrastructure such as shore power and green hydrogen infrastructure, which has the dual benefit of supporting the zero emission transitions of heavy-duty trucks and marine vessels. We also urge CEC to renew their hydrogen fuel cell demonstration projects for Marine Harbor Crafts.

Founded in 1987, Pacific Environment is a 501(c)(3) public-benefit corporation, headquartered in San Francisco, with regional offices in Anchorage, Alaska, and Chongqing, China. Pacific Environment has earned rare permanent consultative status at the International Maritime Organization (IMO), the United Nations' entity that sets international shipping law. We are co-founders and leaders of a burgeoning new global coalition of environmental, environmental justice, and ocean organizations working to rapidly accelerate the shipping industry's zero-emission transition on a 1.5C-aligned timeline.

Ships are one of the worst air polluters in California, accounting for nearly 1% of the state's greenhouse gas pollution. We are seeing an unprecedented port congestion in the San Pedro Ports due to increased online shopping, which also means a spike in ship pollution.

The Governor of California has asked all regulatory agencies to accelerate their climate mitigation strategies. In addition, many of California's port communities remain in non-attainment of NOx reduction goals under the federal Clean Air Act. Air Districts across the state are working to reduce NOx and other criteria pollutants from mobile sources. Marine vessels are designed as "off-road mobile sources" and part of Governor's Climate Executive Order N-79-20, to achieve zero emission for the off-road sector by 2035 where feasible.

By 2023, fossil-fueled ships will be the largest source of smog-forming nitrous oxide (NOx) pollution at the Ports of Los Angeles and Long Beach, surpassing heavy-duty trucks. Ships continue to contribute a large portion of health and cancer risks to communities near ports and in the areas surrounding the San Pedro Bay Ports, OGVs and harbor craft constitute **one of the top three sources** of cancer risk attributable to diesel particulate matter exposure. These pollution sources disproportionately affect lower-income communities and communities of color.

To protect the ocean, climate, and public health and livelihoods, California cannot afford to delay the shipping industry's transition to a clean energy future. We need the State to allocate funds for port electrification and green hydrogen infrastructure which would have the dual benefit of supporting the zero emission transitions of heavy-duty trucks and marine vessels.

At the Port of Hueneme in California, their forecasted cost for electric infrastructure is $28.5 million, which does not include the local utility company's infrastructure improvements. Those necessary upgrades are forecasted to cost as much as $50 million.

The Port of San Francisco studied the power requirements specific to powering cruise ships and found it could cost around $80-100 million to fully fund service connection infrastructure.

Another example is the Port of San Diego, where it will cost nearly $35 million to install four shore power substations, shore power outlets and connection vaults, and one military shore power substation and connection power mound at National City Marine Terminal. Another half million is needed for environmental scoping.

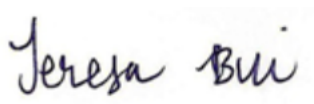
We also urge CEC to allocate funds to advance zero-emission technology for harbor craft, and ocean-going vessels. There are ship operators taking action to reduce maritime emissions but need significantly more funding for pilot demonstrations and implement projects. Some of the high-ambition operators that we have talked to in regard to the proposed the California Air Resources Board regulations on Commercial Harbor Craft confirmed that going to zero emission for the marine sector is feasible but funding is a huge barrier. We just saw California's first zero-emission hydrogen fuel cell passenger ferry is already on the water in the San Francisco Bay, made possible by state and private investments.

Prioritizing funds for port electrification and zero emission marine vessel will help spur economic development and create reliable union careers. California ports are well poised to become hubs of the green hydrogen economy, generating new jobs and revenue streams. Investments in zero-emission technologies and infrastructure at ports and in the maritime sector provides opportunities to create reliable and well-paying domestic union careers.

Adequate funding for a zero-emission marine segment is critical to the future of our state in order to achieve greenhouse gas emission reduction targets, urgently save lives, meet bare minimum federal clean air attainment standards, and align our decarbonization trajectory with the Paris Climate Agreements' 1.5C global warming mitigation target.

Thank you for your consideration. We would be pleased to answer any questions or provide further information.

Sincerely,



Teresa Bui
State Climate Policy Director
Pacific Environment