California Energy Commission
October 03, 2024 Business Meeting
Backup Materials for The Regents of The University of California, on behalf of the Berkeley School of Law's Center for Law, Energy, & Environment

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

[PROPOSED]

RESOLUTION NO: 24-1003-08b

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION: The Regents of The University of California, on behalf of the Berkeley School of Law's Center for Law, Energy, & Environment

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 CRI-24-002 with the Regents of the University of California, on behalf of the Berkeley School of Law's Center for Law, Energy, & Environment for a $300,000 federal cost-share grant. This agreement will conduct a detailed feasibility study of an innovative community-centered direct air capture hub model with community partnership and co-production from the feasibility phase to hub design, construction, ownership, and operation; and

FURTHER BE IT RESOLVED, that the Executive Director or their 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 October 3, 2024.

AYE:
NAY:
ABSENT:
ABSTAIN:

Dated:

_____
Kristine Banaag
Secretariat

STATE OF CALIFORNIA
CALIFORNIA ENERGY COMMISSION

CEC-270 (Revised 01/2024)

GRANT REQUEST FORM (GRF)

A. New Agreement Number

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

New Agreement Number: CRI-24-002

B. Division Information

1. Division Name: ERDD
2. Agreement Manager: Tannis Breure
3. MS-:51
4. Phone Number:

C. Recipient's Information

1. Recipient's Legal Name: The Regents of The University of California, on behalf of the Berkeley School of Law's Center for Law, Energy, & Environment.
2. Federal ID Number: 94306778

D. Title of Project

Title of project: Feasibility Study for a Community Alliance for Direct Air Capture

E. Term and Amount

1. Start Date: 7/29/2024 needs fix
2. End Date: 3/31/2026
3. Amount: $300,000.00

F. Business Meeting Information

1. Are the ARFVTP agreements $75K and under delegated to Executive Director? No
2. The Proposed Business Meeting Date: 09/11/2024.
3. Consent or Discussion? Discussion
4. Business Meeting Presenter Name: Kevin Mori
5. Time Needed for Business Meeting: 5 minutes.
6. The email subscription topic is: Research (Energy RD&D / PIER program).

Agenda Item Subject and Description:

The Regents of The University of California, on behalf of the Berkeley School of Law's Center for Law, Energy, & Environment. Proposed resolution approving agreement CRI-24-002 with the Regents of the University of California, on behalf of the Berkeley School of Law's Center for Law, Energy, & Environment for a $300,000 federal cost-share grant, and adopting staff's recommendation that this project is exempt from CEQA. This agreement will conduct a detailed feasibility study of an innovative community-centered direct air capture hub model with community partnership and co-production from the feasibility phase to hub design, construction, ownership, and operation. (CRISP funding) Contact: Kevin Mori (Staff Presentation: 5 minutes)

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?
      Yes
      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: Cal. Code Regs., tit 14, § 15262

      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, § 15306

      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.

      14 CCR § 15306 provides that activities of basic data collection, research, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource are exempt from the provisions of CEQA. The proposed project will primarily involve office-based activities such as information gathering, analysis, writing feasibility studies, and site assessments. Because the project consists of information gathering and evaluation, it falls within § 15306, and is not subject to CEQA.

      14 CCR § 15262 provides that a project involving feasibility or planning studies for possible future actions which the agency, board, or commission has not approved, adopted, or funded does not require the preparation of an EIR or Negative Declaration but does require consideration of environmental factors. Here, the proposed project involves feasibility studies related to a future, potential DAC Hub.

   b) The project 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. 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”?

No

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
No subcontractors to report	$	**$**

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
No vendors to report	**$**	**$**

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
Lawrence Berkeley National Laboratory
Clean Energy Systems, Inc.
Capture6 Corp
CarbonBuilt, Inc.
Blue Planet Systems
Physicians, Scientists, and Engineers for Sustainable and Health Energy, Inc.
Project 2030
Origen Carbon Solutions Inc.
AirMyne, Inc.
Electric Power Research Institute, Inc.

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
GENERAL	22-23	303.107	$ 300,000

TOTAL Amount: $ 300,000

R&D Program Area: ICMB: IAW

Explanation for "Other" selection Not applicable

Reimbursement Contract #: Not applicable

Federal Agreement #: 007

M. Recipient's Contact Information

1. Recipient's Administrator/Officer

Name: Louise Bedsworth

Address: 1995 University Ave Ste 460

City, State, Zip: Berkeley, CA 94704-7394

Phone: 510-910-4445

E-Mail: Louise.bedsworth@berkeley.edu

3. Recipient's Project Manager

Name: Louise Bedsworth

Address: 1995 University Ave Ste 460

City, State, Zip: Berkeley, CA 94704-7394

Phone: 510-910-4445

E-Mail: Louise.bedsworth@berkeley.edu

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-22-901
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	

Approved By

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

Agreement Manager: Kevin Mori

Approval Date: 5/10/2024

Branch Manager: Cody Taylor

Approval Date: 5/10/2024

Director: Cody Taylor on behalf of Director

Approval Date: 5/10/2024

Exhibit A
Scope of Work
University of California, Berkeley

I. TASK ACRONYM/TERM LISTS

A. Task List

Task #	CPR[1]	Task Name
1		General Project Tasks
2		Hub Design And Development
3		Hub Resources And Analysis
4		Environment, Health, And Safety
5		Community Partnership And Benefits
6		Hub Ownership
7		Technology Description And Scale Up Potential
8	X	Finalize DAC Hub Concept
9		Environment, Health, And Safety
10		Community Partnership And Benefits
11		Evaluation of Project Benefits
12		Technology/Knowledge Transfer Activities

B. Acronym/Term List

Acronym/Term	Meaning
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CEC	California Energy Commission
CPR	Critical Project Review
DAC	Direct Air Capture
DAC Hub[2]	Nationwide network of large-scale carbon removal sites to address legacy carbon dioxide pollution and complement rapid emissions reductions. These emissions are already in the atmosphere, fueling climate change, extreme weather, and jeopardizing public health and ecosystems across the globe. The Hubs are expected to ensure meaningful community and labor engagement and contribute to the President's Justice40 Initiative[3]
DOE	US Department of Energy
TAC	Technical Advisory Committee
TPY	Tons per year
LCA	Life-cycle assessment

[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.

[2] Funding Notice: Bipartisan Infrastructure Law: Regional Direct Air Capture Hubs https://www.energy.gov/fecm/funding-notice-bipartisan-infrastructure-law-regional-direct-air-capture-hubs

[3] Justice40 https://www.whitehouse.gov/environmentaljustice/justice40/

Exhibit A
Scope of Work
University of California, Berkeley

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

A. Purpose of Agreement

The purpose of this Agreement is to provide cost share support for a US Department of Energy (DOE)-funded feasibility study for a regional direct air capture (DAC) hub in the San Joaquin Valley. The feasibility study will assess the technical, social, and governance feasibility of the DAC hub.

B. Problem/ Solution Statement

Problem

The transition to a carbon neutral economy requires widespread deployment of clean, renewable energy sources, zero-emission transportation options, carbon capture and sequestration, and carbon dioxide removal through natural processes and engineered solutions including DAC. The global environmental effect of this transition is positive. However, these transitions have disparate impacts at a local scale and there are issues of distributional, procedural, recognition, and restorative justice.[4] Some U.S. communities that have experienced the worst pollution from high-emitting industries, poverty, and systemic discrimination are now being considered as sites for new climate technologies, including DAC facilities. As these facilities are being deployed, it is necessary to develop a new model for energy transitions to ensure the communities benefit from new technology and do not bear the burdens and negative impacts of these transitions as they have in the past.

Solution

A growing body of scholarship on co-production demonstrates that local participation and knowledge contribute to the generation of actionable and useful knowledge[5,6] and that approaches with greater public participation and engagement contribute to more legitimate and publicly accepted decisions.[7],[8] Bottom-up community-led approaches to transformation reflect the diverse contexts in energy transitions.[9]

This project includes a diverse group of technology companies, research organizations, and community partners. Together, we will collaboratively develop a direct air capture (DAC) hub that achieves technology goals and delivers meaningful community benefit. We will accomplish this by coupling rigorous technical analysis of hub technologies, risk assessment, and life cycle analysis informed by robust community engagement, vision, and metrics. We will assess the

[4] Carley, S. and D. Kanisky. 2020. The Justice and Equity Implications of the Clean Energy Transition. *Nature Energy* 5 (August): 569-577.
[5] Hickey, G. 2018. Co-Production from Proposal to Paper. *Nature* 562(4 October): 29-30.
[6] Mach, K., et al. 2020. Actionable Knowledge and the Art of Engagement. *Current Opinion in Environmental Sustainability* 42: 30-37.
[7] Coburn, J. 2007. Community Knowledge in Environmental Health Science: Co-Producing Policy Expertise. *Environmental Science and Policy* 10: 150-161.
[8] Graff, M.; D. Konisky; and S. Carley. 2018. Stakeholder Perceptions of the United States Energy Transition: Local-Level Dynamics and Community Responses to National Politics and Policy. *Energy Research & Social Science* 43(September): 144-157
[9] Bazillian, M.D.; S. Carley; D. Konisky; H. Zerriffi; Sandeep Pai; and Brad Handler. 2021. Expanding the Scope of Just Transitions: Toward Localized Solutions and Community-Level Dynamics. *Energy Research & Social Science* 80 (October): 102245.

feasibility of community- and public-ownership models to deliver meaningful benefits to residents. We will work with our partners to conduct outreach, engagement, and education on DAC; establish a compensated Community Oversight Council; and develop a set of community-vetted criteria and goals for DAC hub design, development, and operation. These activities will inform preliminary hub design, integration, location, and ownership decisions. Completion of a feasibility assessment that meets both technical and social criteria is a requirement to advance to full scale hub design.

C. Goals and Objectives of the Agreement

Agreement Goals

The goal of this Agreement is to provide cost share support for a regional DAC hub feasibility study being funded by the US Department of Energy (DOE) under Funding Opportunity Announcement (FOA) DE-FOA-0002735. Under this award, the Recipient will work with a project team that includes community-based organizations, research institutions, and technology provides to conduct a technical, social, and governance feasibility assessment for a regional DAC hub.

The funds from the California Energy Commission under this agreement will support a portion of the University of California, Berkeley's participation in this larger study.

Technological Advancement and Breakthroughs:[10] 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 supporting a community-engaged and led process to design and operate a DAC hub.

Agreement Objectives

The objective of this Agreement is to support the Recipients community engagement and research work as part of a DOE-funded regional DAC hub award to conduct a social and governance feasibility assessment of a DAC hub in the San Joaquin Valley.

[10] California Public Resources Code, Section 25711.5(a) also requires EPIC-funded projects to lead to technological advancement and breakthroughs to overcome barriers that prevent the achievement of the state's statutory and energy goals.

Exhibit A
Scope of Work
University of California, Berkeley

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**
  - 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.

  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 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.

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.

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

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.

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.

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 Subawards

The goals of this subtask are to: (1) procure subawards required to carry out the tasks under this Agreement; and (2) ensure that the subawards are consistent with the terms and conditions of this Agreement.

The Recipient shall:

- Manage and coordinate subrecipients activities in accordance with the requirements of this Agreement.
- 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.
- If requested by the CAM, submit a draft of each *Subaward* required to conduct the work under this Agreement.
- If requested by the CAM, submit a final copy of each executed subaward.
- Notify and receive written approval from the CAM prior to adding any new subrecipient (see the terms regarding of subrecipient additions in the terms and conditions).

Products:

- Subawards *(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;
- 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.

Exhibit A
Scope of Work
University of California, Berkeley

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.
- 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

Exhibit A
Scope of Work
University of California, Berkeley

III. TECHNICAL TASKS

TASK 2: HUB DESIGN AND DEVELOPMENT *[partially funded by DOE]*
The goal of this task is to conduct the initial technical feasibility assessment of potential hub designs that meet DOE's initial capture capacity of 50,000 TPY. The project team will prioritize scenarios according to synergy between hub performance goals, TRLs, and community priorities.

The Recipient Shall:

- Coordinate a Community Guided Project Design Process, including**:**
    - Convening community experts, technology providers, and technical assessment team to translate community priorities and requirements into parameters to inform analysis
    - Work with a Community Oversight Council (see Task 5.3) and technology providers to prepare scenarios for the DAC Hub design. Based on this process, we will select anchoring technologies going forward that will serve as the initial baseline for the development of the Technology Maturation Plan.
    - Prepare *Roundtables and Convenings Report.*

Several tasks will be supported by DOE, including:

- Assessment of DAC Technologies *[funded by DOE]*
- Assessment of CO_2 to Products Technologies *[funded by DOE]*
- Produce *Data Tables* with preliminary estimates for the operations of the hub. *[funded by DOE]*

Products:

- Roundtables and Convenings Report
- Data Tables [f*unded by DOE*]

TASK 3: HUB RESOURCES AND ANALYSIS *[funded by DOE]*
The goal of this task is to prepare a preliminary hub design based on the community guided design process.

The Recipient Shall:

- *Provide location and map of potential host site*
- *Prepare a preliminary DAC Hub Design inclusive of:*
    - Quantification of energy needs and identification of sources of electricity and thermal energy.
    - Assessment of water requirements and availability to meet hub design requirements.
    - Assessment of CO2 purification options Identification of opportunities to leverage synergies between DAC technologies, including shared equipment, synergistic thermal and material flows, and overall hub optimization following the initial development of a hub design, and as new DAC and CO_2 to products technologies are identified.

- Production of hub layout, land use, and identification of potential host site modifications

- Conduct a preliminary life cycle analysis of the DAC Hub at the initial capacity (at least 50,000 TPY CO_2) and final capacity (at least 1 M TPY CO_2) and provide a *Summary of Findings LCA.*
- Working with potential storage providers, the Recipient team will assess the planned storage locations and will monitor progress towards development, characterization, and permitting activities, relative to the capacity needed for a minimum of 12 years of DAC Hub operation.

Process Flow Diagrams for each technology according to the company informed guidance and state tables for a feasible capture scale, and then scaled based on the individual technology's potential contribution to meeting the hub CO2 capture capacity requirements as well as the project design basis.

Products: *[funded by DOE]*

- Location and Preliminary DAC Hub Design
- Process Flow Diagrams
- Summary of Preliminary LCA

TASK 4: ENVIRONMENT, HEALTH, AND SAFETY *[funded by DOE]*
The goal of this task is to assess the environmental, health, and safety characteristics of the preliminary hub design. All tasks will be funded by DOE.

The Recipient Shall:

- Assessment of risks from air emissions based on data on all potential or incidental air emissions provided by DAC, CO_2 to products, energy supply and storage providers, and the host site operator.
- Evaluation of the availability of water resources for the proposed technologies in the initial hub design.
- Development of safety, security, and regulatory requirements for initial hub design.
- EH&S reports/products as provided to DOE

Products:
Products provided to DOE

TASK 5: COMMUNITY PARTNERSHIP AND BENEFITS
The goal of this task is to establish the structures and processes to ensure robust community engagement and partnership in the feasibility study.

The Recipient Shall:

- Conduct community and outreach and engagement to include community groups as partners in all stages of the study,
- Host roundtables and convenings on specific project design elements and/or with specific community groups

- *[in-kind contribution]* Develop and deliver a carbon removal curriculum to support informed community decision making around DAC engagement.
- Establish a Community Oversight Council that includes representatives of community-based organizations, environmental justice organizations, labor and workforce representatives, and residents.
  - The Recipient will facilitate meetings between the Community Oversight Council, technology providers, and site owner(s) to develop a shared set of criteria for hub design, development, and performance.
  - The Community Oversight Council will work with technology providers, and the Recipient team to develop a *Community Vision and Goals For DAC Hub*. These criteria will be used to guide the feasibility assessment and design principles (see Task 2).
- The Recipient team will identify and collect community-relevant data to inform the design process and to monitor, track and verify social and environmental goals.
- The Recipient Shall provide a *Community Oversight Council Report.*

Products:
- Community Oversight Council Report (upon request)
- Community Vision and Goals For DAC hub

TASK 6: HUB OWNERSHIP
The goal of this task is to research and propose potential hub ownership structures, with the goal to identify structures that align with community vision, goals, and values.

The Recipient Shall:
- Prepare a *Literature Review* of public, community, and cooperative hub ownership models that include a comparison of the characteristics of different ownership models, including enabling legal and regulatory actions.
- Explore the feasibility and legal and regulatory steps needed to establish a Public Authority to oversee the business model, operations, and financing of a DAC Hub.
- *[partially funded by DOE]* Based on the review of ownership models, engagement with technology providers, site owner(s), and the Community Oversight Council, the Recipient team will select an ownership model and provide *DAC Hub Owner(s) Identification*. The Recipient team will identify needed steps to establish an ownership structure in later tasks, including any transitional or intermediate steps.

Products:
- Literature Review
- DAC Hub Owner(s) Identification

TASK 7: TECHNOLOGY DESCRIPTION AND SCALE UP POTENTIAL *[funded by DOE]*
This task will be a continuation and further maturation of the efforts conducted in Task 2, but with a shift in emphasis on conducting scale-up feasibility and design scenarios to at least 1 M TPY for the DAC hub for all selected DAC and CO2 to products technologies.

The Recipient Shall:

- Evaluate the community-based priorities and perspectives around the deployment of these technologies at the scale of the hub to be built and operated.
- Provide descriptions of technology state of development and scale, which is essential for understanding design flexibility, scaling uncertainty when extrapolating data, and for determining appropriate technology performance milestones.
- Conduct an analysis to verify inputs and ensure the inventory and technologies are described with enough detail at relevant operating conditions to conduct subsequent process modeling, and environmental and economic assessments.
- Provide *Products provided to DOE* as requested by the CAM.

Products:
Products provided to DOE.

TASK 8:FINALIZE DAC HUB CONCEPT *[funded by DOE]*
This goal of this task is to finalize a hub design that meets DOE's technical requirements, including a capture capacity of at least 1.0 million TPY.

The Recipient Shall:
- Develop a final DAC Hub design for a capture capacity of at least 1 M TPY. The design will be informed by the knowledge gained through the development and technical and community vetting of hub designs at the 50,000 TPY scale, the life cycle assessment, technology maturation plans for each technology, and technoeconomic analysis.
- Plan Resources for initial buildout (50,000 TPY) and final buildout (1 M TPY) to feed into Balance of Plant (BOP) for final capacity as described in Task 3.0 and associated Subtasks.
- Prepare an updated *Integrated Project Schedule* through the lifetime of the project.
- Provide an updated Preliminary Life Cycle Analysis, including any new life cycle phases associated with the final DAC Hub design.
- Develop the pre-FEED for the initial capacity DAC Hub, including key capital equipment for each DAC technology and shared supporting infrastructures such as heating and cooling, water, CO_2 purification, compression, and transportation.
- Provide a *Pre-FEED Final Report* along with relevant *DAC Hub Data Tables*
- Provide a conceptual design of the hub balance of plant at its final design capacity
- Identify geologic storage options and respective available capacity of each option
- Develop a business development and financial plan for the DAC hub that includes consideration of key material and energy inputs, selling price for CO2 conversion products, and commercial viability of technologies.
- Prepare and submit a *CPR Report #1.*
- Attend the CPR meeting per subtask 1.3.

Products: *[funded by DOE]*
- The Pre-FEED Final Report
- DAC Hub Data Tables
- Integrated Project Schedule

- CPR Report #1

TASK 10:COMMUNITY PARTNERSHIP AND BENEFITS
The goal of this task is to continue working with a Community Oversight Council and other stakeholders to develop a Community Benefits Plan that reflects the community vision, goals, and objectives for a DAC Hub. This will include metrics to monitor DAC Hub progress and performance, transparency, and accountability systems.

The Recipient Shall:
- Continue activities started under Task 5 to support ongoing community engagement through the second phase of the project and to implement the plan to develop a *Community Benefits Plan*.
- Provide ongoing education and capacity building opportunities to improve accessibility for interested stakeholders and create a *Workforce Development Plan.*
- Partner with local labor organizations and leverage ongoing regional economic development efforts, including the recently-funded Jobs First collaboratives in the region.
- Develop community *Monitoring, Data Transparency, and Accountability Systems,* based on information from the Community Oversight Council, the community vision, goals, and criteria for a DAC Hub, and the EH&S Risk analysis.
- Work in partnership with project partners, a Community Oversight Council, and local labor and workforce partners to understand workforce needs for various DAC Hub designs.
- Develop a *Community Governance Model* in collaboration with the Community Oversight Council.

Products:
- Community Benefits Plan
- Workforce Development Plan
- Community Governance Model
- Monitoring, Data Transparency, and Accountability Systems

TASK 11: EVALUATION OF PROJECT BENEFITS
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 January 31st of each year. The Annual Survey includes but is not limited to the following information:
    - Technology commercialization progress
    - New media and publications
    - 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), 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), 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 12 TECHNOLOGY/KNOWLEDGE TRANSFER ACTIVITIES

The Recipient Shall:

- Develop and submit a *Knowledge Transfer Plan* that identifies the proposed activities the recipient will conduct to meet the goal of the task. The *Knowledge Transfer Plan* should include at a minimum:
    - Specific policy and planning efforts this project is expected to inform.
    - Specific stakeholder groups and energy policy and planning practitioners who will utilize the results of this project.
    - Proposed activities the Recipient will conduct to ensure the tools and results from this project will be utilized and adopted by the groups identified above.
- Present the *Draft Knowledge Transfer Plan* to the TAC for feedback and comments.
- Develop and submit a *Summary of TAC Comments* that summarizes comments received from the TAC members on the *Draft Knowledge Transfer Plan*. This document will identify:
    - TAC comments the Recipient proposes to incorporate into the *Final Knowledge Transfer Plan*.
    - TAC comments the Recipient does not propose to incorporate with and explanation why.
- Submit the *Final Knowledge Transfer Plan* to the CAM for approval.
- Implement the activities as described in the *Final Knowledge Transfer Plan.*
- Develop a *Knowledge Transfer Summary Report* that includes high level summaries of the activities, results, and lessons learned of tasks performed relating to implementing

the Final Technology Transfer Plan. This report should not include any proprietary information.

- When directed by the CAM, develop presentation materials for an CEC- sponsored conference/workshop(s) on the project.
- When directed by the CAM, participate in annual EPIC symposium(s) sponsored by the California 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:

- Knowledge Transfer Plan (draft and final)
- Summary of TAC Comments
- Technology Transfer Summary Report (draft and final)
- High Quality Digital Photographs

IV. PROJECT SCHEDULE

Please see the attached Excel spreadsheet.