

SAN PEDRO BAY PORTS

CLEAN AIR ACTION PLAN

Clean Air Action Plan Implementation Stakeholder Advisory Meeting

MEETING SUMMARY

June 1, 2022

All meeting attendees participated via teleconference using the Zoom platform or by phone. Questions or comments were submitted via the Zoom chat or microphone feature.

1. Welcome

- Christopher Cannon, Port of Los Angeles (POLA) Director of Environmental Management and Heather Tomley, Port of Long Beach (POLB) Managing Director of Planning and Environmental Affairs, made opening remarks

2. Status Update on Current Technology Demonstrations

- The Ports presented a number of their Technology Advancement Program (TAP) achievements in 2021 and highlighted progress made to date in 2022.
 - The TAP received a total of ten (10) project concepts through the open Request for Information process in 2021. Seven (7) concepts were deemed eligible under the TAP and full proposals were requested. Of the seven (7) full proposals requested, three (3) proposals are presently under review.
- Port staff shared information on two new grant awards.
 - POLB was awarded a \$2.5 million grant to support zero-emission (ZE) infrastructure master planning efforts, light- and medium-duty vehicle charging infrastructure, and a workforce assessment to be conducted by Long Beach City College.
 - POLA was awarded approximately \$2.0 million grant for the replacement of an existing Tier 0+ switch locomotive with a new battery-electric switch locomotive. This project is in close partnership with Union Pacific, who will lead project implementation.
- Challenges and lessons learned were provided on the yard tractor, top handler, drayage truck, and hydrogen infrastructure projects. Some challenges included:
 - Thermal events experienced with two yard tractor batteries
 - Sudden loss of power with some drayage trucks
 - Long delays in deployment of charging infrastructure
 - Challenges achieving full functionality of hydrogen fueling stations
- Port staff shared upcoming state and federal funding opportunities for further technology demonstrations and equipment deployment were discussed at a high-level.
- The public was invited to provide comments and ask questions to Port staff.
 - One commenter commended the Port of Los Angeles for their leadership on the Green Ship Corridor and the Port of Long Beach for joining.
 - One commenter urged the Ports to fund harbor craft projects through the TAP in light of the California Air Resources Board (CARB) recently

adopted Harbor Craft Regulation and to only fund zero-emission harbor craft and vessels.

- Several individuals asked for more details regarding the challenges that were experienced during several of the demonstration projects.

3. Status Update on the 2021 Feasibility Assessments for Drayage Trucks & Cargo Handling Equipment

- The Ports' consultant, Gladstein, Neandross, and Associates (GNA), provided updates on the 2021 feasibility assessments for drayage trucks and cargo handling equipment (CHE).
 - GNA outlined the structure of the feasibility assessments, including the screening criteria used to determine the depth of analysis of each fuel-technology platform, and the fuel-technologies considered in the 2021 assessments.
 - GNA provided a status update on development of both the 2021 truck and CHE feasibility assessments.
 - GNA presented on the progress and challenges demonstrated for those drayage truck fuel-technologies that were evaluated in the 2021 drayage truck feasibility assessment.
 - A summary of the public comments received on the draft 2021 CHE feasibility assessment was provided.
 - The draft drayage truck feasibility assessment and the final cargo handling equipment feasibility assessment are expected to be released in Q3 2022. The Ports will accept public comments on the draft drayage truck feasibility assessment during Q2/Q3 2022.
- The public was invited to provide comments and ask questions to Port staff.
 - One commenter raised concern about indicating short haul trucks are considered TRL 9 when the assessment needs to address all drayage operations. GNA noted that the Broadly Applicable Truck definition under the 2018 assessment still applies to the 2021 assessment, and the assessment does delineate that the trucks that meet technology readiness level (TRL) 9 is limited to shorter haul applications.
 - One commenter felt the CHE TRL designation of 8 for yard tractors in the draft 2021 CHE feasibility assessment was too high given the results of the Port's demonstration project. The commenter recommended that Port staff revise this designation to a lower value, such as TRL 7. The commenter would also like to see a focus on safety, and update to the battery-electric yard tractor capital cost, which has increased, rather than decreased, over time.
 - One commenter noted that they would like to see a ramp up in deployment of ZE CHE and policies established to force equipment turn over in advance of the Port's goal for zero-emission CHE by 2030. Port staff noted that the technology feasibility assessments are not policy documents themselves, but will inform potential future policies.

- One attendee asked if CARB is aware of the findings of the Port's draft 2021 drayage truck feasibility assessment. Port staff noted that they frequently meet with CARB staff to discuss rulemakings and the draft drayage truck feasibility assessment will be available to CARB staff. Additionally, CARB has funded a number of Port-led truck projects and the data collected under those projects is shared with CARB.
- One attendee requested more information on the TRL rating for hydrogen fuel cell CHE.

4. Status Update on the Clean Truck Fund Rate Implementation

- The Ports provided a presentation on the Clean Truck Fund (CTF) Rate.
 - A summary of the truck population in the Port Drayage Truck Registry (PDTR) was provided.
 - Port staff presented on the steps for implementation of the CTF rate, differences in exemptions, and spending plan and priorities for the CTF Rate.
 - The two ports are partnering with CALSTART to contribute CTF Rate dollars to the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Program (HVIP) for zero-emission drayage trucks that visit the San Pedro Bay Ports. Additional details on this partnership were provided.
 - POLA provided an update on their early zero-emission truck deployment Request for Proposals (RFP).
 - POLB provided an update on their Public Charging Request for Information that was issued in February 2022, and described next steps. Additionally, POLB plans to issue guidance on Electric Vehicle Infrastructure Training Program requirements for charging infrastructure installed utilizing CTF Rate funds.
- The public was invited to provide comments and ask questions to Port staff.
 - One commenter said they support the Port's decisions to spend the CTF Rate dollars collected on ZE trucks and infrastructure. This commenter also urged the Port's to dedicate significant portions of the Port's own budget to zero-emission trucks, to increase the rate, and to request information from truck drivers on truck misclassification. The commenter also requested that the Ports design a roadmap for achieving zero-emission CHE and include ZE CHE milestones.
 - One attendee asked whether or not POLA's \$3 million RFP for 10 or more ZE trucks focused on a specific fuel-technology. The RFP did not define a particular technology for the trucks. POLA plans to go to Board before the next CAAP Implementation Stakeholder meeting.
 - One attendee asked what fuel-technology the POLB public truck charging and fueling assessment focused on. POLB staff noted that it covered hydrogen fuel cell and battery-electric technologies at a high level at the beginning of the document, but focused predominantly on battery-electric in light of the tremendous gap in heavy-duty, public charging infrastructure.

- One attendee asked how the Port's align the state of truck technology in the feasibility study with the impending regulations and goals to transition to ZE. The Ports acknowledged that the transition to ZE is going to be challenging, and there is a lot of work to be done by all stakeholders to make complete ZE drayage possible. The two Ports are committed to supporting technology advancement, where applicable, incentivizing the transition, and working with the regulatory agencies in support of strategic, and achievable rulemaking.
- One attendee asked how many additional years the Ports will allow trucks that meet EPA 2010 engine emission standard to perform work at the Ports after 2023. Port staff noted that the Advanced Clean Fleet Regulation is likely to have an important impact on what trucks can participate in drayage work at the Ports. However, the regulation is still in draft form. The two Ports have a requirement for new registrants that all new trucks entering the PDTR must be 2014 model year or newer.
- One attendee asked if the CTF Rate funding dedicated to HVIP will be rolled out through traditional HVIP or if there will be a separate application portal specific to POLA/POLB. Staff is still working with CALSTART on how the CTF Rate funds will be administered, but the plan is for it to be the same web portal as traditional HVIP.
- One attendee asked how much funding POLA expects to release in the first round of POLA ZE truck vouchers this summer. POLA responded that there will be smaller first installment. A second, larger installment from both Ports will be made available later in 2022.
- One attendee asked if the CTF Rate dollars that go towards HVIP funding will be released separately from CARB funds. The Ports' intent is to ensure funding is seamlessly released through the HVIP program. These dollars can be released as part of a CARB planned funding release, or through a separate Port-specific funding release.
- One attendee asked if the CTF Rate dollars that are passed through to HVIP are not utilized to turn over trucks soon to be banned under the CARB Truck and Bus Rule, can truck owners who have newer trucks take advantage of funding. Port staff said all owners of diesel-powered drayage trucks are encouraged to take advantage of funding made available through HVIP program.

5. Additional Comments & Questions

- Participants provided additional comments and questions regarding port-related topics.
 - One attendee asked if the Ports are tracking or creating a database of operational information to understand the efficacy of existing shore power. Port staff noted that we do not have such a database, but that the Ports do track air quality benefits associated with shore power usages in their annual emissions inventories.