



## **Sustainable Supply Chain Advisory Committee**

### ***May Meeting Summary***

**Date:** May 30th | 11 am – 3 pm

**Location:** In-person at Port of Long Beach and via phone conference

**Attendees:** Attachment A

**Meeting Agenda:** Attachment B

#### ***Key Discussion Items*** *(Action items in green)*

#### **1. POLA & POLB Opening Remarks**

- Mario Cordero opened up the meeting by discussing the collaboration between POLB and marine terminal operators in deploying clean equipment. POLB has also moved forward with the GE Portal pilot project, which provides opportunity for maritime stakeholders to share information.
- Mike DiBernardo provided an update on the recent CAAP implementation stakeholder meeting that took place on March 29<sup>th</sup>. Mike also discussed recent developments with fuel cell technology for off-road equipment.

#### **2. Review March Meeting Summary**

- Meeting summary was approved (**see Attachment C**)

#### **3. Review & Finalize 2018 Mission & Vision**

- The group discussed edits to the introduction of the mission and vision document and agreed further revisions would be made and reviewed in the next meeting.
  - **Action item: GNA to coordinate edits and recirculate before July meetings.**

#### **4. Review Draft System of Systems Recommendation**

- The group discussed whether or not a recommendation to make a simple tool is feasible. Given time constraints, it was agreed the group would continue discussing and revising the document until the next meeting to finalize.
  - **Action item: GNA to coordinate edits and recirculate before July meetings.**



#### 5. **SCAQMD Summary of May Board Meeting**

- Sarah Reed provided a summary of the May AQMD board meeting related to reducing emissions from freight facilities, including airports, seaports, railyards, warehouses and development projects.

#### 6. **Discussion on Funding Prioritization**

- The group discussed the need to line up funding priorities with state emission reduction goals.
- With many major buckets of funding available include VW Settlement funds, PUC, CEC, and others, the group discussed the need for more stakeholders to come together to illustrate the regional need for funding to be prioritized in and around the ports. The group discussed developing a letter to send to Sacramento signed by all of the committee members, advocating for an increased focus of funds for zero and near-zero equipment in the upcoming budget.
  - Action item: GNA to work with the Committee to draft a letter and send it out over the next couple of weeks.
- The group discussed pathways to transition the San Pedro Bay Port drayage truck fleet to near-zero or better, which is approximately 12,500 vehicles. With programs like Prop 1B, which has replaced 7,000 trucks already, members of the group agreed that 12,500 is not unattainable. However, there are issues with scrappage and stranded assets.

#### 7. **100 Zero-Emission Truck Project Update & Discussion**

- POLA staff provided an update that they are meeting with trucking companies who are interested in running a 10+/- vehicle demonstration of electric trucks to test the typical duty cycle. This approach of having several trucking companies run a handful of trucks each is a likely scenario, rather than finding one company to run 100 vehicles. However, they will need to have an infrastructure plan and operate the vehicles for at least one year.
- The group discussed a need to hold workshops with drayage trucking companies, technology providers, port staff and the utilities to talk through of the issues and variables.
- One of the key issues is still funding the demonstration. The VW Settlement funds could be a good pot of money to fund the vehicles for this project.
- The group discussed if there is a clear picture of the project costs at this stage to ask for funding, or if there needs to be some additional upfront scoping time to better define the project budget.
- Further discussion is needed on the project scope. The group will revisit this item at the next meeting.

#### 8. **Recommendation on Fueling Infrastructure for Zero Emission Trucks & CHE**

- Currently there is very little infrastructure for electric vehicle charging and hydrogen fueling. With PUC and CEC funding coming online, there is a lot of funding available for infrastructure projects. However, the group discussed that the utilities need more collaboration with the



ports and trucking companies to better understand what kind of investment is needed to support the transition to zero emission trucks and CHE.

- Due to time constraints, this agenda item will be revisited at the next meeting.

**9. Recommendation on Marine Emission Reduction Strategies**

- Due to time constraints, this agenda item will be moved to the next meeting.

**Attachment A**

***Meeting Attendees***

<b>SSCAC Committee Members</b>	
Adrian Martinez (by phone)	Earth Justice
Stella Ursua	GRID Alternatives
Peter Peyton	Former ILWU
Marnie Primer	FuturePorts
Cynthia Marvin (by phone)	CARB
Fred Minassian	SCAQMD
Sarah Reed	SCAQMD
Michele Grubbs	PMSA
Thomas Jelenic	PMSA
Joe Lyou	CCA and SCAQMD Governing Board
Louis Dominguez	San Pedro Neighborhood Council
Steve Cadden (by phone)	CRT
<b>Los Angeles Port &amp; City Staff</b>	
Michael DiBernardo	Port of Los Angeles
Chris Cannon	Port of Los Angeles
David Libatique	Port of Los Angeles
Lauren Faber O'Connor	City of LA, Mayors Office
Michael Samulon	City of LA, Mayors Office
David Reich	City of LA, Mayors Office
<b>Long Beach Port &amp; City Staff</b>	
Mario Cordero	Port of Long Beach
Rick Cameron	Port of Long Beach
Heather Tomley	Port of Long Beach
Ashley Samara	Port of Long Beach



<b>Meeting Facilitation Staff</b>	
Erik Neandross	GNA
Lexi Wiley	GNA
Patrick Couch	GNA



## **Attachment B**

### ***Meeting Agenda***

1. POLA & POLB Opening Remarks (10 min)
2. Review March Meeting Summary (5 min)
3. Review & Finalize 2018 Mission & Vision (10 min)
4. Review Draft System of Systems Recommendation (20 min)
5. SCAQMD Summary of May Board Meeting (30 min)
6. Lunch (10 min)
7. Discussion on Funding Prioritization (30 min)
8. 100 Zero-Emission Truck Project Update & Discussion (20 min)
9. Recommendation on Fueling Infrastructure for Zero Emission Trucks & CHE (45 min)
10. Recommendation on Marine Emission Reduction Strategies (60 min)
11. Conclusion & Discussion of Next Steps (10 min)



## Attachment C

### ***March 2018 Meeting Summary - FINAL***

<b>Date:</b>	March 28th   11 am – 3 pm
<b>Location:</b>	In-person at Port of Los Angeles and via phone conference
<b>Attendees:</b>	Attachment A
<b>Meeting Agenda:</b>	Attachment B

#### ***Key Discussion Items*** (Action items in green)

#### **10. Admin: FMC Agreement #201219**

- Jana Sidley from the Los Angeles City Attorney’s Office provided an overview of the FMC agreement and noted that given the joint Los Angeles – Long Beach nature of the committee, formal meetings summaries will be filed with the FMC.
  - **GNA to file meeting summary with the FMC as required.**

#### **11. Committee Member Updates**

- Steve Cadden, who has taken over as executive director of Coalition for Responsible Transportation, provided a brief introduction of his background in the global shipping business for the last 25 years. Given his role as the new executive director for CRT, he noted his interest in helping BCOs, truckers, and ports work collaboratively to improve freight efficiency, velocity and environmental performance.
- Marnie Primer, who is the interim executive director for FuturePorts, introduced herself and explained that she will be sitting on the committee until FuturePorts hires a new executive director.

#### **12. Opening Remarks by POLA & POLB**

- Chris Cannon and Rick Cameron provided an update on the recently organized Pacific Ports Clean Air Collaborative, which is focused on exchanging ideas on how to “green the ports.”
- Chris and Rick provided a summary of some recent meetings with high level EPA personnel, including the Assistant Administrator over Air & Radiation and a senior manager from EPA OTAQ. It was mentioned that the South Coast AQMD helped to play an important role in facilitating these meetings with EPA.
- The two Ports also provided an update on the CAAP Implementation Advisory Committee meeting set for March 29.



### 13. SSCAC Admin

- Review 2018 Meeting Schedule (**attachment C**)
  - GNA provided an overview of the forward looking schedule. The group confirmed its preference to meet every other month, with occasional interim technical meetings where a more in-depth discussion of an issue is required.
- Website
  - It was agreed that both Ports to host SSCAC dedicated page on their respective websites.
  - Action item: GNA to coordinate with both ports to post content regularly.

### 14. Review 2018 Mission & Vision (**attachment D**)

- There was some discussion about the need to ensure that available public funding is well aligned with the stage of development for various ZE and NZE technologies. To help assess such alignment issues, the POLB agreed to develop a draft matrix showing various advanced technologies and key development timelines.
  - Action item: POLB to develop technology & timeline matrix.
- Due to time constraints, it was agreed that the document would be reviewed by the group after the meeting and feedback would be provided in advance of the next meeting.
  - Action item: GNA to collect feedback and develop a final Mission and Vision document.

### 15. SCAQMD Summary of March Board Meeting

- Joe Lyou provided a summary of the discussion at the AQMD board meeting related to AQMD's staff presentation on option to reduce emissions from freight facilities, including airports, seaports, warehouses and new and re-development projects. No action was taken by the AQMD Governing Board at the meeting due to board member attendance issues. Future action is expected at a subsequent AQMD Governing Board meeting.
  - Action item: Joe to share a copy of the memo from AQMD legal counsel discussing the authority of the AQMD to adopt regulations that can impact rail yard.

### 16. CARB Summary of March Board Meeting

- Cynthia Marvin summarized the board meeting, including the nine different concepts reviewed in order to reduce community health impacts from large freight facilities in California (presentation is attachment E). No action was taken by the board as the staff presentation was only an informational update.
- Additional discussion focused on ARB's desire to be an active participant and supporter of the Ports' efforts on NZE and ZE trucks, CHE, locomotives, Tier 4 engines for harbor craft, and the ARB's concept for a Freight Handbook to act as an advisory document.
- The group agreed that cost-effective emission reductions could likely be achieved from the rail and harbor craft sectors and thus, that this should be a focus of a future SSCAC agenda.



#### 17. DWP and SCE Presentations on Electrification Infrastructure Plans

- Presentations were provided Peter Liang, LADWP and Damon Hannaman, SoCal Edison. Presentations can be found in attachment F and G.
- Highlights from Peter’s presentation include:
  - Current aggregate electrical demand in the Port of LA (from customers on Port of LA property) is between 70 and 90 MW. The three primary areas of large power demand generally come from: lighting, AMP, and ship-to-shore cranes.
  - Future aggregate electrical demand for the Port of LA is estimated to be approximately 235 MW. Such demand assumes 100 percent electrification of cargo handling equipment in the Port of LA, but does not consider any charging infrastructure for battery-powered on-road drayage trucks.
  - A new receiving station for the Port of LA would likely be required to support this increased electrical demand of approximately 235 MW. The receiving station will likely require approximately 5 acres of property and require a 10 year planning and construction timeline. LADWP is now working on the site feasibility study for this receiving station, as well as additional studies, including: a load growth schedule; an outage correlation study; and a system vulnerability study.
  - Additional details from the Port of LA are required to determine the load growth schedule. Additional discussion is also required as it relates to allocation of capital improvement project costs for this new service.
  - LADWP has sufficient power resources in the Port complex to support immediate load growth from battery electric powered CHE.
- Highlights from Damon’s presentation include:
  - A review of the SCE SB 350 filing and approved elements of this filing was provided, together with a summary of some of the ZE CHE project work that Edison is supporting in the POLB.
  - SCE has sufficient power resources in the Port complex to support load growth from CHE in the next 10 to 12 years; beyond this, however, additional plans will be required. In parallel to these discussions, SCE staff frequently talks about their Grid Modernization Plan.

#### 18. Funding Prioritization

- Due to time constraints, this agenda item will be moved to the next meeting.





## Attachment A

### *Meeting Attendees*

<b>SSCAC Committee Members</b>	
Adrian Martinez	Earth Justice
Stella Ursua	GRID Alternatives
Peter Peyton	Former ILWU
Marnie Primer	FuturePorts
Cynthia Marvin	CARB
Matt Miyasato	SCAQMD
Michele Grubbs	PMSA
Thomas Jelenic	PMSA
Joe Lyou	CCA and SCAQMD Governing Board
Louis Dominguez	San Pedro Neighborhood Council
Steve Cadden	CRT
Jonathan Rosenthal	Saybrook Capital
<b>Los Angeles Port &amp; City Staff</b>	
Chris Cannon	Port of Los Angeles
Jana Sidley	Port of Los Angeles
Tim DeMoss	Port of Los Angeles
Lauren Faber O'Connor	City of LA, Mayors Office
Michael Samulon	City of LA, Mayors Office
David Reich	City of LA, Mayors Office
<b>Long Beach Port &amp; City Staff</b>	
Rick Cameron	Port of Long Beach
Heather Tomley	Port of Long Beach
Justin Ramirez	City of Long Beach, Mayor's Office
<b>Meeting Facilitation Staff</b>	
Erik Neandross	GNA
Lexi Wiley	GNA
Patrick Couch	GNA
<b>Guests</b>	
Peter Liang	LADWP
Damon Hannaman	SoCal Edison



## **Attachment B**

### ***Meeting Agenda***

12. POLA & POLB Opening Remarks
13. Committee Member Updates
14. Review January Meeting Summary
15. SSCAC Admin (Meeting Schedule, Website)
16. Review 2018 Mission & Vision
17. Lunch
18. CARB Summary of March Board Meeting
19. DWP and SCE Presentations on Electrification Infrastructure Plans
20. Funding Prioritization
21. Conclusion & Discussion of Next Steps



**Attachment C**

***Draft 2018 Meeting Schedule – To Be Updated***

<b>Date</b>	<b>Meeting Type – Topics</b>	<b>Location</b>
Wednesday, March 28	Meeting – DWP & SCE updates; CARB & AQMD rules; funding prioritization	Los Angeles
Wednesday, April 25	Technical – Marine technology RD&D roundtable & tour; ESI & Green Ship Program Updates	Los Angeles
Wednesday, May 23	Meeting – Systems of Systems Guiding Document; HPEC update; marine recommendations; funding prioritization	Long Beach
Wednesday, June 27	Technical – Truck OEM roundtable (financing, IOO model)	Long Beach
Wednesday, July 25	Meeting – Truck financing recommendation; 100 BET project update; funding prioritization	Los Angeles
Wednesday, August 22	Technical – Near-zero & zero emission CHE technology RD&D roundtable & tour	Los Angeles
Wednesday, September 26	Meeting – CHE recommendation; infrastructure cost/timeline updates from DWP/SCE; funding prioritization	Long Beach
Wednesday, October 24	Technical – Labor roundtable	Long Beach
Wednesday, November 28	Meeting – Labor recommendation; multi-port clean tech RFI update; funding prioritization	Los Angeles
Wednesday, December 19	Technical – Locomotive tech RD&D	Los Angeles



## Attachment D Mission & Vision

### PURPOSE

The Committee's purpose is to evaluate technologies and make advisory recommendations to both port's executive directors and the Mayors of Los Angeles and Long Beach for moving cargo more efficiently and advancing zero-emissions goods movement. Using innovation, market transformation, and other tools, the Committee will also be tasked to help the San Pedro Bay Ports achieve and exceed the goals set forth in the State's Sustainable Freight Action Plan and the Clean Air Action Plan while addressing economic and commercial needs.

### GOALS

The State's **Sustainable Freight Action Plan** goals of note for the Committee include:

- Improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030
- Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize near-zero emission freight vehicles and equipment powered by renewable energy by 2030
- Foster future economic growth within the freight and goods movement industry by promoting flexibility, efficiency, investment, and best business practices through State policies and programs that create a positive environment for growing freight volumes, while working with industry to lessen immediate potential negative economic impacts

The San Pedro Bay Ports **Clean Air Action Plan** goals of note for the Committee include:

- Reduce population-weighted residential cancer risk of Port-related DPM emissions by 85% by 2020
- Reduce port-related emissions by 59 percent for NO<sub>x</sub>, 93 percent for SO<sub>x</sub> and 77 percent for DPM by 2023
- Reduce GHGs from port-related sources to 40% below 1990 level by 2030 and 80% below 1990 levels by 2050

### VALUES AND GUIDELINES

As the Committee discusses possible recommendations, the following values and guidelines should be considered:

- Near term pilots that are scalable, advance zero emissions targets, and help transform markets
- Focus on the largest sources of emissions with near-term and currently available technologies that meet economic and commercial needs



- Cost-effective investments with environmental, economic, and technological sustainability that also drive long-term market transformation
- Protecting human health, especially in port-adjacent communities that are disproportionately impacted by freight emissions, by accelerating the deployment of zero and near-zero emission technologies

### **PRIORITIES FOR 2018**

The Committee has identified the following priorities for discussion and possible recommendations in 2018:

- Develop a one-page guiding document that identifies priorities to address and improve the “system of systems” nature of goods movement
- Collaborate with the port complex workforce to successfully plan for a zero and near-zero emission technology future
- Advocate for local, state and federal funds to accelerate the deployment of zero and near-zero emission technologies at the joint ports
- Participate in the development of a multi-port clean tech RFI to accelerate the procurement and deployment of clean technology and vehicles
- Accelerate technology & efficiency innovation, development and commercial deployments of :
  - Increase the On-road trucks (including a 100 BET Demonstration)
  - Container handling equipment
  - Marine
  - Locomotive/rail