

**GRANT REQUEST FORM (GRF)**

CEC-270 (Revised 10/2015)

CALIFORNIA ENERGY COMMISSION

New Agreement ARV-17-048 (To be completed by CGL Office)

600 Fuels and Transportation Division	Adeel Ahmad	6	916-651-2077
City of Long Beach Harbor Department			95-6000733
Port Community EV Blueprint			
06 / 30 / 18	9 / 30 / 19	\$ 200,000	

☐ ARFVTP agreements \$75K and under delegated to Executive Director.

Proposed Business Meeting Date	05 / 09 / 2018	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
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Business Meeting Presenter	Sharon Purewal	Time Needed:	5 minutes
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Please select one list serve. Altfuels (AB118- ARFVTP)

**Agenda Item Subject and Description**

Proposed resolution approving Agreement ARV-17-048 with City of Long Beach Harbor Department for a \$200,000 grant to develop an innovative, replicable electric vehicle and equipment blueprint plan in the port community, Port of Long Beach, which includes marine terminals, cargo-handling vehicles, visitor facilities, and warehouse/distribution centers; all activities that impact surrounding disadvantaged communities.

1. Is Agreement considered a "Project" under CEQA?

☒ Yes (skip to question 2)☐ No (complete the following (PRC 21065 and 14 CCR 15378)):

Explain why Agreement is not considered a "Project":

Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because .

2. If Agreement is considered a "Project" under CEQA:

☒ a) Agreement **IS** exempt. (Attach draft NOE)
☒ Statutory Exemption. List PRC and/or CCR section number:

14 CCR section 15262 – Feasibility and Planning Studies

☒ Categorical Exemption. List CCR section number:

14 CCR section 15306 – Information Collection

☒ Common Sense Exemption. 14 CCR 15061 (b) (3)

Explain reason why Agreement is exempt under the above section:

Cal. Code Regs., tit.14, §15262 exempts feasibility and planning studies for possible future actions that have not been approved, adopted or funded from CEQA. Cal. Code Regs, tit. 14, §15306 information collection, provides that projects which consist of basic data collection, research and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource are categorically exempt from the provisions of CEQA. This project consists of developing a planning document for possible future development of electric vehicles and equipment at the Port of Long Beach. The project will not cause direct physical changes to the environment and only involves public outreach, administrative coordination efforts, and similar activities, but no physical construction. Therefore, this project falls within sections 15262 and 15306 and will not have a significant effect on the environment. This project will not cause any significant effects from unusual circumstances or cumulative effects or other exceptions listed under Cal. Code Regs., tit. 14, §15300.2.

Additionally, under Cal. Code Regs., tit. 14, §15061(b)(3) the common sense exemption, this project is exempt because it can be seen with certainty that this proposed project will not cause any direct or indirect change in the environment because funding will only be used for planning and analysis activities and will not involve any construction, improvements, or enactment of zoning ordinances.

☐ b) Agreement **IS NOT** exempt. (Consult with the legal office to determine next steps.)

Check all that apply

☐ Initial Study☐ Negative Declaration☐ Mitigated Negative Declaration☐ Environmental Impact Report☐ Statement of Overriding Considerations

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Legal Company Name:	Budget
Grant Farm	\$ 200,000
Zero Net Energy Alliance, Inc.	\$ 10,000
Center for International Trade and Transportation	\$ 12,000

Legal Company Name:
Southern California Edison, City of Long Beach, Pacific Merchant Shipping Association

Funding Source	Funding Year of Appropriation	Budget List No.	Amount
ARFVTP	FY 17/18	601.118I	\$200,000
Funding Source			\$
Funding Source			\$
Funding Source			\$
Funding Source			\$
R&D Program Area:	Select Program Area		\$200,000
Explanation for "Other" selection			
Reimbursement Contract #:	Federal Agreement #:		

Name:	Aimee Castillo	Name:	Renee Moilanen
Address:	4801 Airport Plaza Drive	Address:	4801 Airport Plaza Drive
City, State, Zip:	Long Beach, CA 90815	City, State, Zip:	Long Beach, CA 90815
Phone:	562-283-7111	Fax:	562-283-7148
Phone:	562-283-7100	Fax:	562-283-7148
E-Mail:	aimee.castillo@polb.com	E-Mail:	renee.moilanen@polb.com

<input checked="" type="checkbox"/> Competitive Solicitation	Solicitation #: GFO-17-604
<input type="checkbox"/> First Come First Served Solicitation	

1. Exhibit A, Scope of Work	<input checked="" type="checkbox"/> Attached
2. Exhibit B, Budget Detail	<input checked="" type="checkbox"/> Attached
3. CEC 105, Questionnaire for Identifying Conflicts	<input checked="" type="checkbox"/> Attached
4. Recipient Resolution	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> Attached
5. CEQA Documentation	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> Attached

Agreement Manager

Date

Office Manager

Date

Deputy Director

Date

## Exhibit A SCOPE OF WORK

### TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2	X	Pre-Blueprint Preparation
3		Development Port Community EV Blueprint
4		Knowledge Transfer
5		Final Port Community EV Blueprint

### GLOSSARY

*Specific terms and acronyms used throughout this scope of work are defined as follows:*

Term/ Acronym	Definition
ARFVTP	Alternative and Renewable Fuel and Vehicle Technology Program
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CPR	Critical Project Review
Energy Commission	California Energy Commission
EV	Electric Vehicle
FTD	Fuels and Transportation Division
PCEVB	Port Community Electric Vehicle Blueprint
POLB	Port of Long Beach
Recipient	City of Long Beach Harbor Department (DBA - Port of Long Beach)
TOC	Table of Contents

### BACKGROUND

Assembly Bill (AB) 118 (Núñez, Chapter 750, Statutes of 2007), created the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP). The statute authorizes the California Energy Commission (Energy Commission) to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the state's climate change policies. AB 8 (Perea, Chapter 401, Statutes of 2013) re-authorizes the ARFVTP through January 1, 2024, and specifies that the Energy Commission allocate up to \$20 million per year (or up to 20 percent of each fiscal year's funds) in funding for hydrogen station development until at least 100 stations are operational.

The ARFVTP has an annual budget of approximately \$100 million and provides financial support for projects that:

- Reduce California's use and dependence on petroleum transportation fuels and increase the use of alternative and renewable fuels and advanced vehicle technologies.
- Produce sustainable alternative and renewable low-carbon fuels in California.
- Expand alternative fueling infrastructure and fueling stations.
- Improve the efficiency, performance and market viability of alternative light-, medium-, and heavy-duty vehicle technologies.
- Retrofit medium- and heavy-duty on-road and non-road vehicle fleets to alternative technologies or fuel use.
- Expand the alternative fueling infrastructure available to existing fleets, public transit, and transportation corridors.
- Establish workforce training programs and conduct public outreach on the benefits of alternative transportation fuels and vehicle technologies.

On December 14, 2017, the California Energy Commission (Energy Commission) released a Grant Solicitation and Application Package entitled "Electric Vehicle (EV) Ready Communities Challenge Phase I- Blueprint Plan Development Solicitation" under the ARFVTP. This competitive grant solicitation was for Phase I of an expected two phase effort for EV ready communities. Phase I planning blueprints will identify the actions and milestones needed to proceed towards implementation of an EV ready community. In response to GFO-17-604, the Recipient submitted application #13 which was proposed for funding in the Energy Commission's Notice of Proposed Awards on April 04, 2018. GFO-17-604 and Recipient's application are hereby incorporated by reference into this Agreement in their entirety.

In the event of any conflict or inconsistency between the terms of the Solicitation and the terms of the Recipient's Application, the Solicitation shall control. In the event of any conflict or inconsistency between the Recipient's Application and the terms of Commission's Award, the Commission's Award shall control. Similarly, in the event of any conflict or inconsistency between the terms of this Agreement and the Recipient's Application, the terms of this Agreement shall control.

### **Problem Statement:**

California's interconnected system of ports, railroads, highways, and roads are responsible for one-third of the State's economic product and jobs, with freight-dependent industries accounting for over \$740 billion in gross domestic product and over 5 million jobs in 2014.<sup>1</sup> Maintaining the competitiveness of this economic engine is vital. Yet, freight transportation in California also generates a high portion of local pollution in parts of the state with poor air quality. Reducing these harmful pollutants is an important local, regional, and State priority, as well as a matter of compliance with the federal Clean Air Act.<sup>2</sup> Seaports are faced with unique constraints to deploying zero-emissions vehicles and equipment due to, among other factors, high energy demand, restrictive duty cycle requirements, diverse tenant and operational interests, and limited operational or ownership control over fleets and infrastructure. Further complicating

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<sup>1</sup> "California Sustainable Freight Action Plan," Brown Jr., Governor Edmund G., p. 1.

<sup>2</sup> Id.

matters, in the dynamic, 24/7 port environment, everything is interdependent, with an astonishingly broad array of light-, medium-, and heavy-duty equipment and vehicles in operation.

### **Goals of the Agreement:**

The goals of this project are to:

- Establish a comprehensive, yet nimble, strategy to assist in the identification of the most cost-effective technology suites, financial incentives, infrastructure upgrades, and equipment mixes for creating the model sustainable, zero-emission port ecosystem of the 21<sup>st</sup> century.
- Accelerate the deployment of electrified transportation at local and regional levels with a holistic and futuristic view of regional transportation planning.
- Propagate, organize, and simplify the process of transitioning one of the world's busiest seaports to zero-emission operations.

### **Objectives of the Agreement:**

To achieve these goals, Port of Long Beach (POLB) will pursue the following operational objectives:

- Assemble a multidisciplinary Project Team consisting of experts in planning, the electricity grid, marine terminal operations, and workforce development.
- Research the current state of progress toward electrification of Port-related transportation and equipment.
- Solicit input from community leaders, local governments, technology and building developers, utilities, and experts in logistics, sustainability, transportation, energy generation and distribution, international trade, regional planning, environmental justice, and clean energy finance.
- Host a Port Community EV Blueprint (PCEVB) Planning Workshop.
- Address all attributes of an EV-ready seaport community in a comprehensive and replicable PCEVB.
- Submit the final version of the EV-Ready Community Blueprint to the Energy Commission.
- Share project results at a daylong symposium for regulators and funding agencies.
- Lay the foundation for an actionable Phase II implementation plan that supports the installation of EV infrastructure in the Port community over the next two to five years.

## **TASK 1 ADMINISTRATION**

### **Task 1.1 Attend Kick-off Meeting**

The goal of this task is to establish the lines of communication and procedures for implementing this Agreement. The Commission Agreement Manager (CAM) shall designate the date and location of this meeting and provide an agenda to the Recipient prior to the meeting.

#### **The Recipient shall:**

- Attend a “Kick-Off” meeting with the CAM, the Commission Agreement Officer (CAO), and a representative of the Energy Commission Accounting Office. The Recipient shall bring their Project Manager, Agreement Administrator, Accounting Officer, and any others determined necessary by the Recipient or specifically requested by the CAM to this meeting.
- Discuss the following administrative and technical aspects of this Agreement:
  - Agreement Terms and Conditions
  - Critical Project Review (Task 1.2)
  - Match fund documentation (Task 1.6) No reimbursable work may be done until this documentation is in place.
  - Permit documentation (Task 1.7)
  - Subcontracts needed to carry out project (Task 1.8)
  - The CAM's expectations for accomplishing tasks described in the Scope of Work
  - An updated Schedule of Products and Due Dates
  - Monthly Progress Reports (Task 1.4)
  - Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
  - Final Report (Task 1.5)

#### **Recipient Products:**

- Updated Schedule of Products
- Updated List of Match Funds
- Updated List of Permits

#### **CAM Product:**

- Kick-Off Meeting Agenda

### **Task 1.2 Critical Project Review (CPR) Meetings**

CPRs provide the opportunity for frank discussions between the Energy Commission and the Recipient. The goal of this task is to determine if the project should continue to receive Energy Commission funding to complete this Agreement and to identify any needed modifications to the tasks, products, schedule or budget.

The CAM may schedule CPR meetings as necessary, and meeting costs will be borne by the Recipient.

Meeting participants include the CAM and the Recipient and may include the Commission Agreement Officer, the Fuels and Transportation Division (FTD) program lead, other Energy Commission staff and Management as well as other individuals selected by the CAM to provide support to the Energy Commission.

**The CAM shall:**

- Determine the location, date, and time of each CPR meeting with the Recipient. These meetings generally take place at the Energy Commission, but they may take place at another location.
- Send the Recipient the agenda and a list of expected participants in advance of each CPR. If applicable, the agenda shall include a discussion on both match funding and permits.
- Conduct and make a record of each CPR meeting. Prepare a schedule for providing the written determination described below.
- Determine whether to continue the project, and if continuing, whether or not modifications are needed to the tasks, schedule, products, and/or budget for the remainder of the Agreement. Modifications to the Agreement may require a formal amendment (please see section 8 of the Terms and Conditions). If the CAM concludes that satisfactory progress is not being made, this conclusion will be referred to the Lead Commissioner for Transportation for his or her concurrence.
- Provide the Recipient with a written determination in accordance with the schedule. The written response may include a requirement for the Recipient to revise one or more product(s) that were included in the CPR.

**The Recipient shall:**

- Prepare a CPR Report for each CPR that discusses the progress of the Agreement toward achieving its goals and objectives. This report shall include recommendations and conclusions regarding continued work of the projects. This report shall be submitted along with any other products identified in this scope of work. The Recipient shall submit these documents to the CAM and any other designated reviewers at least 15 working days in advance of each CPR meeting.
- Present the required information at each CPR meeting and participate in a discussion about the Agreement.

**CAM Products:**

- Agenda and a list of expected participants
- Schedule for written determination
- Written determination

**Recipient Product:**

- CPR Report(s)

**Task 1.3 Final Meeting**

The goal of this task is to closeout this Agreement.

**The Recipient shall:**

- Meet with Energy Commission staff to present the findings, conclusions, and recommendations. The final meeting must be completed during the closeout of this Agreement.

This meeting will be attended by, at a minimum, the Recipient, the Commission Grants Office Officer, and the CAM. The technical and administrative aspects of Agreement closeout will be discussed at the meeting, which may be two separate meetings at the discretion of the CAM.

The technical portion of the meeting shall present an assessment of the degree to which project and task goals and objectives were achieved, findings, conclusions, recommended next steps (if any) for the Agreement, and recommendations for improvements. The CAM will determine the appropriate meeting participants.

The administrative portion of the meeting shall be a discussion with the CAM and the Grants Officer about the following Agreement closeout items:

- What to do with any equipment purchased with Energy Commission funds (Options)
  - Energy Commission's request for specific "generated" data (not already provided in Agreement products)
  - Need to document Recipient's disclosure of "subject inventions" developed under the Agreement
  - "Surviving" Agreement provisions
  - Final invoicing and release of retention
- Prepare a schedule for completing the closeout activities for this Agreement.

**Products:**

- Written documentation of meeting agreements
- Schedule for completing closeout activities

**Task 1.4 Monthly Progress Reports**

The goal of this task is to periodically verify that satisfactory and continued progress is made towards achieving the objectives of this Agreement on time and within budget.

The objectives of this task are to summarize activities performed during the reporting period, to identify activities planned for the next reporting period, to identify issues that may affect performance and expenditures, and to form the basis for determining whether invoices are consistent with work performed.

**The Recipient shall:**

- Prepare a Monthly Progress Report which summarizes all Agreement activities conducted by the Recipient for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Each progress report is due to the CAM within 10 days of the end of the reporting period. The recommended specifications for each progress report are contained in Section 6 of the Terms and Conditions of this Agreement.



- In the first Monthly Progress Report and first invoice, document and verify match expenditures and provide a synopsis of project progress, if match funds have been expended or if work funded with match share has occurred after the notice of proposed award but before execution of the grant agreement. If no match funds have been expended or if no work funded with match share has occurred before execution, then state this in the report. All pre-execution match expenditures must conform to the requirements in the Terms and Conditions of this Agreement.

**Product:**

- Monthly Progress Reports

**Task 1.5 Final Report**

The goal of the Final Report is to assess the project's success in achieving the Agreement's goals and objectives, advancing science and technology, and providing energy-related and other benefits to California.

The objectives of the Final Report are to clearly and completely describe the project's purpose, approach, activities performed, results, and advancements in science and technology; to present a public assessment of the success of the project as measured by the degree to which goals and objectives were achieved; to make insightful observations based on results obtained; to draw conclusions; and to make recommendations for further projects and improvements to the FTD project management processes.

The Final Report shall be a public document. If the Recipient has obtained confidential status from the Energy Commission and will be preparing a confidential version of the Final Report as well, the Recipient shall perform the following activities for both the public and confidential versions of the Final Report.

**The Recipient shall:**

- Prepare an Outline of the Final Report, if requested by the CAM.
- Prepare a Final Report following the latest version of the Final Report guidelines which will be provided by the CAM. The CAM shall provide written comments on the Draft Final Report within fifteen (15) working days of receipt. The Final Report must be completed at least 60 days before the end of the Agreement Term.
- Submit one bound copy of the Final Report with the final invoice.

**Products:**

- Outline of the Final Report, if requested
- Draft Final Report
- Final Report

**Task 1.6 Identify and Obtain Matching Funds**

The goal of this task is to ensure that the match funds planned for this Agreement are obtained for and applied to this Agreement during the term of this Agreement.

The costs to obtain and document match fund commitments are not reimbursable through this Agreement. Although the Energy Commission budget for this task will be zero dollars, the Recipient may utilize match funds for this task. Match funds shall be spent concurrently or in advance of Energy Commission funds for each task during the term of this Agreement. Match funds must be identified in writing and the associated commitments obtained before the Recipient can incur any costs for which the Recipient will request reimbursement.

**The Recipient shall:**

- Prepare a letter documenting the match funding committed to this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If no match funds were part of the proposal that led to the Energy Commission awarding this Agreement and none have been identified at the time this Agreement starts, then state such in the letter. If match funds were a part of the proposal that led to the Energy Commission awarding this Agreement, then provide in the letter a list of the match funds that identifies the:
  - Amount of each cash match fund, its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied.
  - Amount of each in-kind contribution, a description, documented market or book value, and its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied. If the in-kind contribution is equipment or other tangible or real property, the Recipient shall identify its owner and provide a contact name, address and telephone number, and the address where the property is located.
- Provide a copy of the letter of commitment from an authorized representative of each source of cash match funding or in-kind contributions that these funds or contributions have been secured. For match funds provided by a grant a copy of the executed grant shall be submitted in place of a letter of commitment.
- Discuss match funds and the implications to the Agreement if they are reduced or not obtained as committed, at the kick-off meeting. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide the appropriate information to the CAM if during the course of the Agreement additional match funds are received.
- Notify the CAM within 10 days if during the course of the Agreement existing match funds are reduced. Reduction in match funds must be approved through a formal amendment to the Agreement and may trigger an additional CPR meeting.

**Products:**

- A letter regarding match funds or stating that no match funds are provided
- Copy(ies) of each match fund commitment letter(s) (if applicable)
- Letter(s) for new match funds (if applicable)
- Letter that match funds were reduced (if applicable)

### **Task 1.7 Identify and Obtain Required Permits**

The goal of this task is to obtain all permits required for work completed under this Agreement in advance of the date they are needed to keep the Agreement schedule on track.

Permit costs and the expenses associated with obtaining permits are not reimbursable under this Agreement. Although the Energy Commission budget for this task will be zero dollars, the Recipient shall budget match funds for any expected expenditures associated with obtaining permits. Permits must be identified in writing and obtained before the Recipient can make any expenditure for which a permit is required.

#### **The Recipient shall:**

- Prepare a letter documenting the permits required to conduct this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If there are no permits required at the start of this Agreement, then state such in the letter. If it is known at the beginning of the Agreement that permits will be required during the course of the Agreement, provide in the letter:
  - A list of the permits that identifies the:
  - Type of permit
  - Name, address and telephone number of the permitting jurisdictions or lead agencies
  - The schedule the Recipient will follow in applying for and obtaining these permits.
- Discuss the list of permits and the schedule for obtaining them at the kick-off meeting and develop a timetable for submitting the updated list, schedule and the copies of the permits. The implications to the Agreement if the permits are not obtained in a timely fashion or are denied will also be discussed. If applicable, permits will be included as a line item in the Progress Reports and will be a topic at CPR meetings.
- If during the course of the Agreement additional permits become necessary, provide the appropriate information on each permit and an updated schedule to the CAM.
- As permits are obtained, send a copy of each approved permit to the CAM.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM within 5 working days. Either of these events may trigger an additional CPR.

#### **Products:**

- Letter documenting the permits or stating that no permits are required
- A copy of each approved permit (if applicable)
- Updated list of permits as they change during the term of the Agreement (if applicable)
- Updated schedule for acquiring permits as changes occur during the term of the Agreement (if applicable)
- A copy of each final approved permit (if applicable)

### **Task 1.8 Obtain and Execute Subcontracts**

The goal of this task is to ensure quality products and to procure subcontractors required to carry out the tasks under this Agreement consistent with the Agreement Terms and Conditions and the Recipient's own procurement policies and procedures. It will also provide the Energy Commission an opportunity to review the subcontracts to ensure that the tasks are consistent with this Agreement, and that the budgeted expenditures are reasonable and consistent with applicable cost principles.

#### **The Recipient shall:**

- Manage and coordinate subcontractor activities.
- Submit a draft of each subcontract required to conduct the work under this Agreement to the CAM for review.
- Submit a final copy of the executed subcontract.
- If Recipient decides to add new subcontractors, then the Recipient shall notify the CAM.

#### **Products:**

- Letter describing the subcontracts needed, or stating that no subcontracts are required
- Draft subcontracts
- Final subcontracts

### **TECHNICAL TASKS**

Pursuant to Exhibit D, if any information under this Agreement is "Personal Information" as defined under the Information Practices Act (see California Civil Code section 1798.3(a) and Exhibit D section 3 of this Agreement for the definition of "Personal Information") then Recipient and any subcontractor or partner who collects or otherwise has access to the Personal Information must comply with the Information Practices Act (California Civil Code sections 1798 et seq.) when performing activities under this Agreement.

### **Task 2 PRE-BLUEPRINT PREPARATION**

The goal of this task is to complete all research, engagement, and planning activities necessary to begin work on the PCEVB.

#### **Task 2.1 Research**

The goal of this subtask is to understand the baseline status of the transition to zero-emission transportation and cargo-handling activities within the Port, adjacent visitor-serving areas, and the surrounding communities directly impacted by port-related activities.

#### **The Recipient shall:**

- Schedule a Project Team kickoff meeting to initiate communications among team members and confirm project goals and objectives.
- Conduct research to determine the current state of the following items relating to the Port Community's transition to zero-emission operations, but not limited to:
  - Regional and local planning documents;

- Current and planned zoning and parking policies;
- Local building codes;
- Permitting and inspecting processes;
- Utility interconnection processes;
- EV registration data;
- Equipment and vehicle usage (including, but not limited to; duty cycle, visitor information, and driving data);
- Port EV and zero-emission cargo-handling equipment data;
- Analytical tools and software applications useful for future EV planning at seaports throughout California and nationwide;
- Documentation of actions or steps already adopted by the local and regional jurisdiction, particularly related to the deployment of freight-related EV infrastructure, and the impact of those actions or steps on the development of an EV ready community;
- Key local “champions” of the transition to zero-emissions operations of the Port and adjacent visitor-serving area;
- Existing incentives (grants, rebates, etc.) and financing sources (bank or financial institution loans, etc.) for relevant electric vehicles, charging equipment, and hydrogen refueling infrastructure; and
- Comparison of how California seaports are similar and differ.
- Integrate content from research and information gathering stages of feasibility assessments for zero emissions on-road trucks and terminal equipment to be conducted in 2018 by POLB.
- Identify innovative strategies for EV deployment that include but are not limited to such strategies as, but not limited to:
  - On-bill utility financing for EV infrastructure;
  - Bundled approaches to selling EVs, EV supply equipment, solar, and energy storage;
  - Demand response and system capacity optimization using storage and/or micro-grid controls; and
  - Duty cycle adjustments for equipment optimization and cost-savings.
- Prepare *Port Community EV Blueprint Research Report* summarizing the results of the research process.

#### **Products:**

- Port Community EV Blueprint Research Report

#### **Task 2.2 Outreach and Engagement**

The goal of this subtask is to share the results of Task 2.1 with relevant stakeholders and to solicit input from them on how they understand their involvement in the transition to zero-emissions.

#### **The Recipient shall:**

- Establish and manage the PCEVB Guiding Committee with representatives from, but not limited to:
  - Port of Long Beach;
  - Grant Farm;
  - City of Long Beach, City Manager’s Office;
  - Southern California Edison;
  - Pacific Merchant Shipping Association; and

- Center for International Trade and Transportation.
- Finalize a target list of stakeholders from a variety of industries and jurisdictions, stakeholders that will be considered include, but are not limited to:
  - Technology developers;
  - Original Equipment Manufacturers;
  - Utilities;
  - Marine terminal operators and tenants;
  - Trucking and warehousing associations and owners;
  - EV charging station manufacturers, distributors, and operators;
  - Hydrogen fueling station manufacturers/distributors;
  - Labor and workforce development;
  - Community-based organizations;
  - Regulatory agencies;
  - Public and private funding authorities and experts; and
  - Environmental justice organizations.
- Develop a series of customized *PCEVB Questionnaires* for the targeted stakeholders. Project Team will attempt to understand many factors impacting the transition to zero-emissions operations, including, but not limited to:
  - Pain points for potential buyers and lessors of zero-emission vehicles, equipment, and charging/refueling infrastructure;
  - Charging requirements as a function of end-user behavior and duty cycle limitations, such as restrictive scheduling, heavy utilization, and limited access to alternative fueling infrastructure;
  - Sustainability goals of end-users, including vehicle and equipment acquisition timelines, renewable energy objectives;
  - Activities already undertaken in furtherance of deploying zero-emission vehicles and equipment;
  - Limitations and barriers to deploying electric and hydrogen fueling infrastructure, including physical constraints of real estate and raising capital; and
  - Recommendations on potential new regional and state incentive programs for zero-emission vehicles and equipment.
- Interview each targeted stakeholder soliciting answers to the questions in the relevant PCEVB Questionnaire and engaging in a discussion about the specific needs, desires, plans, and challenges that stakeholder possesses in relation to the transition to zero-emissions operations.
- Summarize the results of the questionnaire process in a *PCEVB Engagement Report*.

**Products:**

- PCEVB Questionnaires
- PCEVB Engagement Report

**Task 2.3 Workforce Development**

The goals of this subtask are to evaluate the local and regional workforces and to formulate pathways to preparing them to service a zero-emission port community.

**The Recipient shall:**

- Identify and prioritize workforce opportunities associated with the deployment of EV at seaports.

- Identify and convene working groups of freight industry and workforce experts to outline and prioritize workforce challenges associated EV and EV infrastructure deployment.
- Map related skill and training requirements in mission-critical occupations tied to EV development and deployment. This process to include career and curriculum pathways extending from K-12 through post-secondary and professional development.
- Develop concepts for longer-term training strategies that could include apprenticeships in critical occupations.
- Prepare *Workforce Development Report*.

**Products:**

- Workforce Development Report

**Task 2.4 Planning**

The goals of this subtask area to review the results of Tasks 2.1, 2.2, 2.3 and to convene a PCEVB Planning Workshop. This subtask will culminate in a CPR report.

**The Recipient shall:**

- Convene meeting of PCEVB Guiding Committee to review results of Tasks 2.1 and 2.2 and assess quality and completeness of data collected in preparation for development of PCEVB. In particular, Committee will identify gaps in knowledge and formulate plan to fill those gaps, either through additional outreach or at the planned PCEVB Planning Workshop.
- Conduct any necessary follow-up engagement activities.
- Plan two (2, or more) PCEVB Planning Workshops, as necessary, at which the members of the Guiding Committee, as well as select representatives of the organizations targeted in Task 2.2 gather to assess the success of the research and engagement efforts and the group's readiness to proceed to formal development of the PCEVB. Planning efforts to include, but not limited to:
  - Event location, event duration, agenda, and attendees.
- Conduct the PCEVB Planning Workshops, which will include roundtable discussions by Guiding Committee members, technical advisors, and invited stakeholders, particularly those essential to filling in any last critical gaps in knowledge.
- Produce *Draft PCEVB Table of Contents (TOC)*.
- Prepare *PCEVB Planning Workshop Report* summarizing results of the workshop. This report will include a variety of material, including, but not limited to:
  - Identification of risks and uncertainties surrounding the design, permitting, planning, and financing of EV ready communities.
  - Assessment of current levels of relevant training and education possessed by local officials, site hosts, and users to be impacted by implementation of the PCEVB.
  - Documentation of specific restrictions and requirements for EV infrastructure unique to a seaport community.
  - Assessment of replicability to other California seaports.
- Prepare and submit to CAM CPR Report.
- Attend CPR Meeting with Energy Commission staff.

**Products:**

- Draft PCEVB Table of Contents
- PCEVB Planning Workshop Report

**[CPR WILL OCCUR DURING THIS TASK, SEE TASK 1.2 FOR DETAILS]**

**Task 3 DEVELOP PORT COMMUNITY EV BLUEPRINT**

The goal of this task is to manage the development of a comprehensive and replicable blueprint that details the steps needed for a regional electrified transportation network and to transition the port to an EV ready community. This document will include action items at the end of each section that can be used to replicate the process at other seaports.

**The Recipient shall:**

- Review all previous deliverables and convene Guiding Committee meeting to formulate *Draft Goals* for PCEVB and confirm Draft TOC.
- Assign roles to members of the Project Team and Guiding Committee in the development of the PCEVB.
- Produce a *Draft PCEVB* and distribute for review to Guiding Committee members and select group of stakeholders. Draft will include the following, but not limited to:
  - Discussion of risks surrounding the design, permitting, planning, and financing of an EV ready community and a high-level plan for mitigation.
  - Analysis of combination of technologies and systems (transport and charging) that potentially offer the best mix of economic, environmental, and technical performance specific to the defined Port Community.
  - Identification of optimal locations for electric vehicle charging infrastructure deployment and the rationale for them being considered optimal.
  - Comprehensive financial and business models or collaborative strategies among developers, local governments, investor-owned utilities, etc. as well as showcasing innovative financing strategies that will accelerate the deployment of EV Ready Communities. Strategies to include:
    - Innovative financing approaches designed to mitigate pain points identified in Task 2.2.
    - Recommendations to regional, state, and federal funding agencies on new incentive types/programs.
  - Workforce development strategies necessary to ensure the community workforce has the requisite knowledge, skills and abilities to develop, support, and maintain the EV ready community.
  - Potential reduction goals in greenhouse gases, criteria air pollutants, and toxic air contaminants for the region, and the emitters at the local level that would need to be targeted.
  - Benefits that would accrue to Disadvantaged Communities to the maximum extent possible through implementation of the PCEVB.
  - Clear plan for capturing lessons learned and best practices.
  - An outreach strategy supported by education and outreach materials such as journal articles, webinars, and conference presentations.



- Identification of each task or area of responsibility required of the project partners and stakeholder groups to develop a replicable approach for other port communities.
- Circulate the Draft PCEVB among the PCEVB Steering Committee members and relevant stakeholders for comments and modifications.

**Products:**

- Draft Goals
- Draft PCEVB

**Task 4 KNOWLEDGE TRANSFER**

The goals of this task are to share lessons learned in the development of the replicable PCEVB with the other private and public seaports in California and to serve as a resource for them in their respective planning efforts.

**The Recipient shall:**

- Develop *PCEVB Presentation* for engagement of the broader community.
- Present the PCEVB Presentation to local and regional agencies and elected state officials.
- Present the PCEVB Presentation to the other seaport communities throughout the country and state via webinar, phone/videoconference, or in-person meetings

**Products:**

- PCEVB Presentation

**Task 5 FINAL PORT COMMUNITY EV BLUEPRINT**

The goals of this task are to incorporate suggestions or changes from the reviewers and knowledge transfer presentations. By using stakeholder, other private, and public seaports in California to make the PCEVB more effective in helping seaports electrify their operations.

**The Recipient shall:**

- Prepare *Final PCEVB*.
- Circulate Final PCEVB among the PCEVB Steering Committee members and relevant stakeholders for comments and modifications.

**Products:**

- Final PCEVB

**Recipient must submit a complete Final PCEVB to the CAM by July 1, 2019 to be eligible for funding under the planned Phase II solicitation. The July 1, 2019 due date may be extended if the Energy Commission, and not the Recipient, caused a delay in execution of this Agreement past July 1, 2018.**

STATE OF CALIFORNIA

STATE ENERGY RESOURCES  
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: CITY OF LONG BEACH HARBOR DEPARTMENT

**RESOLVED**, that the State Energy Resources Conservation and Development Commission (Energy Commission) adopts the staff CEQA findings contained in the Agreement or Amendment Request Form (as applicable); and

**RESOLVED**, that the Energy Commission approves Agreement ARV-17-048 with City of Long Beach Harbor Department for a \$200,000 grant to develop an innovative, replicable EV and equipment blueprint plan in the Port of Long Beach community, which includes marine terminals, cargo-handling vehicles, visitor facilities, and warehouse/distribution centers; and

**FURTHER BE IT RESOLVED**, that the Executive Director or his/her designee shall execute the same on behalf of the Energy Commission.

**CERTIFICATION**

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted at a meeting of the California Energy Commission held on May 9, 2018.

AYE: [List of Commissioners]

NAY: [List of Commissioners]

ABSENT: [List of Commissioners]

ABSTAIN: [List of Commissioners]

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Cody Goldthrite,  
Secretariat