



San Pedro Bay Ports Sustainable Supply Chain Advisory Committee *May Meeting Summary*

Date: May 19th, 2021 | 11:00 am – 3:00 pm

Location: Via phone conference

Attachments: Attachment A - Attendees
Attachment B - Meeting Agenda
Attachment C - Pre-Meeting Primer
Attachment D - Presentation

Meeting Summary

1. POLA / POLB Opening Remarks
 - a. Both ports flagged that the pandemic-related cargo surge continues to put pressure on their supply chains, and that long dwell times at anchor and warehouse congestions persists. This is expected to affect their emissions inventories, which are forecasted for publication in mid-2021.
 - i. POLB shared that its April cargo volume (746,188 TEUs) was the highest on record, and that the volume moved from January through April 2021 reflected a 41.8% increase over the same period in 2020, when cargo volumes began to decline with the pandemic's onset in Asia and then the U.S. POLA added that it forecasts this surge will persist for another 2-3 months.
 - b. Addressing progress against their joint Clean Air Action Plan (CAAP), both ports said that they continue to implement grant-funded demonstration programs, that POLB has approved a \$1MM contribution to South Coast AQMD's Kickstart program for truck incentives, and that the ports are hopeful of receiving some additional awards in the next few months. Meanwhile, POLB is revising its Green Ship incentive program to incorporate the Environmental Ship Index (ESI) program, reward top performers, and more closely align with POLA's program. POLA also anticipates testing zero emission (ZE) locomotives. The ports are working to execute their agreement with a firm for the rate collection mechanism for the Clean Truck Program (CTP), which will require FMC approval and then seven months to develop.
 - i. POLB announced that it is presenting a resolution to its board on May 24th recommending lifetime clean truck rate exemptions for trucks purchased not later than 12/31/2022 and meet the standard of 0.02 g NOx per bhp-hr. The proposal will become publicly available with the supplemental agenda before the board meeting.
 - GNA noted that the Committee has issued several recommendations supporting incentives for trucks that meet this standard or better and would provide this separately as supporting material for the Board.
 - POLB advised that, if approved, the proposal would inform POLB's planning efforts but would that the exemption would not be formally



adopted until the Board passes the clean truck tariff, which the ports expect to take action on later in 2021.

- ii. The Committee asked if the joint ports were synchronized on this resolution and whether the financial impact of this exemption had been calculated.
 - POLB stated that it has not yet calculated the financial effect of this proposal, and noted that the CTP's ultimate goal is to convert the fleet to a rate-exempt ZE standard. POLB added that trucks certified to the 0.02g/bhp-hr standard are commercially available today, and that the driving factor behind the proposal is to minimize replacements with diesel trucks and capture all emissions reductions available.
 - The two ports have been in discussions. POLA is aware of the exemption, but has not yet made a decision to recommend a similar measure to its board.
 - Mayor Garcetti's office emphasized their interest in programs that favor ZE technology adoption and market penetration.
- iii. The Committee asked for an update on the timeline to adopt the CTP rate, but the ports said that while they are working on the program's mechanics, there is no definitive schedule at this point. Mayor Garcetti's office added that these mechanics include addressing policy mechanisms for improved efficiencies.
- c. Highlighting recent federal and state legislation, POLB notified the Committee that it is actively advocating for funding for NZE and ZE trucks, CHE, and infrastructure, and asked that the Committee and other participants on the call focus their attention on ways to align efforts in this area in order to achieve their shared goals.

2. Review & Approve March Meeting Summary

- a. The Committee noted that the meeting summary stated that Volvo had responded to POLA's October 2020 ZE RFI, but that that was inaccurate. This correction is noted in the May Meeting summary. The March meeting summary was approved.

3. Update on CARB Activities (CARB)

- a. Project 800
 - i. CARB staff reported that they are tracking funding sources to support a few hundred initial orders which have been placed, which they consider to be a strong signal of program success particularly in the absence of HVIP, which won't open until June 8th, 2021. These funding sources include the VW Mitigation Fund, Proposition 1B, the anticipated joint solicitation by CARB and the CEC, the U.S. EPA, and the Mobile Source Air Pollution Reduction Review Committee (MSRC).
 - CARB asserted that, considering these sources in addition to HVIP, there is currently \$120MM available to support Project 800 and that this is sufficient - but that HVIP funding alone would be insufficient.
 - LA Metro observed that \$120MM seemed insufficient to support 800 Class 8 trucks assuming a base price of \$300,000 or more. The group discussed the additional burden of registration, licensing and sales taxes which present significant barriers to drayage truck fleet operators.



POLA's legislative team advised that it is actively pursuing various mechanisms to reduce this burden through legislation.

- Mayor Garcetti's office added that the Governor's revised May budget included significant carve-outs for the drayage market. A recent proposal to eliminate sales taxes on ZE drayage trucks, however, has been stalled. This topic was further discussed under agenda item 4(b).
- ii. Staff added that HVIP will open with some new conditions in support of drayage fleets including voucher caps of 50 per fleet; higher voucher amounts; and a brake control to pause the program if funds are claimed in a short period so that a share of the available funding can remain available throughout the year. CARB is also working with dealerships to update their systems in advance of June 8th.
 - Representatives from the California Transportation Commission (CTC) reminded the audience that its TCEP program can also fund trucks if they are procured as part of a CEQA mitigation effort.
- b. Mobile Source Strategy
 - i. CARB summarized the scope and timeline of the MSS, noting that it takes a high-level approach to evaluate fleet mixes that would allow the state to meet air quality attainment goals. A revised draft strategy was published in April 2021 with new content addressing benefits to disadvantaged communities (DACs) and near-term emission reductions strategies. CARB is currently addressing comments received in April and May and plans to present the revised strategy to its board in September.
- c. Harbor Craft Regulation
 - i. After summarizing this regulation's key points, CARB reported that it has responded to comments received, many of which pertained to compliance extensions, the requirement to use renewable diesel, term stringencies in DACs, and emissions trading between fleets. CARB noted that it is requesting feedback from the Harbor Craft audience but has not received any to date. The regulation will be presented to the board in November.
- d. Low NOx Omnibus
 - i. After summarizing the Omnibus' key points, CARB reported that its comment period will close on June 4th, 2021, and that it expects to present the updated rule to its board by the end of the year. The agency noted that it has added a program to conduct maintenance and smog checks on HD trucks, and as this would be a first of its kind, it is working within CARB and with the DMV and other state agencies to prepare them to support and implement this program.
 - ii. CARB flagged that the Biden Administration's EPA is significantly more supportive of California's Omnibus and hopes to present an emission standard closely aligned with the Omnibus this fall.
 - iii. The Committee asked for clarification on the timeline to secure an executive order for the optional low NOx standard of 0.01g/bhp-hr, which has been recently redefined. CARB advised that this may be available in 2022 at the earliest, but that the agency has not received any definitive statements from OEMs indicating that they will request this certification in that timeframe.
 - Responding to a request to clarify the role of hybrids under the optional (0.01 g/bhp-hr) standard, CARB said that the Omnibus will allow hybrids



that are certified to federal GHG standards, and that it does not require hybrids to guarantee a share of miles that are ZE-only.

- POLA requested to continue the discussion separately to fully understand the role of hybrids that have zero emission mile capability.

e. Advanced Clean Fleet Rule

- Referring to the recently-closed comment period, CARB noted that most feedback received addressed cost, operational comparisons of Low NOx and ZE trucks, driver misclassification, and infrastructure availability. The staff member reminded the audience that CARB is hosting a workshop on ZE infrastructure needs for the commercial MD/HD sector on June 2nd.
- Option for Committee Input
 - The Committee agreed to address this after the Deep Dive discussion, given its relevance to the ACT regulation and the ACF rule.

4. Legislative Update

a. Federal Funding Overview

- POLA's legislative team outlined the following allocations in the federal budget in support of the SPBP's CAAP goals: \$17 Bn for marine and off-road infrastructure; \$174 Bn for a land-based EV charger network; \$50 Bn for infrastructure resiliency; and \$100 Bn for digital infrastructure access. Additionally, \$100 Bn is proposed to support workforce development programs.

b. Governor's May Budget Revise

- Noting the earlier comments from Mayor Garcetti's office about the Governor's budget supporting Project 800, POLA's legislative team advised that the \$100 Bn California Comeback Plan includes a large amount of funding for the HD trucking segment. Specifically, it focuses \$1.8 Bn on ZE technology proposals in 2021-2022, and \$3.2 Bn over 3 years; \$165M in workforce development; \$250M in port relief to costs associated with the COVID-19 pandemic; and \$325M for the AB 617 Community Air Protection Program. The ZE-specific funding further breaks down as follows:
 - \$402M for clean trucks, buses and off-road equipment
 - \$150M for drayage trucks and infrastructure, up to \$470M through 2024
 - \$65M for a drayage pilot project
 - \$125M for ZE manufacturing, up to \$250M over 2 years
 - \$500M in the Clean Transportation Program and for ZEV infrastructure
 - \$5M for ZEV market development strategy

c. AB365 & AB1524

- Request for Committee Support
 - Speaking on behalf of the joint ports, POLA's legislative team asked the Committee members to issue a letter of support for both bills, with a priority focus on AB1524 given its current active status in the legislature.
 - The members did not object to supporting AB1524, and tasked GNA with circulating a draft within a week.



- Meanwhile, the port will update the Committee with the final language for AB365 once issued. The ports added that they supported proposed language addressing driver misclassification.

5. Deep Dive - ZE Fueling Infrastructure

a. Introductions

- i. See **Attachment C**.

b. Background

- i. 2020 Infrastructure Roundtable
- ii. Port Drayage Truck Fleet's ZE Fueling Needs
- iii. Key Timelines and Milestones for Regional ZEV Infrastructure
 - GNA presented slides summarizing the SPBP equipment population, anticipated energy requirements, and key features of the ZE fueling infrastructure market identified through Committee research (**Attachment D**). A major takeaway was the market's readiness to invest in fueling infrastructure if a clear roadmap of vehicle and equipment technology types, fueling requirements and travel patterns can be provided. GNA noted that the ports have not yet taken the steps to provide the drayage truck travel heat map requested in May 2020.

c. Current Regional Planning Activities

i. CEC - Regional Blueprint; RHETTA

- Representatives from the California Energy Commission (CEC) shared a summary of the 28 awardees receiving funding to develop fueling infrastructure blueprints, and specified that projects by LACI and UC Irvine will specifically address needs in the MD/HD port drayage market. Completed blueprints from all awardees are expected to be delivered to the CEC over a six to 26 month timeframe.
- Separately, the CEC shared that it has selected an awardee for its recently-proposed RHETTA project and will issue a notice of award in early June. This project's goal is to create a multi-stakeholder research hub to develop public charging solutions at scale for HDVs. A total of \$23MM is available for infrastructure technology assessment and planning, and a subsequent deployment.

ii. SCAG - ZE Infrastructure Study

- Representatives from the South Coast Association of Governments (SCAG) identified specific areas of research that must be addressed in order for regional agencies and stakeholders to successfully close the ZE fueling infrastructure gap. Its current study addresses this need by studying land supply, grid capacity, and market demand, with a granular assessment conducted at 10 sites to understand the costs and timelines to develop the needed infrastructure.
- SCAG's study aims to produce a primer for local government on needs and opportunities to deliver efficiencies to the transportation industry.
- SCAG also identified itself as a prominent agency with a clear mandate to coordinate the resources and efforts of numerous groups in the region, including several at this particular meeting, to address the



regional fueling infrastructure need. A technical advisory committee is being formed to support this mandate.

- iii. The CTC was invited to provide a brief summary of the TCEP program, which funds freight infrastructure. The CTC noted that the program offers \$400M per year, and that the funding cycle would re-open in 2023 with applications being solicited in fall 2022. To date, the program has not received any applications for ZE infrastructure projects. The low level of applications may be due to restrictions per Article 19 on the use of funds raised through the gas tax. The CTC invited audience members with project concepts to share them to inform a precedent for freight-supportive projects that would qualify for public funding through TCEP.
 - Mayor Garcetti's office noted that land ownership is an important, and admittedly complicating, factor in the city's support for public fueling infrastructure development. Specifically, public housing is a top priority for the City of Los Angeles. The office recommended that the CTC and other organizations explore options for defining public benefits of diverse land use strategies in upcoming workshops.
- iv. PMSA flagged that land relationships at maritime ports are complex but often misunderstood, and asked whether SCAG's scope accounts for port-specific land ownership structures. SCAG anticipates that its early outreach effort will inform these details.
- v. Responding to questions from the Mayor's office on the SCAG blueprint award, SCAG clarified that the project will first evaluate energy supplies on available land starting in summer 2021, and run for two years. Data will be procured from existing internal sources, the ports and potentially probes.
 - The Mayor's Office recommended setting clear timeframes for making data available, to support other organizations' planning efforts and avoid delays. SCAG clarified that hosting regular meetings and sharing available data throughout the project is defined in its scope of work.
 - Noting that the various and extensive studies are needed but that their timelines are incongruent with the near-term need for charging infrastructure solutions, GNA asked speakers to comment on how they are coordinating across their respective projects to ensure an actionable outcome. The CEC acknowledged that there is not currently a process but that their solicitation expresses a clear interest in developing one. With 13 blueprints expected to become available within one year, the CEC is interested in convening organizations to discuss these first results and potential impact on a scalable solution.
- d. Utility Presentation on Charging Infrastructure Development
 - i. Forecasting Demand for On and Off Dock Port Activity
 - ii. Resilience Planning
 - Southern California Edison (SCE) asserted that it is fully prepared and capable of supporting a ZE transition at the SPBP complex, and that the majority of its current infrastructure in that area has the necessary capacity to support anticipated demand growth over the next 10 years. During that time, SCE intends to test infrastructure rated up to 1 MW.



By 2045, SCE estimates that the electric supply requirements in the POLB area will increase to between 125 and 250 GWh, or approximately 34 times the 2021 load. Meanwhile, demand along the I-710 corridor will increase 80x, from a current demand of 24 GWh to over 2,000 GWh.

- a. SCE shared slides describing its Reimagining the Grid program, specifying its interim targets to reach the state's goal of 100% renewable electricity by 2045, and describing high-level strategies for facilitating the transportation sectors' transition to ZE technologies (**Attachment D**).
- Los Angeles Department of Water and Power (LADWP) provided a high-level summary of its existing EV-supporting programs (**Attachment D**) and specified that it is making an effort to provide strategic, customized support for the POLA's ZE transition. Under one scenario, the utility forecasts that MD/HD electrification will generate an additional 450 MW of new demand in its service territory, and that the POLA area would account for just over 50 MW, half of which is attributed to cargo handling equipment (CHE). Approximately 18 MW are attributed to HD trucks and electrified transport refrigeration units (eTRUs). LADWP stated that it is not currently prepared to meet that load, but is using these assumptions to inform its upgrade plans during the 2020 decade.
- While it does not currently offer incentives for fleets operating MD/HD ZEVs, LADWP will propose commercial EV contract rates to its board in summer 2021. If approved, these rates will be available to customers over the next five years. Additionally, under the CAAP LADWP has been providing up to \$15MM from 2017 through 2022 to support infrastructure needs.
 - a. GNA observed that \$15MM is a helpful but incredibly small share of the total investment needed, and asked whether a long-term funding plan was in development. LADWP noted that a lot has changed since the plan was introduced in 2017, and that while its management is excited to support MD/HD electrification, they have received minimal interest from this segment under their current rebate programs. A clear indication of demand is required to allocate limited funds towards the commercial sector while demand remains strong in the passenger vehicle sector.
 - i. Mayor Garcetti's office added that the MOU was designed to provide support upon request from the terminal operators, but that to date these operators have been using other, larger, grant funds. The work under these projects has only triggered utility updates on the relatively small scale needed to complete a small-volume demonstration.
- PMSA expressed concern that the utilities' systems are currently unable to measure grid events that disrupt the port even if they are short (<10 seconds). Noting that accurate measurement is critical for effective



management and forecasting, PMSA asked if the utilities are investing in this issue. Both utilities agreed that there are pathways to explore to resolve this gap; SCE is looking into some solutions.

- a. PMSA requested that the Committee explore this issue in more detail and consider making a recommendation. The Committee agreed to discuss this further at a separate time.

e. POLA/POLB Infrastructure Planning

i. POLB Fueling/Charging Study

- The port presented a summary of its current study on the opportunities for and challenges to deploying public charging infrastructure near the ports to support port ZE operations (**Attachment D**). While the study is selecting specific sites to evaluate for installations, POLB noted that site availability changes quickly.
- The port's study assumes that 16,300 ZE trucks will require fueling support, with 10% of the fleet requiring hydrogen. POLB noted that while it may build charging stations it will not operate them.
- For more details on POLB's site selection criteria and assumptions, see **Attachment C**.

ii. POLA Charging Study & ZEV RFI

- This topic was not addressed due to time restrictions.

f. Discussion

i. Opportunity for Committee Action

- This topic was not addressed due to time restrictions. The Committee agreed to convene in June to cover the remaining agenda items and debrief on presented materials.
- EarthJustice added that the Committee's future actions and recommendations should convey a clear sense of urgency for the industry and ports to create jobs in order to support the ZE transition.

6. Conclusion & Next Steps

a. Next Meeting: July 21st, 11 am - 3 pm, Zoom

b. 2021 Agenda:

- i. July - Cargo Handling Equipment (*guests: operators*)
- ii. September - Workforce Development (*guests: TBD*)
- iii. November - Locomotives (*guests: TBD*)



Attachment A
List of Meeting Participants

SSCAC Committee Members	
Erin Gardner	FuturePorts
Thomas Jelenic	PMSA
Michele Grubbs	PMSA
Matt Miyasato	South Coast AQMD
Heather Arias	CARB
Joe Lyou	CCA
Stella Ursua	Grid Alternatives
Ray Familathe	ILWU-13
Adrian Martinez	EarthJustice
Ricardo Hidalgo	International Brotherhood of Teamsters
Weston LaBar	Harbor Trucking Association
Los Angeles Port & City Staff	
Chris Cannon	Port of Los Angeles
Tim DeMoss	Port of Los Angeles
David Libatique	Port of Los Angeles
Erick Martell	Port of Los Angeles
Michael DiBernardo	Port of Los Angeles
Michael Samulon	City of LA, Mayor's Office
Lauren Faber O'Connor	City of LA, Mayor's Office
Julia Thayne	City of LA, Mayor's Office
Jacob Haik	City of LA, Councilman Buscaino's Office
Long Beach Port & City Staff	
Heather Tomley	Port of Long Beach
Bianca Villanueva	Port of Long Beach
Sam Joumblat	Port of Long Beach
Wei Chi	Port of Long Beach
Morgan Caswell	Port of Long Beach
Jacqueline Moore	Port of Long Beach
Rick Cameron	Port of Long Beach
Meeting Facilitation Staff	
Erik Neandross	GNA
Eleanor Johnstone	GNA
Patrick Couch	GNA
Other Stakeholders	



Regina Hsu	Earthjustice
Andre Freeman	CARB
Tony Brasil	CARB
Kim Heroy-Rogalski	CARB
Ariel Fideldy	CARB
Peter Christensen	CARB
Firas Abu-Sneh	CARB
Aaron Katzenstein	South Coast AQMD
Zorik Pirveysian	South Coast AQMD
Brian Choe	South Coast AQMD
Hannah Walter	California Transportation Commission
Michael Joseph	California Transportation Commission
Reynaldo Gonzalez	California Energy Commission
Michelle Vater	California Energy Commission
Ben DeAlba	California Energy Commission
Ryan Laws	SCAG
Alison Linder	SCAG
Yamen Nanne	LADWP
Kent Chan	LADWP
Vincent Zabukovec	LADWP
Scott Briasco	LADWP
Gia Vacin	GO-Biz
Eric Seilo	SCE
Damon Hannaman	SCE
Brian Bustamante	SCE
Michael Cano	LA Metro
Daniel Kopulsky	Caltrans
James Shankel	Caltrans



Attachment B Meeting Agenda

1. POLA / POLB Opening Remarks
2. Review & Approve March Meeting Summary
3. Update on CARB Activities (CARB)
 - a. Project 800
 - b. Mobile Source Strategy
 - c. Harbor Craft Regulation
 - d. Low NOx Omnibus
 - e. Advanced Clean Fleet Rule
 - i. Option for Committee Input
4. Legislative Update
 - a. Federal Funding Overview
 - b. Governor's May Budget Revise
 - c. AB365 & AB1524
 - i. Request for Committee Support
5. Deep Dive - ZE Fueling Infrastructure
 - a. Introductions
 - b. Background
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 - i. POLB Fueling/Charging Study
 - ii. POLA Charging Study & ZEV RFI
 - f. Discussion
 - i. Opportunity for Committee Action
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Attachment C
Pre-Meeting Primer



Attachment D
Presentation