



GRANT REQUEST FORM (GRF)

A) New Agreement # ARV-21-007 (to be completed by CGL office)

B) Division	Agreement Manager:	MS-	Phone
600 Fuels and Transportation Division	Ian Baird	27	916-805-7480

C) Recipient's Legal Name	Federal ID #
City of Long Beach	95-6000733

D) Title of Project
City of Long Beach Blueprint for Medium and Heavy-Duty Zero-Emissions Vehicle Infrastructure

E) Term and Amount

Start Date	End Date	Amount
08 / 11 / 2021	06 / 30 / 2023	\$ 200,000

F) Business Meeting Information

ARFVTP agreements \$75K and under delegated to Executive Director
 Proposed Business Meeting Date 08 / 11 / 2021 Consent Discussion
 Business Meeting Presenter Katie Reid Time Needed: 5 minutes
 Please select one list serve. Altfuels (AB118-ARFVTP)

Agenda Item Subject and Description:

CITY OF LONG BEACH. Proposed resolution approving Agreement ARV-21-007 with the City of Long Beach for a \$200,000 grant to develop and implement a replicable strategy for accelerating the planning, adoption, and deployment of MD/HD ZEVs and charging infrastructure that directly targets municipal and private fleets, and adopting staff's determination that this action is exempt from CEQA. (Clean Transportation Program funding.) Contact: Ian Baird. (Staff Presentation: 5 minutes).

G) California Environmental Quality Act (CEQA) Compliance

- 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

If Agreement is considered a "Project" under CEQA:

- Agreement **IS** exempt.
 Statutory Exemption. List PRC and/or CCR section number:
 Categorical Exemption. List CCR section number: 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 deployment of zero emission vehicles and related infrastructure



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equipment. The project will not cause direct physical changes to the environment, and there will be no physical destruction. This project involves data collection, technology assessment, public outreach, administrative coordination efforts, planning, and similar activities. Therefore, the proposed project will have no significant effect on the environment and is categorically exempt under section 15306.

Common Sense Exemption. 14 CCR 15061 (b) (3) Explain reason why Agreement is exempt under the above section:

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

H) List all subcontractors (major and minor) and equipment vendors: (attach additional sheets as necessary)

Legal Company Name:	Budget
Arup North America, Ltd.	\$ 125,697
Build Momentum, Inc.	\$ 49,996
	\$ 0.00

I) List all key partners: (attach additional sheets as necessary)

Legal Company Name:

J) Budget Information

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
ARFVTP	FY 19/20	601.118L	\$200,000
Funding Source			\$

R&D Program Area: Select Program Area TOTAL: \$

Explanation for "Other" selection

Reimbursement Contract #:

Federal Agreement #:



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K) Recipient's Contact Information

1. Recipient's Administrator/Officer

Name: April Walker
 Address: 411 West Ocean Ave
 City, State, Zip: Long Beach, CA 90802
 Phone: (562) 570-6561
 E-Mail: April.walker@longbeach.gov

2. Recipient's Project Manager

Name: April Walker
 Address: 411 West Ocean Ave
 City, State, Zip: Long Beach, CA 90802
 Phone: (562) 570-6561
 E-Mail: April.walker@longbeach.gov

L) Selection Process Used

- Competitive Solicitation Solicitation #: GFO-20-601
- First Come First Served Solicitation Solicitation #: - -

M) The following items should be attached to this GRF

- | | | |
|---|-------------------------------------|----------|
| 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 |
| 5. CEQA Documentation | <input checked="" type="checkbox"/> | N/A |
| | <input type="checkbox"/> | Attached |
| | <input type="checkbox"/> | Attached |

Jan J. Baird

Agreement Manager

6/3/2021

Date

Elizabeth John

Office Manager

6/3/2021

Date

John P. Butler II

Deputy Director

6/4/2021

Date

Exhibit A SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2		Municipal Coordination and Stakeholder Engagement
3		Multilateral Policy, Zoning, and Planning Gap Analysis
4		Municipal Fleet Vehicles Demand and Gap Analysis
5	X	Regional ZEV Refueling Infrastructure Demand and Gap Analysis
6		Supporting Electric and Hydrogen Grid Infrastructure Gap Analysis
7		City Deployment Strategy and Knowledge Transfer
8		Project Fact Sheet
9		Blueprint

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	James Dumont (Build Momentum) April Walker (City of Long Beach)	Build Momentum (Momentum)	
2	April Walker (City of Long Beach) James Dumont (Momentum)	Momentum	
3	Katherine Perez (Arup) April Walker (City of Long Beach)	Arup North America Ltd. (Arup)	
4	Katherine Perez (Arup) April Walker (City of Long Beach)	Arup	
5	Katherine Perez (Arup) April Walker (City of Long Beach)	Arup	
6	Katherine Perez (Arup)	Arup	

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
	James Dumont (Momentum)	Momentum	
7	James Dumont (Momentum) April Walker (City of Long Beach)	Momentum	
8	James Dumont (Momentum) April Walker (City of Long Beach)	Momentum	
9	Katherine Perez (Arup) James Dumont (Momentum)	Arup Momentum	

GLOSSARY

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

Term/ Acronym	Definition
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CEC	California Energy Commission
City	City of Long Beach
Clean Transportation Program	Formerly known as the Alternative and Renewable Fuel and Vehicle Technology Program
CPR	Critical Project Review
DER	Distributed Energy Resources
EVSE	Electric Vehicle Supply Equipment
FTD	Fuels and Transportation Division
MD/HD	Medium- and Heavy-Duty
Recipient	City of Long Beach
ZEV	Zero-Emission Vehicles and Equipment
DAC	Disadvantaged Community

BACKGROUND

Assembly Bill (AB) 118 (Núñez, Chapter 750, Statutes of 2007), created the Clean Transportation Program (formerly known as the Alternative and Renewable Fuel and Vehicle Technology Program). The statute authorizes the California Energy Commission (CEC) 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 Program through January 1, 2024, and specifies that the CEC 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 Clean Transportation Program 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.

The CEC issued GFO-20-601 entitled "Blueprints for Medium- and Heavy-Duty Zero-Emission Vehicle Infrastructure" under the CEC's Clean Transportation Program. To be eligible for funding under GFO-20-601, projects must also be consistent with the CEC's current Clean Transportation Program Investment Plan, updated annually. In response to GFO-20-601, the Recipient submitted Proposal #7 which was proposed for funding in the CEC's Notice of Proposed Awards on April 8, 2021. GFO-20-601 is 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. Similarly, in the event of any conflict or inconsistency between the terms of this Agreement and the terms of the Recipient's Application, the terms of this Agreement shall control.

Problem Statement:

Cities like Long Beach have made significant strides in planning for and deploying charging and fueling infrastructure for light-duty passenger zero-emission vehicles (ZEVs), yet substantial challenges, gaps, and barriers remain to enable the widespread deployment of infrastructure for medium-/heavy-duty (MD/HD) ZEVs. The City of Long Beach (Recipient or City) is uniquely positioned to plan for, support, and enable an accelerated MD/HD ZEV transition for privately-owned and municipal fleet operations because of many factors that express replicability to other cities and the State as a whole, including:

- Proximity to and jurisdiction over major transportation corridors and infrastructure in Los Angeles County and the San Pedro Bay Ports—I-710, I-405, SR 1, SR 19, and SR 103;
- Operation of its own municipal oil and gas utility service—Long Beach Energy Resources;
- Operation of its own municipal water utility—Long Beach Water;
- Operation of an international airport—Long Beach Airport;
- Operation of a major transit fleet—Long Beach Transit;
- Jurisdiction over one of the state’s most popular convention centers—Long Beach Convention & Entertainment Center; and,
- Ownership of 390 MD/HD vehicles, including material handling equipment, emergency services vehicles, street sweepers, transit buses, school buses, ambulances, fire trucks, two trucks, and refuse trucks.

Recipient seeks funding from the CEC to support its efforts to organize and convene its departments operating municipal MD/HD fleets, community-based organizations, industry stakeholders, utilities, and policy makers to develop and undertake a coordinated, holistic implementation strategy—the Blueprint—for deploying MD/HD ZEV fueling and charging infrastructure to directly plan its own municipal fleet transition and help enable private fleet transitions within the City’s boundary.

Goals of the Agreement:

The goal of this Agreement is to develop and implement a replicable strategy for accelerating the planning, adoption, and deployment of MD/HD ZEVs and ZEV infrastructure that directly targets municipal fleets and aims to support private fleets.

Objectives of the Agreement:

The objectives of this Agreement are to:

- Establish a Coordinating Committee among the Recipient’s municipal departments, emergency services, and gas utility to organize for the regional and facility-level planning and deployment of MD/HD ZEV infrastructure.
- Engage a broad stakeholder network to develop a comprehensive, economic, and equitable approach to rapidly deploying MD/HD ZEV infrastructure.
- Establish a baseline fleet energy demand model used to estimate municipal fleet facility impacts and City MD/HD ZEV infrastructure needs, potential extent of distribution system upgrades, and opportunities for reducing grid impact and improving resilience through distributed energy resource (DER) technologies.
- Develop a phased, holistic approach to regional infrastructure planning and deployment that maintains flexibility to react to changes in a nascent market with rapidly evolving technology while providing for equitable outcomes.
- Identify pathways toward enabling a municipal gas utility to enable the hydrogen economy and MD/HD FCEV fleet operations.

- Identify critical performance criteria important to MD/HD ZEV operators.
- Identify workforce education and training resources to prepare maintenance technicians for MD/HD ZEVs as well as ZEV charging and refueling infrastructure.
- Coordinate with public and private partners to identify financing mechanisms and funding sources that enable further progress in planning for and deploying MD/HD ZEV infrastructure.
- Develop a replicable and actionable MD/HD ZEV Infrastructure Blueprint enabling the City of Long Beach's transition to 100 percent ZEV operations by 2030.

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 CEC 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 CEC and the Recipient. The goal of this task is to determine if the project should continue to receive CEC 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 CAO, the Fuels and Transportation Division (FTD) program lead, other CEC staff and Management as well as other individuals selected by the CAM to provide support to the CEC.

The CAM shall:

- Determine the location, date, and time of each CPR meeting with the Recipient. These meetings generally take place at the CEC, but they may take place at another location or remotely.
- 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 CEC 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 CEC funds (Options)
- CEC 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 CEC 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 CEC 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 CEC 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 CEC 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 CEC 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 CEC 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 CEC 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

TASK 2 MUNICIPAL COORDINATION AND STAKEHOLDER ENGAGEMENT

The goal of this task is to convene City's MD/HD fleet operating municipal departments to coordinate the development of 100% zero-emission fleet transition strategies, and planning horizons. The City will engage community and industry stakeholders to establish a comprehensive knowledge base that informs and guides future planning and vehicle retirement efforts.

The Recipient shall:

- Host and facilitate a Partner Agency Workshop to establish goals and priorities.
- Provide a copy of the agenda and a Partner Agency Workshop Summary to the CAM.
- Develop a benefits realization framework to track and realize co-benefits that align with goals and priorities identified in the Partner Agency Workshop.
- Engage with financial institutions to communicate the intent of the MD/HD Blueprint and discuss funding opportunities and financing mechanisms.
- Provide a Financial Institution Engagement Summary to the CAM.
- Engage with electric and gas utilities to discuss opportunities for infrastructure synergies, preparing for a hydrogen future, and alignment with existing utility infrastructure plans and local infrastructure constraints.
- Provide a Utility Engagement Summary to the CAM.
- Engage with community-based organizations to formulate strategies for public outreach on ZEV benefits.
- Develop a Community Outreach Plan tailored to the community for public education on ZEV benefits. Provide a copy to the CAM.
- Engage with community colleges, labor groups and other organizations to collaborate on workforce development to identify gaps and develop training strategies.
- Provide a Summary of Identified Workforce Development Gaps and Strategies to the CAM.

Products:

- Partner Agency Workshop Agenda and Summary
- Financial Institution Engagement Summary
- Utility Engagement Summary
- Draft Community Outreach Plan
- Summary of Identified Workforce Development Gaps and Strategies

TASK 3 MULTILATERAL POLICY, ZONING, AND PLANNING GAP ANALYSIS

The goal of this task is to develop a comprehensive understanding of existing policies, zoning codes, ordinances, and regulations that influence the deployment of ZEVs and ZEV infrastructure. This information gathering effort will be leveraged to identify pathways and actionable strategies to best support rapid MD/HD ZEV adoption and ZEV infrastructure deployment.

The Recipient shall:

- Evaluate relevant departmental, local, and regional planning efforts to ensure alignment of the Blueprint with existing plans.

- Review policies, regulations, and zoning ordinances relevant to municipal MD/HD ZEV operations, maintenance, and refueling. Include assessment of policies to ensure equitable access to ZEV benefits for DACs, low-income communities, priority populations, and/or tribal lands.
- Identify barriers and gaps in ZEV policies, develop systematic recommendations for policy planning to tackle each stage of the ZEV lifecycle for effective deployment.
- Identify funding opportunities and mechanisms for fleet owners and operators; engage in discussions with green investment companies in the private and public sector to explore innovative methods for financing capital upgrades.
- Develop a Draft Summary of ZEV Policy Barriers and Best Practices and provide a copy to the CAM.

Products:

- Draft Summary of ZEV Policy Barriers and Best Practices

TASK 4 MUNICIPAL FLEET VEHICLES DEMAND AND CAPACITY ANALYSIS

The goal of this task is to evaluate the existing energy demands of municipal fleet operations and identify optimal technology replacements for transitioning fleet vehicles to ZEVs in alignment with desired co-benefits. Projections of existing and proposed energy demands at fleet facilities will also inform subsequent tasks related to infrastructure.

The Recipient shall:

- Submit a Request for Information (RFI) to partner agencies to solicit data on fleet inventories, facilities, and existing distributed energy resources.
- Review RFI responses to assess fleet inventories, facilities, and existing distributed energy resources.
- Review fleet facility site plans and local infrastructure capacities.
- Review fleet routes and operations, and existing on-route infrastructure.
- Conduct interviews with fleet specialist representatives from Partner Agencies to establish fleet logistical and operational requirements.
- Calculate and establish baseline demand profiles at fleet facilities to later quantify Blueprint load impacts.
- Identify appropriate market-available vehicle technology replacements for fleet inventory and highlight technology gaps; identify how policy could be utilized for filling technology gaps.
- Evaluate technically feasible fleet replacement pathways given capital constraints, legislation, technology availability and operational requirements.
- Develop a Draft Summary of Fleet Type Logistical and Operational Requirements and provide a copy to the CAM.

- Weigh technically-feasible pathways against one another – through estimation of key performance indicators such as costs, carbon reductions, criteria air pollutant reductions, operational cost savings – to determine an optimal pathway that best aligns with stakeholder interests.
- Calculate and establish Blueprint demand profiles for transitioning all City-owned MD/HD vehicles to ZEV technologies to match regulatory targets and city objectives. Develop Draft Baseline Energy Demand Profiles and Draft Blueprint Fleet Energy Demand Profiles and provide to the CAM.
- Develop a draft Fleet Vehicle Replacement Plan. Outline plan with actions and milestones for fleet replacements that align with capital constraints, legislation and co-benefit priorities; identify next steps in addressing any technology gaps.
- Provide a copy of the Draft Fleet Vehicle Replacement Plan to the CAM.

Products:

- Draft Summary of Fleet Type Logistical and Operational Requirements
- Draft Baseline Fleet Energy Demand Profiles
- Draft Blueprint Fleet Energy Demand Profiles
- Draft Fleet Vehicle Replacement Plan

TASK 5 REGIONAL ZEV REFUELING INFRASTRUCTURE DEMAND AND CAPACITY ANALYSIS

The goal of this task is to outline a plan for MD/HD ZEV refueling infrastructure deployment by evaluating refueling technologies and utility demands of the proposed ZEV fleets. This task also aims to map refueling site areas on a regional level to highlight optimal placement and facilitate coordination with utilities.

The Recipient shall:

- Evaluate market-ready and emerging charging and refueling technologies; assess associated electrical, gas, and water utility infrastructure requirements.
- Estimate rough-order-of-magnitude projections of non-municipal MD/HD resource demands based on fleet numbers / benchmarks (e.g. from DMV data cross-referenced to business registration data), to inform subsequent evaluation of opportunities for publicly accessible MD/HD ZEV infrastructure.
- Work with utility stakeholders to assess infrastructure implications of proposed fleet transition pathway, including mapping of desired fleet-designated refueling site areas; consider appropriate areas for hosting publicly-accessible MD/HD ZEV infrastructure, including along major freight corridors. Provide a copy of the draft ZEV Refueling Infrastructure Map to the CAM.
- Outline plan with actions and milestones for MD/HD ZEV infrastructure deployments that align with capacity constraints, legislation and co-benefit priorities; identify next steps in addressing any technology gaps.

Products:

- Draft ZEV Refueling Infrastructure Map

TASK 6 SUPPORTING ELECTRIC AND HYDROGEN GRID INFRASTRUCTURE GAP ANALYSIS

The goal of this task is to understand and plan for how the local electric and gas utilities can position themselves to best support the ZEV transition in MD/HD applications.

The Recipient shall:

- Identify electric and hydrogen utility-level infrastructure limitations at mapped refueling stations; highlight locations where additional electric/gas grid support may be needed.
- Meet with SCE, Long Beach Energy Resources and/or SoCalGas to identify gaps and strategies in electricity and hydrogen production, transmission, distribution and end-use. Communicate preliminary estimates of demand levels to discuss scale of required infrastructure accurately.
- Identify barriers to expansion of electric and hydrogen infrastructure in Long Beach, including but not limited to regulatory, permitting, safety, public awareness, supply chain, and capital barriers.
- Identify steps already taken or that will need to be taken in order to ensure a safety plan is in place for needed hydrogen refueling infrastructure
- Develop a draft Electric and Hydrogen Grid Infrastructure Development Plan for meeting infrastructure needs to support the proposed ZEV transition plan - map refueling site needs for delivery; identify and propose policy gaps; develop next steps for larger cross-organizational infrastructure developments (e.g. on production and transmission side). Provide a copy to the CAM.

Products:

- Draft Electric and Hydrogen Grid Infrastructure Development Plan

TASK 7 CITY DEPLOYMENT STRATEGY AND KNOWLEDGE TRANSFER

The goal of this task is to leverage the outcomes of Tasks 2-6 to present a Preliminary Fleet Transition Plan to partner agencies to solicit feedback for revisions. The City will then disseminate findings in the revised plan to a diversity of stakeholders through electronic media, workshops, conferences and/or industry meetings. The other key deliverable included in this task is the development of a Roadmap for Citywide MD/HD ZEV Fleet Transition Planning. This roadmap will be publicly available once finalized and will explore challenges, consideration and best practices in city-wide ZEV fleet transitioning while utilizing the City of Long Beach as a case study.

The Recipient shall:

- Draft a Preliminary Fleet Transition Plan. Provide a copy to the CAM.
- Host and facilitate a Partner Agency Workshop 2 to go through the Preliminary Fleet Transition Plan and solicit feedback.

- Provide a copy of the agenda and a Partner Agency Workshop 2 Summary to the CAM.
- Revise Preliminary Fleet Transition Plan accordingly upon input from partner agencies.
- Compile findings from Tasks 2-6 to develop a Roadmap for MD/HD ZEV Fleet Transition Planning that utilizes the City of Long beach as a case study. Explore challenges, considerations and best practices in city-wide ZEV fleet transition by including the following:
 - Methodology: Description of Blueprint approach to stakeholder engagement, policy, technology and infrastructure gap analyses
 - Fleet Types: Overview of fleet compositions to consider as well as their operational and logistical requirements
 - Stakeholders: Overview of pertinent stakeholders to consider and methods for engagement
 - Policy: Barriers and best practices
 - Financial: Identify funding opportunities and mechanisms for security in implementation
 - Technology: Overview of market availability and projections, and effective methods for fleet replacement prioritization
 - Infrastructure: Overview of infrastructure considerations and pathway for progressing utility infrastructure to support ZEV deployment
 - Transition Plan in Action: Exemplify the final outcome of the MD/HD ZEV transition planning by utilizing City of Long Beach's as a case study; pair plan with assessment of co-benefits
- Provide a copy of the draft Roadmap for Citywide MD/HD ZEV Fleet Transition Planning to the CAM.
- Engage stakeholder – elected officials, community-based organizations, municipalities, industry, and utilities—through conferences, workshops, AB 617 CAPP workgroup, and diverse media to share the findings and results of the Blueprint effort.
- Develop a Blueprint Dissemination Engagement Summary and provide to the CAM.

Products:

- Draft Preliminary Fleet Transition Plan
- Partner Agency Workshop 2 Agenda and Summary
- Draft Roadmap for Citywide MD/HD ZEV Fleet Transition Planning
- Blueprint Dissemination Engagement Summary

TASK 8 PROJECT FACT SHEET

The goal of this task is to develop an initial and final project fact sheet that describes the CEC-funded project and the benefits resulting from the project for the public and key decision makers.

The Recipient shall:

- Prepare an Initial Project Fact Sheet at start of the project that describes the project and the expected benefits. Use the format provided by the CAM.
- Prepare a Final Project Fact Sheet at the project's conclusion that describes the project, the actual benefits resulting from the project, and lessons learned from implementing the project. Use the format provided by the CAM.
- Provide at least (6) six High Quality Digital Photographs (minimum resolution of 1300x500 pixels in landscape ratio) from the project.

Products:

- Initial Project Fact Sheet
- Final Project Fact Sheet
- High Quality Digital Photographs

TASK 9 BLUEPRINT

The goal of this task is to formalize the information gathered through Tasks 2-7 into a formal, replicable Blueprint that can be shared with key stakeholders to support the accelerated adoption of ZEVs and ZEV infrastructure technologies.

The Recipient shall:

- Provide an overview of Blueprint methodology and submit to the CAM.
- Document the Final ZEV Fleet Transition Plan including actions and milestones for vehicle replacement and infrastructure developments:
 - Step-by-step plan with a timeline of actions, including estimates of capital and operational expenditures.
 - Mapping of stationary and en-route refueling sites.
 - Demand Impacts – Comparison of Baseline and Blueprint Demand Profiles.
 - Draft Electric and Hydrogen Grid Infrastructure Development Plan.
 - Targets for greenhouse gas, criteria air pollutant and toxic air contaminant reductions.
 - Summary of Job Creation – Summarize the types of jobs that will be created for the local community and strategies for continued workforce development.
 - Summary of DAC Benefits – Identify benefits that would accrue to DACs, low-income communities, priority populations, and/or tribal lands.
 - Final Community Outreach Plan.

- Provide a final version of the Roadmap for Citywide MD/HD ZEV Fleet Transition Planning to be publicly available.

Products:

- Outline of Blueprint Methodology
- Draft Blueprint
- Final Blueprint
- Final Roadmap for Citywide MD/HD ZEV Fleet Transition Planning

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION CITY OF LONG BEACH

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

RESOLVED, that the CEC approves Agreement ARV-21-007 with the City of Long Beach for a \$200,000 grant to develop and implement a replicable strategy for accelerating the planning, adoption, and deployment of MD/HD ZEVs and charging infrastructure that directly targets municipal and private fleets; and

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

CERTIFICATION

The undersigned Secretariat to the CEC 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 CEC held on August 11, 2021.

AYE:

NAY:

ABSENT:

ABSTAIN:

Liza Lopez
Secretariat