

March 4, 2022

Ariel Fideldy
1001 I Street
Sacramento, CA 95814

Submitted electronically to:

[https://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=draft2022statesip-
ws&comm_period=1](https://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=draft2022statesip-
ws&comm_period=1)

Re: Port of Long Beach Comments on the Draft 2022 State Strategy for the State Implementation Plan

Dear Ms. Fideldy and staff at the California Air Resources Board (CARB),

The Port of Long Beach (Port) appreciates the opportunity to comment on the Draft 2022 State Strategy for the State Implementation Plan (SIP). The Port has worked aggressively, in partnership with marine terminal operators and the maritime goods movement industry, to reduce emissions from port-related operations. In the 2017 Clean Air Action Plan (CAAP) Update, the Port of Long Beach jointly with the Port of Los Angeles set ambitious zero emissions (ZE) goals, including ZE cargo handling equipment (CHE) by 2030, and ZE heavy-duty trucks serving the Ports by 2035.

Since the 2017 CAAP Update, the Port of Long Beach has secured over \$80 million in grant funding for the deployment and demonstration of zero emission CHE and heavy-duty trucks, as well as cleaner harbor craft and vessel technologies. While our early CHE demonstration projects have focused heavily on battery-electric CHE, there is substantial interest from our terminal operators to test hydrogen fuel cell technologies. In 2021, the San Pedro Bay Ports Technology Advancement Program (TAP) received three unsolicited proposals for hydrogen fuel cell equipment, including yard tractors and top handlers. All three proposals were unique – none of them proposing the exact same technology from the same manufacturer.

Infrastructure remains the greatest barrier to widespread adoption. As we continue to see mandates from the Governor's Office that request vessels at berth unplug from shorepower due to an overwhelmed grid on peak heat days, questions regarding grid capacity and reliability remain. Further, infrastructure to support battery-electric technologies will require substantial disruption of marine terminal operators, including many miles trenching, to install the necessary electrical infrastructure. The cost of this infrastructure, including the necessary planning and engineering design, is going to be hundreds of millions, if not billions of dollars.

The decision to pursue battery-electric or fuel cell technologies has not been determined by our terminal operators, with the exception of Long Beach Container Terminal. The SIP needs to reflect a fuel and technology neutral approach so that our terminals can design the most cost-effective, and operations specific strategy to achieve zero emissions operations. Memorializing a prediction of up to 90% battery-electric CHE by 2036 is inappropriate given the feedback we are hearing from our terminal operators, and is unnecessary for the SIP. Estimations regarding the technology mix should be reserved for rulemaking, where the appropriate stakeholders (marine terminal operators, their associations, Ports, and manufacturers amongst others) will be present.

We support CARB's commitment to develop a cargo handling equipment regulation to transition marine terminal operations to zero emissions. It is imperative that we advance our joint clean-air goals and reduce the Port's operational impacts on nearby disadvantaged communities. We respectfully request that CARB refrain from any predictions regarding the technology mix within the Draft 2022 State Strategy for the SIP.

Thank you for letting us provide input throughout this public process. Should you have any questions regarding these comments, please reach out to Morgan Caswell, Manager of Air Quality Practices at morgan.caswell@polb.com.

Sincerely,



Matthew Arms
Director of Environmental Planning
Port of Long Beach