

Sustainable Freight Advisory Committee

Meeting Summary

- Date:** July 27th, 2016 | 11 am – 3 pm
- Location:** Harbor Administrative Building
425 S. Palos Verdes Street, San Pedro, CA 90731
Room 522
- Attendees:** Attachment A
- Meeting Agenda:** Attachment B

Overview:

In this meeting, the Committee discussed and identified the initial key priorities of focus, including zero emission truck deployment projects, zero emission top handler technology development and deployment, as well as broader system improvements to increase on-dock and short-haul rail, and reduce empty truck miles.

The Committee also finalized a Mission and Vision statement that will be used to guide all future discussions and, ultimately, advisory recommendations to Mayor Eric Garcetti and Port Executive Director Gene Seroka.

Key Discussion Items

(Action items in green)

- 1. Preview of the 2015 Emissions Inventory Report:**
 - Chris Cannon presented a preview of the 2015 POLA air emissions inventory report that will soon be presented to the board. Key trends and the largest sources of emissions in the port were highlighted.
 - Zero emission baseline for CHE: currently there are 145 CHEs that are zero emission; year prior was 110.
- 2. Summary of POLA investments in technology developments and projects:**
 - Doane Liu provided a summary of the key investments the POLA has made in various clean air technologies and initiatives over the last decade. It is estimated that the POLA

has spent \$350 to \$400 million on the various elements of the Clean Air Action Plan. It was noted that POLB has probably spent a similar amount.

3. Admin:

- The review of the administrative items on the agenda was taken out of turn in order to manage the agenda during the meetings.
- It was confirmed that the role of the Committee is not intended to in any way be a substitute for a joint POLA/POLB stakeholder process on CAAP 3.0. The Committee is intended to be a parallel effort to make recommendations on POLA and City of LA specific initiatives, especially since Mayor Garcetti has recently released the 2015 Sustainable City pLAn, which has several port, goods movement transportation and air quality related goals for the City of LA. A question about the parameters of the next Clean Truck Program was not discussed and the issue was deferred to the joint POLA/POLB release of the draft CTP in the near term.
- There was a good discussion on the Committee's reporting structure to Mayor Eric Garcetti and Gene Seroka was discussed. The group decided that recommendations would be given as soon as they are decided on rather than waiting for the end of the Committee's term.
 - Recommendations to the Mayor will be passed along by Matt Petersen and recommendations to Port Executive Director will be passed along by Doane Liu. GNA will support by writing up any necessary memos or briefing materials.
- Peter Peyton and Jonathan Rosenthal suggested that the committee look at the entire supply chain system rather than focusing on individual pieces alone. The Committee agreed and incorporated these suggestions into the mission and vision document.

4. Review and finalize Mission & Vision statement:

- The document was updated during the meeting based upon the discussion amongst the Committee and support staff. It was agreed that this would be a "living document" as the Committee continues its work. The final draft is attached (**Attachment C**).
- In the course of the conversation, several key issues were stressed by members of the Committee:
 - The Committee should focus on the projects that it can help get done in the time it has available.
 - Demonstration projects must shoot for scale and size.
 - There should be an elevated focus on delivering emission reductions to EJ communities.

5. Battery Electric Truck presentation and discussion:

- GNA presented its concept to develop and launch a demonstration project with 100 battery electric trucks. A copy of the slides is attached (**Attachment D**).
- The Committee agreed with the proposed concept but would like additional analysis to determine the right number of trucks needed for this demonstration concept. It was also noted that the level of funding required to support this project is significant and at these levels of funding, systems and infrastructure investments could be made that could possibly provide significant emission reductions.
- **ACTION ITEMS:**

- GNA to figure out the final location of the trucks developed as part of the CARB EV truck grant awarded to SCAQMD announced earlier this year to determine if any of these trucks can be leveraged as part of this project concept.
- GNA, Jonathan Rosenthal and Peter Peyton to look at potential location for the BETs and to identify terminals with top handlers to integrate with the BET concept.

6. Top handler discussion:

- The Committee agreed that top handlers are a priority because of the emissions associated with them and because they do 70% of the work.
 - **ACTION ITEM:** Chris Cannon to follow-up on the August 11th meeting he is having with a top handler OEM on an all-electric version of this equipment.

7. City of LA's EV RFI presentation:

- Michael Samulon provided a presentation on the City of LA's EV RFI process and its relationship to port equipment and the joint West Coast Mayor's initiative.
- GNA suggested that the pick-up trucks used by the clerks could be considered as part of this RFI initiative.
 - **ACTION ITEM:** GNA to work with Peter Peyton to identify the number of pickup trucks being used by clerks in the harbor; provide this information back to Michael Samulon.

8. Renewable Diesel as a transition fuel discussion:

- The Port is interested in using renewable diesel in its operations (especially POLA harbor craft), but is concerned about the supply of RD and if OEMs will maintain equipment warranties when using the fuel
- Port will continue to identify opportunities for the Port's fleet and terminals to transition to RD.
- The Committee likes the concept and agreed the Port should continue moving in this direction.
 - **ACTION ITEM:** Chris Cannon and his team will continue down this path and report back to the Committee on their progress.
- The Committee also sees the value in renewable natural gas. Cynthia Marvin noted the particular attractiveness of renewable natural gas when developed from waste streams, as well as ARB's preference for renewable natural gas over renewable diesel because of the differences in the composition of the particulate matter. Matt Petersen noted the continued concerns about the efficacy of the natural gas infrastructure and ability to deliver renewable natural gas to the market.

9. Summary of priorities:

- Electric truck projects
- Electric top handlers (especially when working with electric trucks)
- System improvements, including:
 - Increase on-dock rail and short-haul rail
 - Reduction of empty truck miles

Attachment A

Meeting Attendees

COMMITTEE MEMBERS

Louis Dominguez	Chair of the Port & Environment Committee, Coastal San Pedro Neighborhood Council
Michele Grubbs	Vice President, Pacific Merchant Shipping Association
James Jack	Executive Director, Coalition for Responsible Transportation
Joe Lyou	President & CEO, Coalition for Clean Air & Governor's Appointee to the SCAQMD Governing Board
Adrian Martinez	Staff Attorney, Earthjustice
Cynthia Marvin	Division Chief, California Air Resources Board
Henry Hogo	Assistant Deputy Executive Officer, Mobile Source Division, Science and Technology Advancement, SCAQMD
Peter Peyton	Former President, ILWU Marine Clerks Association of Los Angeles & Long Beach
Jonathan Rosenthal	Co-Portfolio Manager, Saybrook Capital
Elizabeth Warren	Executive Director, FuturePorts

CITY OF LOS ANGELES

Matt Petersen	Chief Sustainability Officer, City of Los Angeles Mayor's Office
Michael Samulon	Policy Analyst, Sustainability Office, City of Los Angeles Mayor's Office

PORT OF LOS ANGELES & CONSULTANTS

Doane Liu	Deputy Executive Director & Chief of Staff, Port of Los Angeles
Chris Cannon	Director of Environmental Management Division & Chief Sustainability Officer, Port of Los Angeles
Tim DeMoss	Air Quality Supervisor, Port of Los Angeles
David Libatique	Senior Director of Government Affairs, Port of Los Angeles
Amber Coluso	Port of Los Angeles
Emily Yen	Port of Los Angeles
Erick Martell	Port of Los Angeles
Erik Neandross	Chief Executive Officer, GNA
Patrick Couch	Vice President, GNA
Alexis Wiley	Communications & PR Manager, GNA

Attachment B
Meeting Agenda

1. Port of Los Angeles Emissions Inventory (POLA) – *15 min*
2. Summary of investments in clean air technologies and projects (POLA) – *15 min*
3. Review and finalize SFAC Mission & Vision statement (group discussion) – *30 min*
4. Develop priority areas of focus for SFAC
 - a) 100 battery electric truck project (GNA) – *20 min*
 - b) Cargo handling equipment: top handlers (group discussion) – *20 min*
 - c) EV RFI (Mayor's Office) – *20 min*
 - d) Renewable diesel as a transition fuel (POLA) – *20 min*
 - e) Identify other priority areas of focus (group discussion) – *40 min*
5. Admin items – *30 min*
 - a. Review reporting structure for the SFAC and confirm meeting summary for Mayor Garcetti and Gene Seroka (group discussion)
 - b. Meeting schedule (see handout)
 - c. Contact list (see handout)
 - d. Non-committee member attendees at future meetings (group discussion)

Note: we will take a short break for lunch sometime during agenda item #4.

Attachment C

Sustainable Freight Advisory Committee: Mission & Vision Statement

PURPOSE

As stated in the Mayor's letter of invitation, the Committee's purpose is to evaluate technologies, systems and other opportunities, and make advisory recommendations to the Mayor Eric Garcetti and Gene Seroka, Executive Director of POLA, 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 POLA achieve and exceed the goals set forth in the Sustainable City pLAN and the State's Sustainable Freight Action Plan while addressing economic and commercial needs.

GOALS

The Sustainable City pLAN goals of note for the Committee include:

- Increasing the percentage of port-related goods movement trips (defined initially as pieces of equipment over a certain size and utility) that use zero-emission technologies to meet and beat 15-percent by 2025 and to 25-percent by 2035
- Air quality outcomes in pLAN (e.g., zero non-attainment days by 2025)

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.
- Increase State competitiveness and future economic growth by aligning with the established targets developed in conjunction with the economic competitiveness working group. These targets and tools will support flexibility, efficiency, investment, and best business practices through State policies and programs that create a positive environment for growing freight volumes and jobs, while working with industry to mitigate potential negative economic impacts.

GUIDING PRINCIPLES

- Near term projects that are scalable, advance zero emission targets, and help transform markets in the years ahead
- Focus on the largest sources of emissions with current and near term available technologies and systems that meet economic and commercial needs
- Cost effective investments with environmental, economic, and technological sustainability that also drive toward long term market transformation
- More efficient goods movement systems and zero and near-zero emission technologies must be deployed as quickly as possible to protect human health, especially in port-adjacent communities that are disproportionately impacted by freight emissions

INITIAL PRIORITIES

- Electric truck projects
- Electric top handlers (especially when working with electric trucks)
- System improvements, including:
 - Increase on-dock rail and short-haul rail
 - Reduction of empty truck miles

DRAFT Battery Electric Drayage Truck Demonstration Project Concept

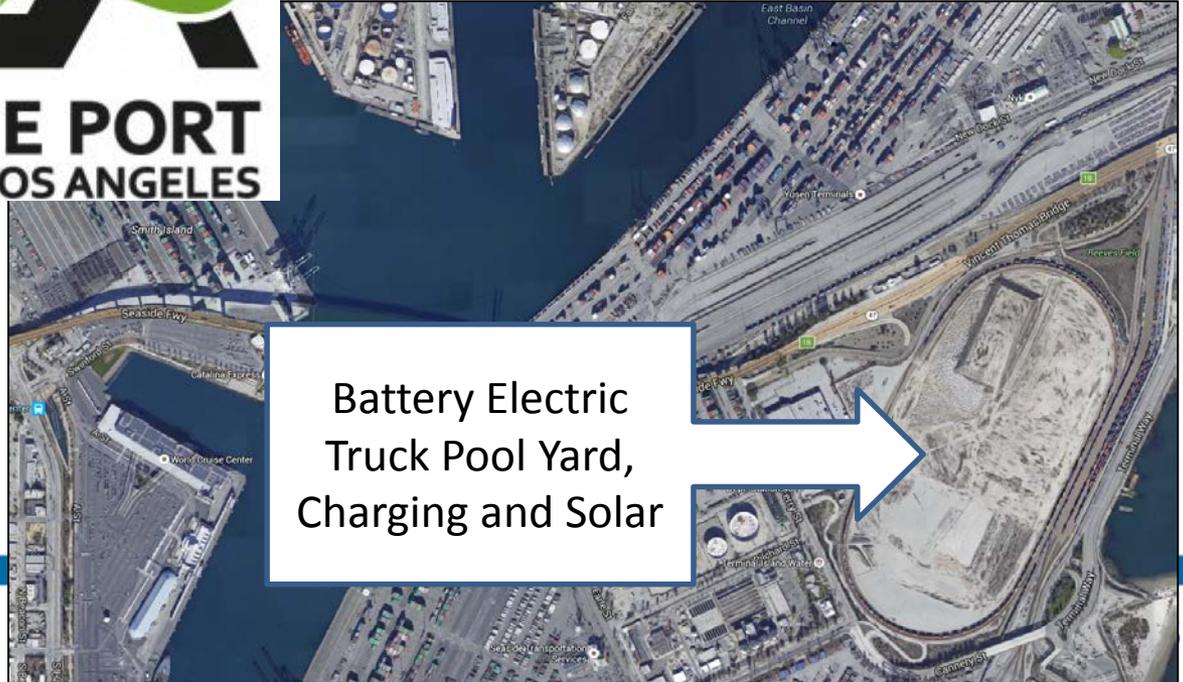


April 2016

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Battery Electric
Truck Pool Yard,
Charging and Solar

Demonstration Concept Overview

LMC or Fleet Operator

- LMC sends IOO to “BET Pool Yard” to pick up truck for day’s activities
- IOO rents truck for a day (includes truck, fuel, maintenance, and insurance)
- Cost is \$1/day for first year; costs increase in year 2, 3, etc. to cover operating costs
- IOO drives loads to the SCIG / ICTF and other local destinations

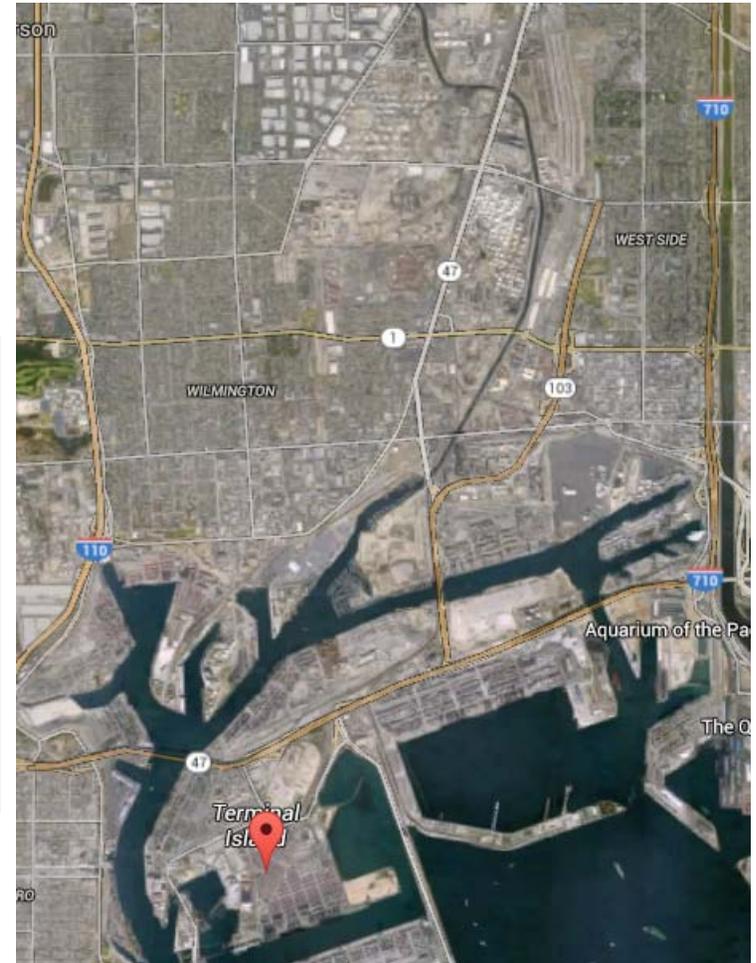
driver

Leasing co. / service provider

driver

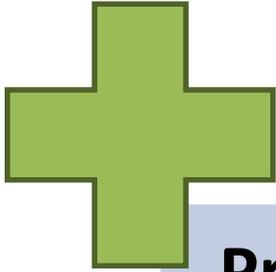


- A contracted service provider owns, maintains, fuels, and rents/leases the assets to qualified drivers.
- POLA/CARB/SCAQMD/others provide funding to purchase the assets, fueling infrastructure, and monthly maintenance/management fees
- Cost to rent/lease trucks is minimal in year 1 during proof of concept phase; costs increase in forward years as reliability and operational capability is proven.



The concepts presented here are very rough / first draft ideas; subject to further stakeholder review and refinement

Driver Perspective – Pros and Cons



Pros

- No insurance
- No maintenance
- No fuel costs
- \$1/day rental
- Prioritized dispatch?
- Priority gate access for ZETs?

Cons

- Limited to near-dock/lower pay routes
- Extra time spent to rent truck each day
- More closely constrained to a single LMC

Rough Budget

100 trucks
\$350,000 cost/truck (1)
\$35,000,000 total truck costs

\$30,000 cost/charging station (2)
\$3,000,000 total charging station costs (installed)
\$15,000,000 site electrical upgrades (3)
\$18,000,000 total charging station and site upgrade cost

\$1,500 monthly cost to maintain/insure/manage each truck (4)
\$150,000 monthly service provider costs

\$65,520 monthly project management (2 FTEs, 1 senior, 1 junior)

\$60,586,240 sub-total project cost

30% contingency

\$78,762,112 Total Project Cost

For Questions & Information

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