



**California Energy Commission
June 22, 2026 Business Meeting
Backup Materials for DC Energy Services LLC dba Imperion**

The following backup materials for the above-referenced agenda item are available in this PDF packet as listed below:

1. Proposed Resolution
2. Grant Request Form
3. Scope of Work

CALIFORNIA ENERGY COMMISSION

PROPOSED RESOLUTION: DC Energy Services LLC dba Imperion

RESOLUTION NO: 26-0622-XX

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 IND-25-001 with DC Energy Services LLC dba Imperion for a \$7,069,435 grant. This project will integrate advanced decarbonization technologies at a dairy product manufacturer in City of Industry, including an industrial ammonia heat pump, pasteurizer heat recovery systems, and thermal energy storage to reduce fossil gas use, greenhouse gas emissions, and support grid reliability; and

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

APPROVED AND ADOPTED this 22 day of June 2026, by the following vote:

AYE:

NAY:

ABSENT:

ABSTAIN:

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 approved and adopted by affirmative vote of the CEC at a meeting held on June 22, 2026.

Kim Todd
Secretariat



GRANT REQUEST FORM (GRF)

A. New Agreement Number

IMPORTANT: New Agreement # to be completed by Contracts, Grants, and Loans Office.

New Agreement Number: IND-25-001

B. Division Information

1. Division Name: ERDD
2. Agreement Manager: Paty De La Torre
3. MS-:51
4. Phone Number: 707-396-9187

C. Recipient's Information

1. Recipient's Legal Name: DC Energy Services LLC dba Imperion
2. Federal ID Number: 92-2746615

D. Title of Project

Title of project: HEATER (Heat Electrification and Advanced Thermal Energy Recovery)

E. Term and Amount

1. Start Date: 7/15/2026
2. End Date: 3/30/2028
3. Amount: \$7,069,435.00

F. Business Meeting Information

1. Are the ARFVTP agreements \$75K and under delegated to Executive Director? No
2. The Proposed Business Meeting Date: 6/22/2026 .
3. Consent or Discussion? Discussion
4. Business Meeting Presenter Name: Mohammad Younes
5. Time Needed for Business Meeting: 5 minutes.
6. The email subscription topic is: Industrial Decarbonization and Improvement of Grid Operations (INDIGO).

Agenda Item Subject and Description:

DC Energy Services dba Imperion. Proposed resolution approving agreement IND-25-001 with DC Energy Services dba Imperion for a \$7,069,435 grant and adopting staff's recommendation that this action is exempt from CEQA. This agreement will integrate advanced decarbonization technologies at a dairy product manufacturer in City of Industry, including an industrial ammonia heat pump, pasteurizer heat recovery systems, and thermal energy storage to reduce fossil gas use, greenhouse gas emissions, and support grid reliability. (INDIGO funding)
Contact: Paty De La Torre

G. California Environmental Quality Act (CEQA) Compliance

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

Yes

If yes, skip to question 2.



If no, complete the following (PRC 21065 and 14 CCR 15378) and 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 answer the following questions.

a) Agreement **IS** exempt?

Yes

Statutory Exemption?

No

If yes, list PRC and/or CCR section number(s) and separate each with a comma. If no, enter "None" and go to the next question.

PRC section number: None

CCR section number: None

Categorical Exemption?

Yes

If yes, list CCR section number(s) and separate each with a comma. If no, enter "None" and go to the next question.

CCR section number: Cal. Code Regs., tit. 14, § 15301 ;

Common Sense Exemption? 14 CCR 15061 (b) (3)

No

If yes, explain reason why Agreement is exempt under the above section. If no, enter "Not applicable" and go to the next section.

Cal. Code Regs., tit 14, sec. 15301 provides that projects that consist of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use, are categorically exempt from the provisions of CEQA. This project will integrate advanced decarbonization technologies at a dairy product manufacturer in City of Industry, including an industrial ammonia heat pump, pasteurizer heat recovery systems, and thermal energy storage to reduce fossil gas use, greenhouse gas emissions, and support grid reliability. The equipment to be installed will replace or retrofit equipment within an existing industrial facility. Thus, this project will involve negligible or no expansion of existing or former use and will not have a significant effect on the environment. Therefore, this project is exempt from CEQA under Section 15301.

Additionally, the project does not involve impacts on any particularly sensitive environment; will not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies; does not involve any cumulative impacts of successive projects of the same type in the same place that might be considered



significant; does not involve unusual circumstances that might have a significant effect on the environment; will not result in damage to scenic resources within a highway officially designated as a state scenic highway; the project site is not included on any list compiled pursuant to Government Code section 65962.5; and the project will not cause a substantial adverse change in the significance of a historical resource. Therefore, none of the exceptions to categorical exemptions listed in CEQA Guidelines section 15300.2 apply to this project, and this project will not have a significant effect on the environment.

b) Agreement **IS NOT** exempt.

IMPORTANT: consult with the legal office to determine next steps.

No

If yes, answer yes or no to all that applies. If no, list all as “no” and “None” as “yes”.

| Additional Documents | Applies |
|--|---------|
| Initial Study | No |
| Negative Declaration | No |
| Mitigated Negative Declaration | No |
| Environmental Impact Report | No |
| Statement of Overriding Considerations | No |
| None | Yes |

H. Is this project considered “Infrastructure”?

Yes

I. Subcontractors

List all Subcontractors listed in the Budget (s) (major and minor). Insert additional rows if needed. If no subcontractors to report, enter “No subcontractors to report” and “0” to funds.

Delete any unused rows from the table.

| Subcontractor Legal Company Name | CEC Funds | Match Funds |
|----------------------------------|--------------|-------------|
| MWE2 LLC | \$ 99,500 | \$0 |
| Danone US, LLC | \$ 5,554,287 | \$4,546,263 |

J. Vendors and Sellers for Equipment and Materials/Miscellaneous

List all Vendors and Sellers listed in Budget(s) for Equipment and Materials/Miscellaneous. Insert additional rows if needed. If no vendors or sellers to report, enter “No vendors or sellers to report” and “0” to funds. **Delete** any unused rows from the table.

| Vendor/Seller Legal Company Name | CEC Funds | Match Funds |
|--|-----------|-------------|
| TBD - Outreach, Workforce Development, Technology and Knowledge Transfer | \$148,539 | \$0 |



| | | |
|---|-------------|-----|
| Alliance Industrial Refrigeration Services, Inc | \$2,343,515 | \$0 |
| TBD- Equipment | \$1,665,772 | \$0 |
| TBD - Water Filtration | \$825,000 | \$0 |
| Delta Wye Electric, Inc. | \$0 | \$0 |
| TBD - Equipment Placement | \$0 | \$0 |
| Dynamic General Construction Corporation | \$675,000 | \$0 |

K. Key Partners

List all key partner(s). Insert additional rows if needed. If no key partners to report, enter “No key partners to report.” **Delete** any unused rows from the table.

| Key Partner Legal Company Name |
|--------------------------------|
| Danone US, LLC |

L. Budget Information

Include all budget information. Insert additional rows if needed. If no budget information to report, enter “N/A” for “Not Applicable” and “0” to Amount. **Delete** any unused rows from the table.

| Funding Source | Funding Year of Appropriation | Budget List Number | Amount |
|----------------|-------------------------------|--------------------|--------------|
| GGRF | 22-23 | 303.202 | \$ 7,069,435 |

TOTAL Amount: \$ 7,069,435

R&D Program Area: ICMB: IAW

Explanation for “Other” selection Not applicable

Reimbursement Contract #: Not applicable

Federal Agreement #: Not applicable

M. Recipient’s Contact Information

1. Recipient’s Administrator/Officer

Name: Jack DiGiacomo

Address: 10000 Stockdale Hwy Ste 105

City, State, Zip: Bakersfield, CA 93311-3602

Phone: 661-717-4206

E-Mail: jack@dcenergyservices.com

2. Recipient’s Project Manager

Name: Jack DiGiacomo

Address: 10000 Stockdale Hwy Ste 105



STATE OF CALIFORNIA
CALIFORNIA ENERGY COMMISSION

Grant Request Form
CEC-270 (Revised 01/2024)

City, State, Zip: Bakersfield, CA 93311-3602

Phone: 661-717-4206

E-Mail: jack@dcenergyservices.com

N. Selection Process Used

There are three types of selection process. List the one used for this GRF.

| Selection Process | Additional Information |
|--|------------------------|
| Competitive Solicitation # | GFO-23-313r3 |
| First Come First Served Solicitation # | Not applicable |
| Other | Not applicable |

O. Attached Items

1. List all items that should be attached to this GRF by entering “Yes” or “No”.

| Item Number | Item Name | Attached |
|-------------|--|----------|
| 1 | Exhibit A, Scope of Work/Schedule | Yes |
| 2 | Exhibit B, Budget Detail | Yes |
| 3 | CEC 105, Questionnaire for Identifying Conflicts | Yes |
| 4 | Recipient Resolution | No |
| 5 | Awardee CEQA Documentation | No |

Approved By

Individuals who approve this form must enter their full name and approval date in the MS Word version.

Agreement Manager: Paty De La Torre

Approval Date: 5/12/2026

Branch Manager: Cody Taylor

Approval Date: 5/14/2026

Director: Cody Taylor for Jonah Steinbuck

Approval Date: 5/14/2026

EXHIBIT A Scope of Work

I. TASK ACRONYM/TERM LISTS

A. Task List

| Task # | CPR ¹ | Task Name |
|--------|------------------|--|
| 1 | | General Project Tasks |
| 2 | | Project Engineering and Design |
| 3 | X | Site Preparation and Equipment Procurement |
| 4 | X | Equipment Installation |
| 5 | | Measurement and Verification |
| 6 | | Community Engagement |
| 7 | | Evaluation of Project Benefits |
| 8 | | Technology/Knowledge Transfer Activities |

B. Acronym/Term List

| Acronym/Term | Meaning |
|--------------------|---|
| CAM | Commission Agreement Manager |
| CAO | Commission Agreement Officer |
| CBO | Community Based Organization |
| CEC | California Energy Commission |
| CPR | Critical Project Review |
| DAC | Disadvantaged Community |
| GHG | Greenhouse Gas |
| HEATER | Heat Electrification and Advanced Thermal Energy Recovery |
| MTCO _{2e} | Metric Tons of Carbon Dioxide Equivalent |
| M&V | Measurement and Verification |
| TAC | Technical Advisory Committee |
| UHT | Ultra-High Temperature |

II. PURPOSE OF AGREEMENT, PROBLEM/SOLUTION STATEMENT, AND GOALS AND OBJECTIVES

A. Purpose of Agreement

The purpose of this Agreement is to fund the Heat Electrification and Advanced Thermal Energy Recovery (HEATER) project, which incorporates the installation of advanced energy-efficient technologies at the Recipient's demonstration site in City of Industry, CA, including an industrial ammonia heat pump, pasteurizer heat recovery systems, and thermal energy storage, to significantly reduce fossil gas consumption and associated greenhouse gas emissions while supporting grid reliability. All energy and emission savings will be validated through pre- and post-installation M&V.

¹ Please see subtask 1.3 in Part III of the Scope of Work (General Project Tasks) for a description of Critical Project Review (CPR) Meetings.

EXHIBIT A

Scope of Work

B. Problem/ Solution Statement

Problem

The Recipient's demonstration site remains heavily dependent on fossil gas to meet its thermal processing needs. Transitioning to advanced, low-carbon technologies is constrained by high upfront capital investments and long payback periods. While industrial heat pumps, heat recovery and thermal energy storage are commercially available, adoption in California has been limited by the high spark gap, where electricity prices are relatively high compared to fossil gas. This cost imbalance makes electrification solutions less financially attractive without external support.

Without support, facilities are unable to justify these investments, leading to continued reliance on fossil fuels and missed opportunities for grid benefits, cost savings and greenhouse gas reductions. Projects like HEATER must be addressed now to align with state decarbonization goals, mitigate rising energy costs, and demonstrate scalable solutions that can be replicated across California's industrial sector.

Solution

HEATER will retrofit the dairy product and beverage manufacturer demonstration site with an industrial ammonia heat pump, pasteurizer heat recovery systems and thermal energy storage to displace fossil gas-based process heat. The system will recover waste heat from an ultra-high temperature (UHT) pasteurization process and repurpose it for hot water production. By converting waste heat into usable thermal energy, the project reduces natural gas demand while maintaining continuous industrial operations. Thermal energy storage further enables strategic load shifting, reducing electricity usage during peak grid periods and improving operational flexibility.

The project addresses a key barrier to industrial electrification in California, the feasibility challenge created by the spark gap between electricity and fossil gas prices. While industrial heat pumps and heat recovery technologies are commercially available, adoption remains limited in large, 24/7 manufacturing environments due to capital intensity and perceived operational risk. By funding deployment at industrial production scale, this project demonstrates how proven technologies can be successfully integrated into an existing industrial demonstration site without disrupting reliability or throughput.

Although implemented in a food manufacturing setting, the core technologies are broadly applicable across multiple industrial sectors including beverage, chemical, pharmaceutical, pulp and paper, and light manufacturing facilities with similar thermal profiles. The project reduces annual fossil gas consumption by nearly one million therms and achieves significant direct greenhouse gas emission reductions, directly advancing California's statutory goals for industrial decarbonization and climate resilience.

Finally, the project establishes a scalable, replicable model for industrial process heat electrification in the state. Lessons learned from integrating heat pumps, heat recovery and storage into existing production lines will inform industry best practices and help accelerate deployment across California's industrial economy.

C. Goals and Objectives of the Agreement

Agreement Goals

EXHIBIT A

Scope of Work

The goals of this Agreement are to:

- Retrofit the Recipient's demonstration site with an industrial ammonia heat pump, heat recovery systems and thermal energy storage to reduce fossil gas consumption.
- Demonstrate the technical and economic feasibility of large-scale electrification and heat recovery technologies in a 24/7 food manufacturing facility.
- Generate replicable knowledge and best practices that support California's statutory energy and climate goals that can be adopted by other industrial facilities statewide.

Electric Grid Benefits: This Agreement will result in electric grid benefits of improving reliability, supporting load flexibility and reducing reliance on fossil gas-based thermal energy. The integration of thermal energy storage shifts electrified thermal energy production away from utility net peak periods, avoiding increased peak demand and reducing strain on the grid during high demand conditions. By preventing additional peak load and enabling load shifting, the project supports more efficient utilization of existing electrical infrastructure and reduces reliance on short-duration, high-cost power generation resources typically dispatched during peak events. This contributes to overall system reliability and helps moderate upward pressure on electricity system costs.

Simultaneously, the project reduces fossil gas consumption through heat recovery and electrification of industrial process heat. Lower fossil gas demand reduces strain on the gas distribution system, mitigates exposure to fuel price volatility and decreases combustion-related emissions. Collectively, these impacts support a more resilient, flexible, and lower-emission energy system, delivering long-term value to California ratepayers.

Technological Advancement and Breakthroughs: This Agreement will lead to technological advancement and breakthroughs to overcome barriers to the achievement of the State of California's statutory energy goals by demonstrating how industrial electrification, thermal energy storage and heat recovery can be strategically integrated into an industrial facility. The project advances energy efficiency by capturing and reusing waste heat from a UHT pasteurization process, reducing the need for additional fuel combustion. It advances energy storage by utilizing thermal energy storage to shift electricity consumption away from peak periods and better align facility load with grid conditions. By electrifying hot water generation through an industrial ammonia heat pump, the project supports renewable energy integration by enabling flexible electric load.

This integrated configuration represents a breakthrough in how low- to medium-temperature industrial process heat can be electrified in grid-constrained environments. By validating performance, reliability, and measurable emissions reductions under real-world operating conditions, the project reduces perceived risk and creates a replicable pathway for broader industrial adoption. In doing so, it directly supports California's statutory goals related to greenhouse gas reduction, clean energy integration, industrial decarbonization and grid resiliency

Agreement Objectives

The objectives of this Agreement are to:

- Install an industrial ammonia heat pump system capable of delivering hot water for process use.
- Integrate heat recovery to preheat soft water, reducing fossil gas boiler demand.
- Install a thermal storage system to balance heat pump output with facility hot water demand and avoid operation during utility peak periods.

EXHIBIT A Scope of Work

- Share project results, lessons learned and best practices with industry stakeholders and the public through workshops, case studies and industry conferences to support broader adoption of electrification and heat recovery technologies in California’s industrial sector.

III. TASK 1 GENERAL PROJECT TASKS

PRODUCTS

Subtask 1.1 Products

The goal of this subtask is to establish the requirements for submitting project products (e.g., reports, summaries, plans, and presentation materials). Unless otherwise specified by the Commission Agreement Manager (CAM), the Recipient must deliver products as required below by the dates listed in the **Project Schedule (Part V)**. All products submitted which will be viewed by the public, must comply with the accessibility requirements of Section 508 of the federal Rehabilitation Act of 1973, as amended (29 U.S.C. Sec. 794d), and regulations implementing that act as set forth in Part 1194 of Title 36 of the Federal Code of Regulations. All technical tasks should include product(s). Products that require a draft version are indicated by marking “**(draft and final)**” after the product name in the “Products” section of the task/subtask. If “(draft and final)” does not appear after the product name, only a final version of the product is required. With respect to due dates within this Scope of Work, “**days**” means working days.

The Recipient shall:

For products that require a draft version, including the Final Report Outline and Final Report

- Submit all draft products to the CAM for review and comment in accordance with the Project Schedule (Part V). The CAM will provide written comments to the Recipient on the draft product within 15 days of receipt, unless otherwise specified in the task/subtask for which the product is required.
- Consider incorporating all CAM comments into the final product. If the Recipient disagrees with any comment, provide a written response explaining why the comment was not incorporated into the final product.
- Submit the revised product and responses to comments within 10 days of notice by the CAM, unless the CAM specifies a longer time period, or approves a request for additional time.

For products that require a final version only

- Submit the product to the CAM for acceptance. The CAM may request minor revisions or explanations prior to acceptance.

For all products

- Submit all data and documents required as products in accordance with the following:

Instructions for Submitting Electronic Files and Developing Software:

- **Electronic File Format**

EXHIBIT A

Scope of Work

- Submit all data and documents required as products under this Agreement in an electronic file format that is fully editable and compatible with the California Energy Commission's (CEC) software and Microsoft (MS)-operating computing platforms, or with any other format approved by the CAM. Deliver an electronic copy of the full text of any Agreement data and documents in a format specified by the CAM, such as memory stick.

The following describes the accepted formats for electronic data and documents provided to the CEC as products under this Agreement, and establishes the software versions that will be required to review and approve all software products:

- Data sets will be in MS Access or MS Excel file format (version 2007 or later), or any other format approved by the CAM.
 - Text documents will be in MS Word file format, version 2007 or later.
 - Project management documents will be in Microsoft Project file format, version 2007 or later.
- **Software Application Development**

Use the following standard Application Architecture components in compatible versions for any software application development required by this Agreement (e.g., databases, models, modeling tools), unless the CAM approves other software applications such as open source programs:

 - Microsoft ASP.NET framework (version 3.5 and up). Recommend 4.0.
 - Microsoft Internet Information Services (IIS), (version 6 and up) Recommend 7.5.
 - Visual Studio.NET (version 2008 and up). Recommend 2010.
 - C# Programming Language with Presentation (UI), Business Object and Data Layers.
 - SQL (Structured Query Language).
 - Microsoft SQL Server 2008, Stored Procedures. Recommend 2008 R2.
 - Microsoft SQL Reporting Services. Recommend 2008 R2.
 - XML (external interfaces).

Any exceptions to the Electronic File Format requirements above must be approved in writing by the CAM. The CAM will consult with the CEC's Information Technology Services Branch to determine whether the exceptions are allowable.

MEETINGS

Subtask 1.2 Kick-off Meeting

The goal of this subtask is to establish the lines of communication and procedures for implementing this Agreement.

The Recipient shall:

- Attend a "Kick-off" meeting with the CAM, and other CEC staff relevant to the Agreement. The Recipient's Project Manager and any other individuals deemed necessary by the CAM or the Project Manager shall participate in this meeting. The administrative and technical aspects of the Agreement will be discussed at the meeting. Prior to the meeting, the CAM will provide an agenda to all potential meeting participants. The meeting may take place in person or by electronic conferencing (e.g., Teams, Zoom), with approval of the CAM.

EXHIBIT A

Scope of Work

The Kick-off meeting will include discussion of the following:

- The CAM's expectations for accomplishing tasks described in the Scope of Work;
 - An updated Project Schedule;
 - Terms and conditions of the Agreement;
 - Invoicing and auditing procedures;
 - Travel;
 - Equipment purchases;
 - Administrative and Technical products (subtask 1.1);
 - CPR meetings (subtask 1.3);
 - Monthly Calls (subtask 1.5)
 - Quarterly Progress reports (subtask 1.6)
 - Final Report (subtask 1.7)
 - Match funds (subtask 1.8);
 - Permit documentation (subtask 1.9);
 - Subawards (subtask 1.10);
 - Technical Advisory Committee meetings (subtasks 1.11 and 1.12);
 - Agreement changes;
 - Performance Evaluations; and
 - Any other relevant topics.
- Provide *Kick-off Meeting Presentation* to include but not limited to:
 - Project overview (i.e. project description, goals and objectives, technical tasks, expected benefits, etc.)
 - Project schedule that identifies milestones
 - List of potential risk factors and hurdles, and mitigation strategy
 - Provide an *Updated Project Schedule, Match Funds Status Letter, and Permit Status Letter*, as needed to reflect any changes in the documents.

The CAM shall:

- Designate the date and location of the meeting.
- Send the Recipient a *Kick-off Meeting Agenda*.

Recipient Products:

- Kick-off Meeting Presentation
- Updated Project Schedule *(if applicable)*
- Match Funds Status Letter (subtask 1.7) *(if applicable)*
- Permit Status Letter (subtask 1.8) *(if applicable)*

CAM Product:

- Kick-off Meeting Agenda

Subtask 1.3 Critical Project Review (CPR) Meetings

The goal of this subtask is to determine if the project should continue to receive CEC funding, and if so whether any modifications must be made to the tasks, products, schedule, or budget. CPR meetings provide the opportunity for frank discussions between the CEC and the Recipient. As determined by the CAM, discussions may include project status, challenges, successes, advisory group findings and recommendations, final report preparation, and progress on technical transfer and production readiness activities (if applicable). Participants

EXHIBIT A

Scope of Work

will include the CAM and the Recipient and may include the CAO and any other individuals selected by the CAM to provide support to the CEC.

CPR meetings generally take place at key, predetermined points in the Agreement, as determined by the CAM and as shown in the Task List on page 1 of this Exhibit. However, the CAM may schedule additional CPR meetings as necessary. The budget may be reallocated to cover the additional costs borne by the Recipient, but the overall Agreement amount will not increase. CPR meetings generally take place at the CEC, but they may take place at another location, or may be conducted via electronic conferencing (e.g., WebEx) as determined by the CAM.

The Recipient shall:

- Prepare and submit a *CPR Report* for each CPR meeting that: (1) discusses the progress of the Agreement toward achieving its goals and objectives; and (2) includes recommendations and conclusions regarding continued work on the project.
- Attend the CPR meeting.
- Present the CPR Report and any other required information at each CPR meeting.

The CAM shall:

- Determine the location, date, and time of each CPR meeting with the Recipient's input.
- Send the Recipient a *CPR Agenda* with a list of expected CPR participants in advance of the CPR meeting. If applicable, the agenda may include a discussion of match funding and permits.
- Conduct and make a record of each CPR meeting. Provide the Recipient with a schedule for providing a Progress Determination on continuation of the project.
- Determine whether to continue the project, and if so whether modifications are needed to the tasks, schedule, products, or budget for the remainder of the Agreement. A determination of unsatisfactory progress This may result in project delays, including a potential Stop Work Order, while the CEC determines whether the project should continue.
- Provide the Recipient with a *Progress Determination* on continuation of the project, in accordance with the schedule. The Progress Determination may include a requirement that the Recipient revise one or more products.

Recipient Products:

- CPR Report(s)

CAM Products:

- CPR Agenda(s)
- Progress Determination

Subtask 1.4 Final Meeting

The goal of this subtask is to complete the closeout of this Agreement.

The Recipient shall:

- Meet with CEC staff to present project findings, conclusions, and recommendations. The final meeting must be completed during the closeout of this Agreement. This meeting will be attended by the Recipient and CAM, at a minimum. The meeting may occur in person or by electronic conferencing (e.g., WebEx), with approval of the CAM.

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The technical and administrative aspects of Agreement closeout will be discussed at the meeting, which may be divided into two separate meetings at the CAM's discretion.

- The technical portion of the meeting will involve the presentation of findings, conclusions, and recommended next steps (if any) for the Agreement. The CAM will determine the appropriate meeting participants.
- The administrative portion of the meeting will involve a discussion with the CAM of the following Agreement closeout items:
 - Disposition of any procured equipment.
 - The CEC's request for specific "generated" data (not already provided in Agreement products).
 - Need to document the Recipient's disclosure of "subject inventions" developed under the Agreement.
 - "Surviving" Agreement provisions such as repayment provisions and confidential products.
 - Final invoicing and release of retention.
- Prepare a *Final Meeting Agreement Summary* that documents any agreement made between the Recipient and Commission staff during the meeting.
- Prepare a *Schedule for Completing Agreement Closeout Activities*.
- Provide copies of *All Final Products* organized by the tasks in the Agreement.

Products:

- Final Meeting Agreement Summary (*if applicable*)
- Schedule for Completing Agreement Closeout Activities
- All Final Products

MONTHLY CALLS, REPORTS AND INVOICES

Subtask 1.5 Monthly Calls

The goal of this task is to have calls at least monthly between the CAM and Recipient to 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 verbally 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, to verify match funds are being proportionally spent concurrently or in advance of CEC funds or are being spent in accordance with an approved Match Funding Spending Plan, to form the basis for determining whether invoices are consistent with work performed, and to answer any other questions from the CAM. Monthly calls might not be held on those months when a quarterly progress report is submitted or the CAM determines that a monthly call is unnecessary.

The CAM shall:

- Schedule monthly calls.
- Provide questions to the Recipient prior to the monthly call.
- Provide call summary notes to Recipient of items discussed during call.

The Recipient shall:

- Review the questions provided by CAM prior to the monthly call
- Provide verbal answers to the CAM during the call.

EXHIBIT A

Scope of Work

Product:

- Email to CAM concurring with call summary notes.

Subtask 1.6 Quarterly Progress Reports and Invoices

The goals of this subtask are to: (1) periodically verify that satisfactory and continued progress is made towards achieving the project objectives of this Agreement; and (2) ensure that invoices contain all required information and are submitted in the appropriate format.

The Recipient shall:

- Submit a *Quarterly Progress Report* to the CAM. Each progress report must:
 - Summarize progress made on all Agreement activities as specified in the scope of work for the reporting period, including accomplishments, problems, milestones, products, schedule, fiscal status, and an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Progress reports are due to the CAM the 10th day of each January, April, July, and October. The Quarterly Progress Report template can be found on the ECAMS Resources webpage available at: <https://www.energy.ca.gov/media/4691>
- Submit a monthly or quarterly *Invoice* on the invoice template(s) provided by the CAM.

Recipient Products:

- Quarterly Progress Reports
- Invoices

CAM Product:

- Invoice template

Subtask 1.7 Final Report

The goal of this subtask is to prepare a comprehensive Final Report that describes the original purpose, approach, results, and conclusions of the work performed under this Agreement. When creating the Final Report Outline and the Final Report, the Recipient must use the CEC Style Manual provided by the CAM.

Subtask 1.7.1 Final Report Outline

The Recipient shall:

- Prepare a *Final Report Outline* in accordance with the *Energy Commission Style Manual* provided by the CAM.

Recipient Products:

- Final Report Outline (draft and final)

CAM Products:

- Energy Commission Style Manual
- Comments on Draft Final Report Outline
- Acceptance of Final Report Outline

Subtask 1.7.2 Final Report

EXHIBIT A

Scope of Work

The Recipient shall:

- Prepare a *Final Report* for this Agreement in accordance with the approved Final Report Outline, Energy Commission Style Manual, and Final Report Template provided by the CAM with the following considerations:
 - Ensure that the report includes the following items, in the following order:
 - Cover page (**required**)
 - Credits page on the reverse side of cover with legal disclaimer (**required**)
 - Acknowledgements page (optional)
 - Preface (**required**)
 - Abstract, keywords, and citation page (**required**)
 - Table of Contents (**required**, followed by List of Figures and List of Tables, if needed)
 - Executive summary (**required**)
 - Body of the report (**required**)
 - References (if applicable)
 - Glossary/Acronyms (If more than 10 acronyms or abbreviations are used, it is required.)
 - Bibliography (if applicable)
 - Appendices (if applicable) (Create a separate volume if very large.)
 - Attachments (if applicable)
- Submit a draft of the Executive Summary to the TAC for review and comment.
- Develop and submit a *Summary of TAC Comments on Draft Final Report* received on the Executive Summary. For each comment received, the Recipient will identify in the summary the following:
 - Comments the Recipient proposes to incorporate.
 - Comments the Recipient does propose to incorporate and an explanation for why.
- Submit a draft of the report to the CAM for review and comment. The CAM will provide written comments to the Recipient on the draft product within 15 days of receipt.
- Incorporate all CAM comments into the *Final Report*. If the Recipient disagrees with any comment, provide a *Written Responses to Comments* explaining why the comments were not incorporated into the final product.
- Submit the revised *Final Report* electronically with any *Written Responses to Comments* within 10 days of receipt of CAM's *Written Comments on the Draft Final Report*, unless the CAM specifies a longer time period or approves a request for additional time.

Products:

- Summary of TAC Comments on Draft Final Report
- Draft Final Report
- *Written Responses to Comments (if applicable)*
- Final Report

CAM Product:

- *Written Comments on the Draft Final Report*

MATCH FUNDS, PERMITS, AND SUBAWARDS

Subtask 1.8 Match Funds

The goal of this subtask is to ensure that the Recipient obtains any match funds planned for this Agreement and applies them to the Agreement during the Agreement term.

EXHIBIT A Scope of Work

While the costs to obtain and document match funds are not reimbursable under this Agreement, the Recipient may spend match funds for this task. Match funds must be identified in writing, and the Recipient must obtain any associated commitments before incurring any costs for which the Recipient will request reimbursement.

The Recipient shall:

- Prepare a *Match Funds Status Letter* that documents the match funds committed to this Agreement. If no match funds were part of the application that led to the CEC awarding this Agreement and none have been identified at the time this Agreement starts, then state this in the letter.

If match funds were a part of the application that led to the CEC awarding this Agreement, then provide in the letter:

- A list of the match funds that identifies:
 - The amount of cash match funds, their source(s) (including a contact name, address, and telephone number), and the task(s) to which the match funds will be applied.
 - The amount of each in-kind contribution, a description of the contribution type (e.g., property, services), the documented market or book value, the 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 must identify its owner and provide a contact name, address, telephone number, and the address where the property is located.
 - If different from the solicitation application, provide a letter of commitment from an authorized representative of each source of match funding that the funds or contributions have been secured.
- At the Kick-off meeting, discuss match funds and the impact on the project if they are significantly reduced or not obtained as committed. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide a *Supplemental Match Funds Notification Letter* to the CAM of receipt of additional match funds.
- Provide a *Match Funds Reduction Notification Letter* to the CAM if existing match funds are reduced during the course of the Agreement. Reduction of match funds may trigger a CPR meeting.

Products:

- Match Funds Status Letter
- Supplemental Match Funds Notification Letter (*if applicable*)
- Match Funds Reduction Notification Letter (*if applicable*)

Subtask 1.9 Permits

The goal of this subtask 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, with the exception of costs incurred by University of California recipients. Permits must be identified and obtained before the Recipient may incur any costs related to the use of the permit(s) for which the Recipient will request reimbursement.

EXHIBIT A Scope of Work

The Recipient shall:

- Prepare a *Permit Status Letter* that documents the permits required to conduct this Agreement. If no permits are required at the start of this Agreement, then state this in the letter. If permits will be required during the course of the Agreement, provide in the letter:
 - A list of the permits that identifies: (1) the type of permit; and (2) the name, address, and telephone number of the permitting jurisdictions or lead agencies.
 - The schedule the Recipient will follow in applying for and obtaining the permits.

The list of permits and the schedule for obtaining them will be discussed at the Kick-off meeting (subtask 1.2), and a timetable for submitting the updated list, schedule, and copies of the permits will be developed. The impact on the project 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 progress reports and will be a topic at CPR meetings.

- If during the course of the Agreement additional permits become necessary, then provide the CAM with an *Updated List of Permits* (including the appropriate information on each permit) and an *Updated Schedule for Acquiring Permits*.
- Send the CAM a *Copy of Each Approved Permit*.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM within 5 days. Either of these events may trigger a CPR meeting.

Products:

- Permit Status Letter
- Updated List of Permits (*if applicable*)
- Updated Schedule for Acquiring Permits (*if applicable*)
- Copy of Each Approved Permit (*if applicable*)

Subtask 1.10 Obtain and Execute Subawards and Agreements with Site Hosts

The goals of this subtask are to: (1) procure and execute subrecipients and site host agreements, as applicable, required to carry out the tasks under this Agreement; and (2) ensure that the subrecipients and site host agreements are consistent with the Agreement terms and conditions and the Recipient's own contracting policies and procedures.

The Recipient shall:

- Execute and manage subawards and coordinate subrecipients activities in accordance with the requirements of this Agreement.
- Execute and manage site host agreements and ensure the right to use the project site throughout the term of the Agreement, as applicable. A site host agreement is not required if the Recipient is the site host.
- Notify the CEC in writing immediately, but no later than five calendar days, if there is a reasonable likelihood the project site cannot be acquired or can no longer be used for the project.
- Incorporate this Agreement by reference into each subaward.
- Include any required Energy Commission flow-down provisions in each subaward, in addition to a statement that the terms of this Agreement will prevail if they conflict with the subaward terms.
- Submit a Subaward and Site Letter to the CAM describing the subawards and any site host agreement needed or stating that no subawards or site host agreements are required.

EXHIBIT A

Scope of Work

- If requested by the CAM, submit a draft of each Subaward and any Site Host Agreement required to conduct the work under this Agreement.
- If requested by the CAM, submit a final copy of each executed Subaward and any Site Host Agreement.
- Notify and receive written approval from the CAM prior to adding any new subrecipient (see the terms regarding subrecipient additions in the terms and conditions).

Products:

- Subaward and Site Letter
- Draft Subawards (if requested by the CAM)
- Draft Site Host Agreement (if requested by the CAM)
- Final Subawards (if requested by the CAM)
- Final Site Host Agreement (if requested by the CAM)

TECHNICAL ADVISORY COMMITTEE

Subtask 1.11 Technical Advisory Committee (TAC)

The goal of this subtask is to create an advisory committee for this Agreement. The TAC should be composed of diverse professionals. The composition will vary depending on interest, availability, and need. TAC members will serve at the CAM's discretion. The purpose of the TAC is to:

- Provide guidance in project direction. The guidance may include scope and methodologies, timing, and coordination with other projects. The guidance may be based on:
 - Technical area expertise;
 - Knowledge of market applications; or
 - Linkages between the Agreement work and other past, present, or future projects (both public and private sectors) that TAC members are aware of in a particular area.
- Review products and provide recommendations for needed product adjustments, refinements, or enhancements.
- Evaluate the tangible benefits of the project to the state of California, and provide recommendations as needed to enhance the benefits.
- Provide recommendations regarding information dissemination, market pathways, or commercialization strategies relevant to the project products.
- Help set the project team's goals and contribute to the development and evaluation of its statement of proposed objectives as the project evolves.
- Provide a credible and objective sounding board on the wide range of technical and financial barriers and opportunities.
- Help identify key areas where the project has a competitive advantage, value proposition, or strength upon which to build.
- Advocate, to the extent the TAC members feel is appropriate, on behalf of the project in its effort to build partnerships, governmental support, and relationships with a national spectrum of influential leaders.
- Ask probing questions that ensure a long-term perspective on decision-making and progress toward the project's strategic goals.

The TAC may be composed of qualified professionals spanning the following types of disciplines:

- Researchers knowledgeable about the project subject matter;

EXHIBIT A

Scope of Work

- Members of trades that will apply the results of the project (e.g., designers, engineers, architects, contractors, and trade representatives);
- Public interest market transformation implementers;
- Product developers relevant to the project;
- U.S. Department of Energy research managers, or experts from other federal or state agencies relevant to the project;
- Public interest environmental groups;
- Utility representatives;
- Air district staff; and
- Members of relevant technical society committees.

The Recipient shall:

- Prepare a *List of Potential TAC Members* that includes the names, companies, physical and electronic addresses, and phone numbers of potential members. The list will be discussed at the Kick-off meeting, and a schedule for recruiting members and holding the first TAC meeting will be developed.
- Recruit TAC members. Ensure that each individual understands member obligations and the TAC meeting schedule developed in subtask 1.12.
- Prepare a *List of TAC Members* once all TAC members have committed to serving on the TAC.
- Submit *Documentation of TAC Member Commitment* (such as Letters of Acceptance) from each TAC member.

Products:

- List of Potential TAC Members
- List of TAC Members
- Documentation of TAC Member Commitment

Subtask 1.12 TAC Meetings

The goal of this subtask is for the TAC to provide strategic guidance for the project by participating in regular meetings, which may be held via teleconference.

The Recipient shall:

- Discuss the TAC meeting schedule with the CAM at the Kick-off meeting. Determine the number and location of meetings (in-person and via teleconference) in consultation with the CAM.
- Prepare a *TAC Meeting Schedule* that will be presented to the TAC members during recruiting. Revise the schedule after the first TAC meeting to incorporate meeting comments.
- Prepare a *TAC Meeting Agenda* and *TAC Meeting Back-up Materials* for each TAC meeting.
- Organize and lead TAC meetings in accordance with the TAC Meeting Schedule. Changes to the schedule must be pre-approved in writing by the CAM.
- Prepare *TAC Meeting Summaries* that include any recommended resolutions of major TAC issues.

The TAC shall:

- Help set the project team's goals and contribute to the development and evaluation of its statement of proposed objectives as the project evolves.

EXHIBIT A

Scope of Work

- Provide a credible and objective sounding board on the wide range of technical and financial barriers and opportunities.
- Help identify key areas where the project has a competitive advantage, value proposition, or strength upon which to build.
- Advocate on behalf of the project in its effort to build partnerships, governmental support and relationships with a national spectrum of influential leaders.
- Ask probing questions that ensure a long-term perspective on decision-making and progress toward the project's strategic goals.
- Review and provide comments to proposed project performance metrics.
- Review and provide comments to proposed project Draft Technology Transfer Plan.

Products:

- TAC Meeting Schedule (draft and final)
- TAC Meeting Agendas (draft and final)
- TAC Meeting Back-up Materials
- TAC Meeting Summaries

Subtask 1.13 Project Performance Metrics

The goal of this subtask is to finalize key performance targets for the project based on feedback from the TAC and report on final results in achieving those targets. The performance targets should be a combination of scientific, engineering, techno-economic, and/or programmatic metrics that provide the most significant indicator of the research or technology's potential success.

The Recipient shall:

- Complete and submit the project performance metrics section of the *Initial Project Benefits Questionnaire*, developed in the Evaluation of Project Benefits task, to the CAM.
- Present the draft project performance metrics at the first TAC meeting to solicit input and comments from the TAC members.
- Develop and submit a *TAC Performance Metrics Summary* that summarizes comments received from the TAC members on the proposed project performance metrics. The *TAC Performance Metrics Summary* will identify:
 - TAC comments the Recipient proposes to incorporate into the *Initial Project Benefits Questionnaire*, developed in the Evaluation of Project Benefits task.
 - TAC comments the Recipient does not propose to incorporate with and explanation why.
- Develop and submit a *Project Performance Metrics Results* document describing the extent to which the Recipient met each of the performance metrics in the *Final Project Benefits Questionnaire*, developed in the Evaluation of Project Benefits task.
- Discuss the *Project Performance Metrics Results* at the Final Meeting.

Products:

- TAC Performance Metrics Summary
- Project Performance Metrics Results

IV. TECHNICAL TASKS

EXHIBIT A

Scope of Work

TASK 2 PROJECT ENGINEERING AND DESIGN

The goal of this task is to complete detailed engineering and system design required to integrate the HEATER project into the Recipient's demonstration site's existing industrial manufacturing operations. This task will finalize equipment selection for the industrial ammonia heat pump, waste heat recovery heat exchangers, thermal energy storage system, electrical and controls integration and associated safety systems.

The Recipient shall:

- Design integration of the industrial ammonia pump, pasteurizer heat recovery systems and thermal energy storage with existing UHT pasteurization operations and demonstration site hot water demand.
 - Industrial ammonia heat pump sized to meet process hot water load.
 - Heat exchangers to capture waste heat from UHT pasteurization process.
 - Thermal energy storage tank and controls to enable load shifting.
 - Pumps, piping, valves and control systems required for system integration.
- Engineer modifications to on-site fossil gas boiler systems to accommodate reduced load and optimized coordination between boilers and heat pump systems.
- Engineer upgrades to behind-the-meter electrical infrastructure to support heat pump and thermal storage integration.
- Engineer integration of control systems to optimize heat recovery, storage charging/discharging and peak demand reduction.
- Provide a *Project Design Memo* to document final system configuration and demonstrate how the solution will overcome barriers associated with industrial electrification. The memo shall include, but not be limited to:
 - Summary of the steps taken to reach the final system design and equipment layout.
 - Identification of financial, operational and integration barriers and discussion of steps taken to overcome those barriers.
 - Description of the final engineered design, system controls and equipment layout at the demonstration site and how it supports energy efficiency, electrification and utility peak period management objectives.

Products:

- Project Design Memo

TASK 3 SITE PREPARATION AND EQUIPMENT PROCUREMENT

The goal of this task is to procure the necessary equipment and materials for this project.

The Recipient shall:

- Prepare the sites by determining locations for new equipment installation and remove existing equipment and any materials as needed. In order to minimize downtime, existing equipment removal and new equipment installation may occur in parallel.
- Provide equipment and performance specifications, utilize California-based vendors when possible, and issue purchase orders for equipment.
- Coordinate shipping, receipt, and inspection of equipment.
- Secure any required permits for equipment installation.
- Procure the equipment for the project such as:

EXHIBIT A

Scope of Work

- Industrial ammonia heat pump, heat exchangers, water pumps, storage vessels, piping and valves.
- Provide a *Site Preparation and Equipment Procurement Memo* that shall include, but not be limited to:
 - Summary of the steps to prepare the site(s);
 - Copy of the performance specifications for each piece of equipment purchased by the grant;
 - Summary of the bids received and from whom;
 - Copies of all required permits needed for installation at each site;
 - Copies of the final procurement documents and purchase orders; and
- Status of the planned installation including a preliminary schedule for equipment delivery and installation for each site.
- Prepare a *CPR Report #1* in accordance with subtask 1.3.
- Participate in a CPR Meeting.

Products:

- Site Preparation and Equipment Procurement Memo
- CPR Report #1

TASK 4 EQUIPMENT INSTALLATION

The goal of this task is to install and commission the equipment for this project.

The Recipient shall:

- Prepare installation sites, including tie-ins to existing refrigeration, hot water and process piping systems.
- Install the heat pump, thermal energy storage system, heat recovery system, associated appurtenances and controls in accordance with design specifications.
- Integrate new equipment into existing demonstration site operations with minimal disruption to 24/7 production schedules.
- Start up and commission each system to verify proper operation, including safety checks, controls calibration and validation of heat recovery and storage cycling.
- Adjust system settings as necessary to meet stated performance specifications (e.g., hot water temperature, thermal storage charge/discharge performance, and grid peak-shifting functionality).
- Provide an *Equipment Installation Memo* that shall include, but not be limited to:
 - Summary of the equipment installation requirements for the demonstration site;
 - Identification of barriers involved during installation and discuss the steps taken to overcome those barriers;
 - Discuss results of equipment start-up and commissioning at each site with respect to whether the equipment as installed meets the stated performance specifications.
- Prepare a *CPR Report #2* in accordance with subtask 1.3.
- Participate in a CPR Meeting.

Products:

- Equipment Installation Memo
- CPR Report #2

EXHIBIT A Scope of Work

TASK 5 MEASUREMENT AND VERIFICATION

The goal of this task is to report the benefits resulting from this project by performing measurement and verification (M&V) of greenhouse gas (GHG) and energy reduction.

The Recipient shall:

- Enter into an agreement with M&V subcontractor per Task 1.9 Coordinate site visits with the M&V subcontractor at the demonstration site
- Develop M&V protocol for pre-installation measurement (and calculation):
 - Electric, fossil gas and/or other fossil fuel consumption and GHG emissions (use appropriate emissions factor from Attachment 8 of the grant solicitation) of the equipment/process/system(s)/sub-system(s) that are to be upgraded and/or replaced and/or modified.
- Prepare and provide a detailed *M&V Plan* for the project to include but not be limited to:
 - A description of the monitoring equipment and instrumentation which will be used.
 - A description of the key input parameters and output metrics that will be measured.
 - A description of the M&V protocol and analysis methods to be employed.
 - A description of the independent, third-party M&V services to be employed.
- Ensure installation of sub-metering equipment and data loggers for pre/post data analysis.
- Perform four months (or a shorter period as approved in writing by the CAM) of pre-installation measurements (and calculations) based on the M&V protocol for pre-installation.
- Prepare and provide a *Pre-Installation M&V Findings Report* that includes M&V protocol, pre-install measurements (and calculations), analysis, and results performed in this task.
- Develop M&V protocol for post-installation measurements (and calculations) of:
 - Electric, fossil gas and/or other fossil fuel consumption and GHG emissions (use appropriate emissions factor from Attachment 8 of the grant solicitation) of the equipment/process/system(s)/sub-system(s) that will be upgraded and/or replaced and/or modified
- Perform at least 12 months or two seasons, for seasonal facilities, or a shorter period as approved in writing by the CAM of post-installation measurements based on M&V protocol for post-installation.
- Provide a summary of post-installation M&V progress in Progress Report(s) (see subtask 1.5) which shall include but not be limited to:
 - A narrative on operational highlights from the reporting period, including any stoppages in operation and why; and
 - A summary of M&V findings from the reporting period.
- Analyze post-installation electrical, fossil gas and/or other fossil fuel consumption and GHG emissions.
- Prepare and provide a *Post-Installation M&V Findings Report* that includes M&V protocol, pre- and post-install measurements (and calculations), analysis, and results performed in this task. Results will at a minimum report on the reduction of electricity, fossil gas and/or other fossil fuel usage and reductions of GHG emissions that directly result from this project.
- Provide all key assumptions used to estimate and determine energy and GHG reductions (and additions, if applicable).

Products:

EXHIBIT A Scope of Work

- M&V Plan (Draft & Final)
- Pre-Installation M&V Findings Report (Draft & Final)
- Post-Installation M&V Findings Report (Draft & Final)

TASK 6: COMMUNITY ENGAGEMENT

The goal of this task is to ensure that the project's benefits to priority populations are identified, documented, and communicated in accordance with the requirements of the California Energy Commission INDIGO Program.

The Recipient shall:

- Organize/participate in community engagement workshop/events 1 times per year
- Develop *Community Engagement Materials*, including slideshow presentations, flyers, list of attendees, feedback from attendees, and summaries of workshop
- Identify and document community needs relevant to the project, including but not limited to air quality, public health, and environmental conditions in the surrounding area.
- Confirm and document anticipated community benefits associated with the project, including reductions in greenhouse gas emissions, criteria air pollutants, and other environmental or economic benefits resulting from the displacement of fossil gas use.
- Coordinate with project stakeholders, including CBOs, as appropriate, to ensure awareness of project activities and anticipated benefits.
- Provide updates on community engagement activities and community benefit alignment as part of Quarterly Progress Reports (subtask 1.6) and CPR Reports (subtask 1.3), as applicable.
- Prepare a Community Engagement and Benefits Memo that shall include, but not be limited to:
 - Summary of DAC designation and relevant CalEnviroScreen indicators
 - Description of identified community needs and community feedback
 - Summary of anticipated project benefits to the surrounding community
 - Summary of stakeholder participation
 - Description of community engagement activities conducted during the project

Products:

- Community Engagement Materials
- Community Engagement and Benefits Memo

TASK 7: EVALUATION OF PROJECT BENEFITS (*Mandatory task*)

The goal of this task is to report the benefits resulting from this project.

The Recipient shall:

- Complete *the Initial Project Benefits Questionnaire*. The Initial Project Benefits Questionnaire shall be initially completed by the Recipient with 'Kick-off' selected for the 'Relevant data collection period' and submitted to the CAM for review and approval.
- Complete the *Annual Survey* by December 1 of each year. The Annual Survey includes but is not limited to the following information:
 - AB 209 Requirements²
 - Technology scalability, and adoption by other industries

² Assembly Bill 209, Chapter 251, Statutes of 2022, Section 25660.2

EXHIBIT A Scope of Work

- News media and publications
- Technology Company growth
- Follow-on funding and awards received
- Complete the *Final Project Benefits Questionnaire*. The Final Project Benefits Questionnaire shall be completed by the Recipient with 'Final' selected for the 'Relevant data collection period' and submitted to the CAM for review and approval.
- Respond to CAM questions regarding the questionnaire drafts.
- Complete and update the project profile on the CEC's public online project and recipient directory on the [Energize Innovation website \(www.energizeinnovation.fund\)](http://www.energizeinnovation.fund), and provide *Documentation of Project Profile on EnergizeInnovation.fund*, including the profile link.
- If the Prime Recipient is an Innovation Partner on the project, complete and update the organizational profile on the CEC's public online project and recipient directory on the [Energize Innovation website \(www.energizeinnovation.fund\)](http://www.energizeinnovation.fund), and provide *Documentation of Organization Profile on EnergizeInnovation.fund*, including the profile link.

Products:

- Initial Project Benefits Questionnaire
- Annual Survey(s)
- Final Project Benefits Questionnaire
- Documentation of Project Profile on EnergizeInnovation.fund
- Documentation of Organization Profile on EnergizeInnovation.fund

TASK 8: TECHNOLOGY/KNOWLEDGE TRANSFER ACTIVITIES (*Mandatory task*)

The goal of this task is to ensure the learning that resulted from the demonstration(s) is captured and disseminated to the range of professions that will be responsible for future deployments of this technology or similar technologies.

The Recipient shall:

- Develop and submit a *Project Case Study Plan* that outlines how the Recipient will document the planning, construction, commissioning, and operation of the technology or system being demonstrated. The Project Case Study Plan should include:
 - An outline of the objectives, goals, and activities of the case study.
 - The organization that will be conducting the case study and the plan for conducting it.
 - A list of professions and practitioners involved in the project's development.
 - Specific activities the Recipient will take to ensure the learning that results from the project is disseminated to those professions and practitioners.
 - Presentations/webinars/training events to disseminate the results of the case study.
- Present the Draft Project Case Study Plan to the TAC for review and comment.
- Develop and submit a *Summary of TAC Comments* that summarizes comments received from the TAC members on the draft *Project Case Study Plan*. This document will identify:
 - TAC comments the Recipient proposes to incorporate into the *Final Technology Transfer Plan*.
 - TAC comments the Recipient does not propose to incorporate and explanation why.

EXHIBIT A

Scope of Work

- Submit the final *Project Case Study Plan* to the CAM for approval.
- Execute the final *Project Case Study Plan* and develop and submit a *Project Case Study*.
- When directed by the CAM, develop presentation materials for a CEC sponsored conference/workshop(s) on the project.
- When directed by the CAM, participate in annual symposium(s) sponsored by the CEC.
- Provide at least (6) six High Quality Digital Photographs (minimum resolution of 1300x500 pixels in landscape ratio) of pre and post technology installation at the project sites or related project photographs.

Products:

- Project Case Study Plan (draft and final)
- Summary of TAC Comments
- Project Case Study (draft and final)
- High Quality Digital Photographs

V. PROJECT SCHEDULE

Please see the attached Excel spreadsheet.