September 12, 2024

**GFO-23-313**

**Deployment of Decarbonization Technologies and Strategies for California Industrial Facilities**

**Addendum 04**

This addendum includes revisions to the Solicitation Manual. Added language appears in **bold underline**, and deleted language appears in [~~strikethrough~~] and within square brackets.

The purpose of this addendum is to open a second round to submit applications to the INDIGO program with updates to the available funding, Key Activities Schedule, Project Eligibility, and Scoring Criteria.

1. Updates to available funding per Section I, pages 6 and 7 of the solicitation manual.

**D. Funding**:

**1.** **Amount Available and Minimum/ Maximum Funding Amounts**

There is **up to** ~~$46,200,000~~ **$5,495,796** available for grants awarded under this solicitation. The minimum funding amount for each project is~~$4,000,000~~ **$2,747,898**. The maximum funding amount is ~~$10,000,0000~~ **$5,495,796**.

**Note: Per AB 209, A single entity cannot receive an excess of $8,000,000, of INDIGO Program funding.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Available INDIGO funding** | **Minimum INDIGO award**  | **Maximum INDIGO award**  | **Minimum match funding****(% of INDIGO funds requested)** |
| ~~Up to $46,200,000~~ **$5,495,796** | $~~4,000,000~~**$2,747,898** | ~~$10,000,000~~**$5,495,796** |  25% of eligible costs referenced in Sections I.D.2. and I.D.3 |

1. Updates to the key activities per Section I, pages 7 and 8 of the solicitation manual.

## Key Activities Schedule

|  |  |  |
| --- | --- | --- |
| **ACTIVITY** | **DATE** | **TIME1**  |
| Solicitation Release | April 3, 2024 |  |
| **Round 2 Release** | **September 12, 2024** |  |
| Pre-Application Workshop  | April 26, 2024 | 10:00 a.m. |
| **Deadline for Written Questions2** | ~~May 01, 2024~~**September 27, 2024** | **5:00 p.m.** |
| Anticipated Distribution of Questions and Answers  | Week of ~~May 13, 2024~~ **October 7, 2024** |  |
| 1st Round Deadline to Submit Applications | June 17, 2024 | 11:59 p.m. |
| **2nd Round3 Deadline to Submit Applications, if funds remain** | **December 20, 2024** | **11:59 p.m.** |
| Anticipated Notice of Proposed Award Posting (NOPA) Date Round 1 | ~~July 2024~~**September 3, 2024** |  |
| Anticipated Notice of Proposed Award Posting (NOPA) for Round 2 | **January 2025** |  |
| Anticipated Energy Commission Business Meeting Date **(Round 1)** | ~~45 days after each NOPA~~ **November 13, 2024** |  |
| **Anticipated Energy Commission Business Meeting Date (Round 2)** | **February 2025** |  |
| Anticipated Agreement Start Date | 45 days after the Business Meeting |  |
| Anticipated Agreement End Date  | No later than 06/30/2028 |  |

1. Updates to project eligibility to include demonstration projects by lowering the minimum TRL to 7.

Per Section II, page 18 of the solicitation manual.

**B.** **Project Requirements**

* **ROUND 2: Implement cutting-edge, emerging technologies at a TRL of 7 or greater that may not be widely deployed in California but have been proven commercially and/or in a relevant industrial environment and have documented technology and economic performance and emissions data for at least one year of operation.**

Per Section II, page 19.

Technical Merit Section:

* + 1. Justification and data supporting that the proposed technology is at ~~TRL of 8~~ **TRL of 7** or greater based on a previous demonstration or commercial application of the technology, including documented technology and economic performance data for at least one year.

Per Section II, pages 19 thru 21 of the solicitation manual.

* 1. **Technologies and Projects**

Eligible technologies and projects are limited to those in the table below. This list of eligible technologies may be expanded for a second round of the solicitation if funds remain.

| **Eligible Projects**  | **Description[[1]](#footnote-1)** |
| --- | --- |
| Alternative Processes, such as:* Alternative materials and feedstocks
* Electrolysis
* **Material efficiency**
* **Strategies that reduce or eliminate process emissions**
 | Switch from raw materials that release GHG emissions upon processing to alternative feedstocks; use alternative processing approaches that replace carbon-intensive thermal energy use.Replace materials to result in lowering temperature requirements of processing that lead to potential for electrification and reduction of GHG emissions in a given industrial process. |
| **Carbon Capture and Utilization in the Cement/Concrete Industry, such as:*** **Carbon capture and utilization of cement plant emissions.**
 | **Reduce GHG and criteria air pollutant emissions via flue gas scrubbing and carbon capture from cement plant combustion activities and clinker process emissions. Captured carbon dioxide must be utilized as a lower carbon footprint alternative feedstock to industrial products/processes such as concrete curing, mineral procurement, and chemical synthesis.** |

1. Updates to application content.

Per Section III, page 26 of the solicitation manual.

**C. APPLICATION CONTENT**

1. Project Narrative Form (Attachment 02)

The Project Narrative includes: a project description; the project goals and objectives to be achieved; an explanation of how the goals and objectives will be achieved, quantified, and measured; and a description of the project tasks and overall management of the agreement.

Preference points:

* **CEC Funds Spent in California**
* **Electric Grid Benefits**
* **Criteria Air Pollutant Reductions**
1. Updates to the scoring criteria.

Per Section IV, pages 40 to 44 of the solicitation manual.

| **Scoring Criteria** | **Possible Points** |
| --- | --- |
| 1. **Technical Merit**

For each proposed project:1. The proposed project provides a clear and concise description of the technological advancement and/or innovation that will overcome barriers to achieving the State’s statutory energy goals.
2. Describes at what scale the technology has been successfully demonstrated, including size or capacity, number of previous installations, location and duration, results, etc.
3. Describes how the proposed project fits the definition of cutting-edge emerging technology that is at a minimum ~~TRL of 8~~ **TRL of 7** and how it meets the goals described in Section II.B.
4. Provides information described in Section II.B
 | **20** |
| 1. **Technical Approach**
2. The application describes the technique, approach, and methods to be used in performing the work described in the Scope of Work, including demonstrated ability to successfully implement the proposed project.
3. The Scope of Work identifies goals, objectives, and deliverables; details the work to be performed; and aligns with the information presented in Project Narrative.
4. The application identifies and discusses factors critical for success, in addition to risks, barriers, and limitations. Provides a plan to address them. Factors critical for success include:
	* Risks, barriers, and other limitations, including those related to demonstration site loss and commitment, technology readiness for demonstration, status of existing electrical infrastructure, environmental permitting, CEQA, technology operation and manufacturing scheduling, technology maintenance and support during and after the grant term, and how these will be mitigated to successfully complete the project within the grant term. Discuss any outstanding permitting issues (e.g., local air districts), local community issues, or equipment performance tests to be completed prior to equipment installation at the facility(ies) and how and when these matters will be resolved.
	* How the facility(ies) plans to overcome potential issues with equipment supply chain, installer availability, cost changes, and other impacts.
5. Provides a clear and plausible measurement and verification plan that describes how GHG emission reductions, energy savings, grid support, and other benefits specified in the application will be determined and measured as described in Section II.B.3.
6. Provides information documenting progress towards achieving compliance with the California Environmental Quality Act (CEQA) by addressing the areas in Section I.I and Section III.C.6.
7. Describes the technology transfer plan to assess and advance the commercial viability of the technology, including how the proposed project will drive scalability and application of the technology across industrial sectors in California, identifying market segments and including size and penetration or deployment rates, with underlying assumptions.
 | **20** |
| 1. **Impacts and Benefits**
2. Provides justifiable and reasonable quantitative estimates of potential benefits:
	* Annual GHG emission reductions at the industrial facility(ies).
	* Annual electricity reductions (kWh), energy cost reductions, peak load reduction and/or shifting (kilowatts (kW) or kWh), infrastructure resiliency, and infrastructure reliability at the industrial facility(ies). Explain whether there is sufficient electrical capacity to complete the project at the designated site or indicate if it will be expanded.
	* Other potential benefits for California including air pollutant emission reductions (e.g. oxides of nitrogen), cost savings (thermal and British thermal units), increased safety, and water reduction/reuse.
3. States the timeframe, assumptions with sources, and calculations for the estimated benefits, and explains their reasonableness. Includes baseline or “business as usual” over timeframe.
4. Provides cost-benefit analysis comparing CEC funds requested relative to estimated GHG emission reductions and/or load shedding/shifting (e.g., CEC dollars requested/metric ton of GHG emissions reduced).
5. Identifies the expected financial performance (e.g. payback period, return on investment) of the demonstration at scale.
6. Identifies the specific programs that the technology intends to leverage (e.g. feed-in tariffs, IOU rebates, demand response, storage procurement) and extent to which technology meets program requirements.
7. Provides information described in Section II.B
 | **20** |
| 1. **Team Qualifications, Capabilities, and Resources**

Evaluations of ongoing or previous projects, including project performance by applicant and team members, will be used in scoring for this criterion. This can include contacting references. 1. Identifies credentials of prime and any subcontractor key personnel, including the project manager and principal investigator (include this information in Attachment 09, Project Team Form).
2. Demonstrates that the project team has appropriate qualifications, experience, financial stability, and capability to complete the project.
3. Explains the team structure and how various tasks will be managed and coordinated.
4. Describes the facilities, infrastructure, and resources available that directly support the project.
5. Describes the team’s history of successfully completing projects in the past 10 years, including subsequent emerging technology deployments and commercialization.
 | **15** |
| 1. **Budget and Cost Effectiveness**
2. Includes complete budget forms for the applicant and all subrecipients, as described in the Budget instructions.
3. Justifies the reasonableness of the requested funds relative to the project goals, objectives, and tasks.
4. Justifies the reasonableness of direct and indirect costs, including equipment and material costs, direct labor, fringe benefits, and subrecipient/vendor costs related to installation, engineering and design, M&V, and community engagement, and that these costs are consistent with Section I.D.
5. Justifies the reasonableness of costs covered by match funding and that these costs are consistent with Section I.D. and Section I.K.
 | **10** |
| 1. **Priority Populations and Community Engagement Plan**
	1. Describes how the applicant will provide direct, meaningful, and assured benefits and address important community needs, including:
		1. Detailed plan for direct community engagement and proposed benefits. Proposed benefits must be identified following the steps required in Section II.B.5.
		2. Letters from CBOs demonstrating that the project has broad community support as described in Section II.B.5.
		3. Clear outline of planned approach provided as a Technical Task in the Scope of Work, including checkpoints for accountability to communities throughout the agreement period.
	2. Provides the rest of the information described in Section II.B
 | **15** |
| **Total Possible Points for Criteria 1-6****(Minimum Passing Score for Criteria 1 – 6 is 70% or 70.00 points)** | **100** |
| **Preference Points** – Applications must meet the minimum passing score (Scoring Criteria 1 – 6) to be eligible for the additional points.  |  |
| 1. **CEC Funds Spent in California**

Projects that maximize the spending of CEC funds in California will receive points as indicated in the table below (see Funds Spent in California section for more details).

|  |  |
| --- | --- |
| **Percentage of CEC funds spent in CA vs Total CEC funds requested**(derived from Budget Attachment) | **Percentage of Possible Points** |
| >60%  | 20% |
| >65%  | 30% |
| >70% | 40% |
| >75%  | 50% |
| >80% | 60% |
| >85%  | 70% |
| >90% | 80% |
| >95%  | 90% |
| >98% | 100% |

 | **10** |
| 1. **Electric Grid Benefits**

To receive additional points, the proposed project must reduce overall electric usage (kWh) during the project facility’s utility rate peak periods. These reductions can result from implementing energy efficiency, load management, or electric generation and/or storage projects. If multiple facilities are bundled under one application, an analysis must be provided for each individual facility. Additionally, explain whether these reductions result from energy efficiency, load flexibility, or energy generation and/or storage projects. Preference points will be awarded based on the table below using the facility with the highest percentage reduction: $$\frac{\left[Electrical Energy \left(\frac{kWh}{yr}\right)Reduced + Electrical Energy \left(\frac{kWh}{yr}\right)Generated\right]}{Total Facility Energy Usage \left(\frac{kWh}{yr}\right)}× 100$$

|  |  |
| --- | --- |
| Facility Electrical Usage Reduction Percentage During Facility’s Utility Rate Peak Periods | Percentage of Possible Points (15) |
| ≥15% | 100% |
| ≥10% to <15% | 80% |
| ≥5% to <10% | 60% |
| ≥1% to <5% | 40% |

 | **15** |
| 1. **Criteria Air Pollutant Reductions**

**To prioritize deep decarbonization and air quality improvement efforts, applicants who demonstrate considerable reductions to local criteria air pollutants may receive additional points. Criteria air pollutants reductions may be calculated cumulatively to include NOx, SO2, PM 2.5, PM 10.**

|  |  |
| --- | --- |
| Facility Local Criteria Air Pollutant Reduction Percentage  | Percentage of Possible Points (15) |
| ≥75% | 100% |
| ≥45% to <75% | 80% |
| ≥15% to <45% | 60% |
| ≥10% to <15% | 40% |

 | **15** |

1. Additional bonus point scoring criteria Page 51 of 51 Section IV.F, new section:

|  |  |
| --- | --- |
| **Scoring Criteria** | **Possible Points** |
| 1. **Criteria Air Pollutant Reductions**

**To prioritize deep decarbonization and air quality improvement efforts, applicants who demonstrate considerable reductions to local criteria air pollutants may receive additional points. Criteria air pollutants reductions may be calculated cumulatively to include NOx, SO2, PM 2.5, PM 10.**

|  |  |
| --- | --- |
| Facility Local Criteria Air Pollutant Reduction Percentage  | Percentage of Possible Points (15) |
| ≥75% | 100% |
| ≥45% to <75% | 80% |
| ≥15% to <45% | 60% |
| ≥10% to <15% | 40% |

 | **15** |

**Kevyn Piper,**

**Commission Agreement Officer**

[1] Pacific Standard Time or Pacific Daylight Time, whichever is being observed.

[2] This deadline does not apply to non-technical questions (e.g., administrative questions concerning application format requirements or attachment instructions), including questions regarding application submission in the ECAMS system or to questions that address an ambiguity, conflict, discrepancy, omission, or other error in the solicitation. Such questions may be submitted to the CAO listed in Section G at any time prior to 5:00 p.m. of the application deadline date. Please see Section G for additional information.

[3] If funds remain at the conclusion of Round 1, the CEC will release a notice and accept applications for Round 2 by the due date listed in the schedule or another date as indicated in the notice. The purpose of Round 2 is to allow for new proposal submissions and resubmissions in order to fund additional projects should funds remain after Round 1.

1. The examples provided are not intended to be all-inclusive. Applicants who are unsure if a project is eligible should submit a written question prior to the Deadline for Written Questions and project eligibility will be determined through the Questions and Answers Document. [↑](#footnote-ref-1)