



GFO-23-313 Pre-Application Workshop

Deployment of Decarbonization Technologies and Strategies for CA Industrial Facilities

Energy Research and Development Division, California Energy Commission

Industry and Carbon Management

April 26, 2024 10:00 AM



Housekeeping

This workshop will be recorded

- Participants will be muted during the presentation. Please chat your question in the Q&A window.
- Virtual Participation Options:
 - Chat questions in the Q&A window
 - Raise hand on Zoom
 - Press *6 on the phone during the Q&A period
- Updates on solicitation documents including this presentation will be posted at the Grant Funding Opportunity's webpage: **GFO-23-313**



Agenda

Time	Item
10:00 am	Welcome and Introduction
10:05 am	Solicitation Background <ul style="list-style-type: none">• INDIGO Program• Purpose of Solicitation• Available Funding
10:10 am	Application Requirements <ul style="list-style-type: none">• Eligibility• Attachments• Evaluation and Submission Process
10:30 am	Q&As
12:00 pm	Adjourn



Commitment to Diversity

The Energy Commission adopted a resolution strengthening its commitment to diversity in our funding programs. The Energy Commission continues to encourage disadvantaged and underrepresented businesses and communities to engage in and benefit from our many programs.

To meet this commitment, Energy Commission staff conducts outreach efforts and activities to:

- Engage with disadvantaged and underrepresented groups throughout the state.
- Notify potential new applicants about the Energy Commission's funding opportunities.
- Assist applicants in understanding how to apply for funding from the Energy Commission's programs.
- Survey participants to measure progress in diversity outreach efforts.



We Want to Hear From You!

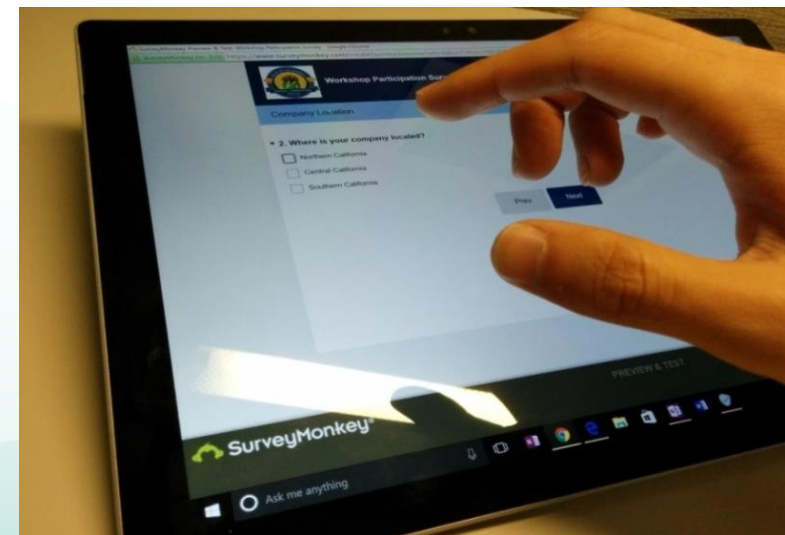
1 Minute Survey

The information supplied will be used for public reporting purposes to display anonymous overall attendance of diverse groups.

- Please use this link:

<https://forms.office.com/g/vAj9C43zdt>

Thank you!





Connect With Us

EMPOWER INNOVATION COMMUNITY EVENTS FUNDING RESOURCES ABOUT

CATALYZING THE CLEANTECH COMMUNITY

JOIN NOW →

CALIFORNIA ENERGY COMMISSION

California Energy Commission
Government Organization

Liked Following Message

Timeline About Photos Reviews More





EmpowerInnovation.net



[Empower Innovation Video Link](#)



Find a Partner on EmpowerInnovation.net

Empower Innovation strives to accelerate your clean tech journey with easy access to funding opportunities from the Energy Commission and other funding providers, curated resources and events, and connections to people and organizations.

FIND A PARTNER

Announce your interest in this funding opportunity and message other interested parties to find potential partners.

RESOURCES & TOOLS

Browse the collection of resources for clean tech innovators including Resource Libraries, Funding Sources, Tools, and Databases.

GFO-23-313's Empower Innovation Page



Industrial Decarbonization

- The industrial sector consumes > 23% of the total energy used in California and accounts for > 30% of fossil gas consumption, making the sector the second largest contributor of GHG emissions in the state.
 - Industrial sector needs advanced, proven, and/or readily deployable technologies with transformational impact to decarbonize industrial facilities and help achieve a net-zero carbon economy by 2045.
- The INDIGO Program was established by **AB 209** in 2022 and is funded by the California Climate Investments Program **AB 1550** administered by the California Air Resources Board (CARB).





Purpose of Solicitation

The CEC's INDIGO Program will assist California's industrial facilities in achieving the following:

- **Emission Reductions:** Adopt electrification and other eligible decarbonization technologies to reduce annual GHG emissions and other criteria air emissions at industrial processing facilities.
- **Electrical Grid Support:** Adopt commercially available and emerging technologies needed to support grid reliability, especially during net peak periods.
- **Benefits to Priority Populations:** Reduce criteria air pollutants and have direct community engagement and support, especially in low income or disadvantaged communities.



Available Funding

Funding Available	Minimum Award Amount	Maximum Award Amount	Match Funding (% of requested funds)
Up to \$46,200,000	\$4,000,000	\$10,000,000	25%



Eligible Costs

INDIGO Program grant funds must cover:

- Equipment and materials, excluding installation
 - dedicate at least 50% of requested funds
- Direct labor, fringe benefits, and subrecipients/vendors that are directly related to installation, engineering and design, measurement and verification (M&V), and community engagement.
 - dedicate less than 50 % of requested funds

Match funds should cover:

- Travel, indirect costs, costs associated with permitting and technology certification.



Match Funding Requirement

- At least 25% of requested INDIGO funds provided as cash and/or in-kind
- Match funding contributors must submit match funding commitment letters that meet the requirements. Failure to do so will disqualify the match funding commitment from consideration.
- Refer to the Solicitation Manual Section I.K for more details on match funding.



Eligible Projects

Cutting-edge, emerging technologies

- TRL of 8 or greater
- not widely deployed in California
- proven commercially and/or in a relevant industrial environment
- documented technology and economic performance and emissions data for at least one year of operation

Projects must achieve at least one of the following goals:

- Electrify some or all industrial processes
- Maximize GHG emission reductions
- Reduce electrical demand during net peak periods
- Provide air pollution benefits to priority populations
- Drive scalability and application of project technology to other facilities/industries/processes



Eligible Technologies

Technology	Examples
Process Heat Electrification	<ul style="list-style-type: none">• Industrial heat pumps• Electric boilers/kilns• Inductive heating
Non-Thermal Separation	<ul style="list-style-type: none">• Membranes• Freeze distillation
Alternative Processes	<ul style="list-style-type: none">• Alternative materials and feedstocks• Electrolysis
Energy Efficiency	<ul style="list-style-type: none">• Process integration and intensification• Advanced catalysts• Sensors and controls for electrical optimization
Load Flexibility	<ul style="list-style-type: none">• Onsite clean electricity generation (coupled with electrification only)• Thermal energy storage• Load shed/shift operational improvements



Eligible Applicants

- Existing industrial facilities located in California, utilities, equipment manufacturers, energy service providers, aggregators, and developers
 - Food and beverage industries receiving funding for the same project from the CEC's Food Production Investment Program (FPIP) are **ineligible** for funding from the INDIGO Program
 - Oil/gas production, processing, transport, gas efficiency **ineligible**
- Applicants must accept the INDIGO terms and conditions available online: <https://www.energy.ca.gov/funding-opportunities/funding-resources>
- Applicants are encouraged to register with the California Secretary of State, as all recipients must be registered and in good standing to enter into an agreement with the Energy Commission: <http://www.sos.ca.gov>



Application Attachments

Each Applicant must complete and include the following:

1. Project Overview (.docx)
2. Project Narrative (.docx)
3. Scope of Work (.docx)
4. Project Schedule (.xlsx)
5. Budget (.xlsx)
6. CEQA Compliance Form (.docx)
7. Commitment and Support Letters (.pdf)
8. INDIGO Benefits Calculator (.xlsx)
9. Project Team Form (.docx)
10. Applicant Declaration Form (.docx)



Project Overview Form (Attachment 1)

Summarizes basic information about the project:

- Technology focus
- Project location
- Funding requested & match
- Estimated energy usage, GHG emissions and reductions



Project Narrative (Attachment 2)

This information will be used to score your proposal

1. **Technical Merit** – Justification and supporting docs for TRL, scale, innovation
2. **Technical Approach** – methods, scope of work, risks, barriers, measurement and verification plan, CEQA, tech transfer plan
3. **Impacts and Benefits** – quantification of prior and anticipated emission reduction benefits, cost/benefit analysis
4. **Team Qualifications, Capabilities, Resources** – project team qualifications and resources
5. **Budget & Cost Effectiveness** – justify reasonableness of costs, budget forms
6. **Priority Populations & Community Engagement** – outline for direct engagement, proposed benefits, accountability checkpoints, community support letters
7. **CEC Funds Spent in CA** – maximize CEC funds spent in California
8. **Electric Grid Benefits** – reduce electric usage via energy efficiency, load management, electric generation/storage, etc.



Scope of Work (Attachment 3)

Tell us exactly what you are proposing to do in your project.

- Identify what will be delivered to the Energy Commission.
- Include in the technical tasks:
 - At least one product deliverable per task.
 - Address Project Requirements, Section II.B.
- Include in the **Project Schedule (Attachment 4)**:
 - Product deliverables that correspond with the Scope of Work.
 - Realistic dates on when product deliverables can be completed.



Budget (Attachment 5)

The budget forms identify how the Energy Commission funds and match funds will be spent to complete the project

- Subrecipients receiving \$100,000 or more Energy Commission funds must complete a separate budget form.
- Ensure that all rates provided are **maximum** rates for the entire project term.



CEQA Compliance (Attachment 6)

The CEQA compliance form facilitates CEC's evaluation of proposed activities under CEQA

- State and local agencies must assess potential environmental impacts of proposed actions
- Failure to **complete CEQA process in a timely manner** after NOPA may result in cancellation of a proposed award



Commitment and Support Letters (Attachment 7)

Project commitment and support letters

- Commitment letters are required for entities or individuals that are committing match funding, testing/demonstration sites, including the Applicant (prime).
- Support letters describe a project stakeholder's interest or involvement in the project.
- All applicants must submit **at least one** support letter.
- **Letters of support from CBOs local to proposed project must be included**
- Any project partners that will make contributions to the project (other than match and sites) must submit a commitment letter.
- Limit to two pages per letter, excluding the cover page.



Measurement & Verification Plan

Applicants must include estimates of GHG emissions and energy reductions in the application, and the actual reductions must be verified after the installation of the funded equipment

- The minimum period of measurement required is as follows:
 - **Pre-installation:** 4 months pre-installation on the equipment and systems to be retrofitted/replaced.
 - **Post-installation:** 12 months post-installation on the equipment/systems installed.
- **Load flexibility projects:**
 - Measurements will be based on load reduced during the net peak period for California Independent System Operator or the facility's electric utility
 - pre- and post-installation periods must include at least one annual peak demand period of June through September.



Quantification and Reporting Requirements

The California Air Resources Board (CARB) creates a quantification tool and reporting template for every CCI program

- Awarded projects are required to fill out the tool periodically
- The calculator tool must be filled out with each application

The quantification methodology, tool, and reporting template for INDIGO are in the "Clean Energy and Energy Efficiency" section of the CCI Quantification, Benefits, and Reporting Materials webpage: <https://ww2.arb.ca.gov/resources/documents/cci-quantification-benefits-and-reporting-materials>





INDIGO Benefits Calculator Tool (Attachment 8)

Applicants must use the INDIGO Benefits Calculator to estimate GHG emission reductions and co-benefits of proposed project

- uses methods described in the supporting INDIGO Quantification Methodology
 - MEASUR and AIRMaster+ software tools developed by DOE
 - CARB-developed emissions factors
- Step-by-step user guide linked within the calculator tool





How will my Application be Evaluated?

Application Screening

Admin Screening Process

- Energy Commission staff screens applications per criteria in Section IV.E.
- Criteria are evaluated on a pass/fail basis.
- Applicants must pass all screening criteria, or the application will be disqualified.

Some Reasons for Disqualification

- Application is not submitted by the specified due date and time.
- Application does not include one or more support letters.
- Application contains confidential material.



How will my Application be Evaluated?

Application Scoring

Evaluation committee applies the scoring scale to the scoring criteria.

- Applications must obtain a minimum passing score of 70 points for Criteria 1-6 in order to be considered for funding.
- Passing applications (score of 70 or more from Criteria 1-7) will be considered for bonus points. Criteria for bonus points include:
 - CEC Funds Spent in California
 - Electric Grid Benefits
- Review Section IV of the manual and ensure the application provides a clear and complete response to each scoring criteria.

Scoring Criteria	Max Points
1. Technical Merit	20
2. Technical Approach	20
3. Impacts and Benefits	20
4. Team Qualifications, Capabilities, and Resources	15
5. Budget and Cost-Effectiveness	10
6. Priority Populations and Community Engagement	15
Total	100
Minimum Points to Pass	70

Preference Points	Max Points
7. CEC Funds Spent in CA	10
8. Electric Grid Benefits	15
Total Bonus Preference Points	25



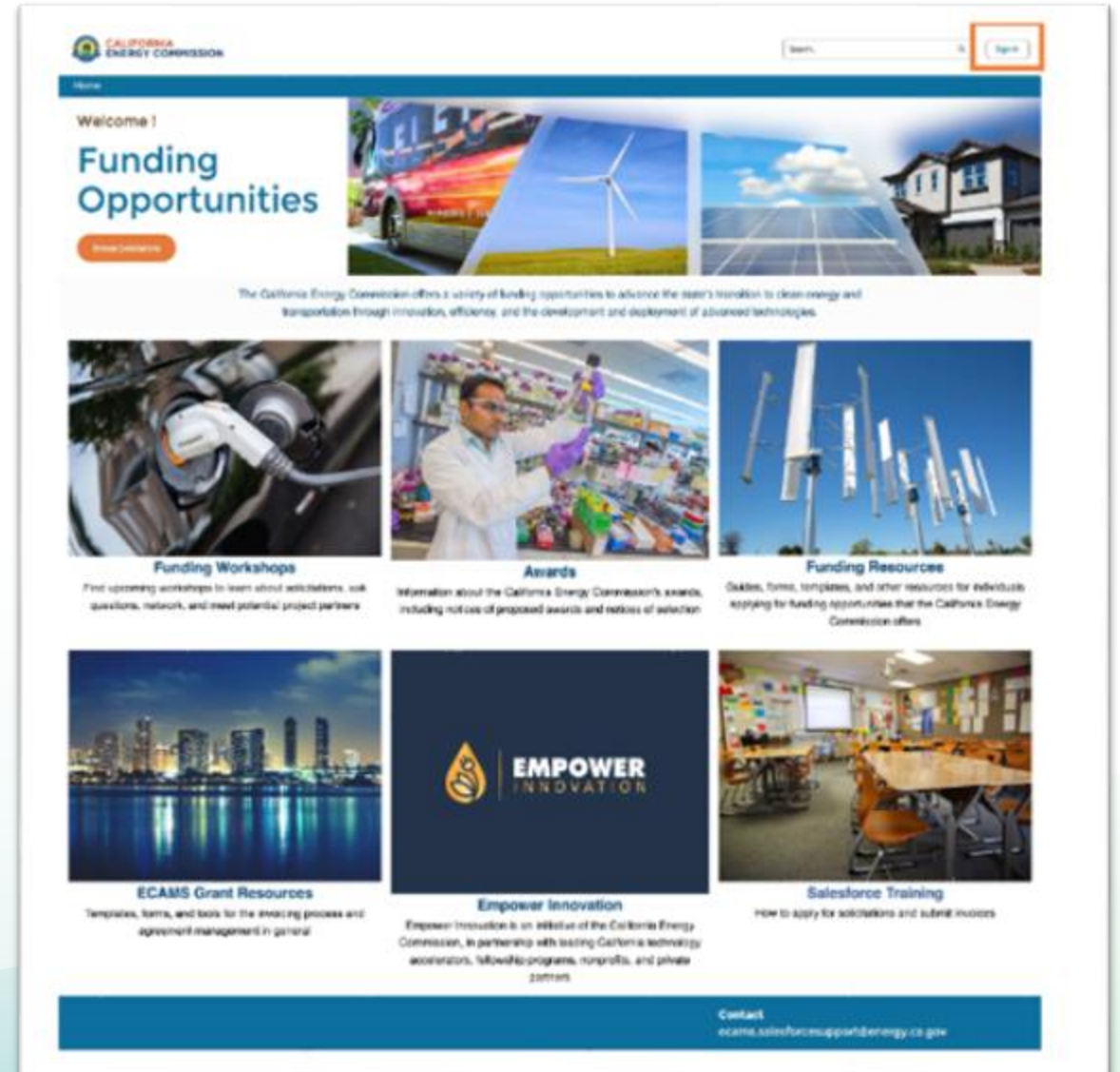
GFO Submission Requirements

- Applicants must have or must create a user account to submit a solicitation application. To create an account, please see the guidance **User Registration Instructions** at:

<https://www.energy.ca.gov/media/7893>

Note: One account manager per organization, but users can be added by account manager

- Applications must be submitted through the **Energy Commission Agreement Management System (ECAMS)** at: <https://ecams.energy.ca.gov/>





GFO Submission Requirements (2)

- For detailed instructions on application submittal, please see the *Applying for a Solicitation* at:
<https://www.energy.ca.gov/media/7956>
- Questions with the ECAMS system should be directed to: ECAMS.SalesforceSupport@Energy.ca.gov
- Electronic files, other than those requiring signatures, must be consistent with the specific file format provided in the solicitation.
- Application documents should meet formatting requirements, and page recommendations as specified in the solicitation manual.



Submission Warning

START THE PROCESS EARLY!

- Applications must be fully submitted BEFORE the deadline listed in the solicitation manual.
- The ECAMS system will reject applications submitted after the deadline.
- Applications in the process of being submitted prior to the deadline will NOT be accepted after the deadline.
- ECAMS support is ONLY available from 8am – 5pm Monday-Friday.



Next Steps After Grant Award

- **Notice of Proposed Award:** Shows total proposed funding amounts, rank order of applicants by project group, and the amount of each proposed award.
- **Agreement Development:** Proposal documents will be processed into a legal agreement.
- **Failure to Execute:** The Energy Commission reserves the right to cancel the pending award if an agreement cannot be successfully **executed in a timely manner** with an applicant.
- **Project Start:** Recipients may begin work on the project **only** after the agreement is fully executed (approved at an Energy Commission business meeting and signed by the Recipient and the Energy Commission).



Key Dates

Activity	Date
Solicitation Release	April 3, 2024
Pre-Application Workshop	April 26, 2024 at 10:00 a.m.
Deadline for Written Questions	<u>May 01, 2024 at 5:00 p.m.</u>
Anticipated Distribution of Questions and Answers	Week of May 13, 2024
1st Round Deadline to Submit Applications	<u>June 03, 2024 at 11:59 p.m.</u>
Anticipated NOPA Posting for Round 1	July 2024
Anticipated NOPA Posting for Round 2	TBD
Anticipated Energy Commission Business Meeting	45 days after each NOPA
Anticipated Agreement Start Date	45 days after Business Meeting
Anticipated Agreement End Date	No later than 06/30/2028



Questions and Answers

- Please chat your question in the Q&A window or raise your hand and you will be called on to unmute yourself. Please remember to introduce yourself by stating your name and affiliation. (Feature found under the Participants panel)
- Keep questions under 3 minutes to allow time for others.
- Note that our official response will be given in writing and posted on the GFO webpage.



Additional Questions

Please send all questions related to GFO-23-313 to

Kevyn Piper

Commission Agreement Officer

715 P Street, MS-18

Sacramento, CA 95814

Kevyn.Piper@energy.ca.gov

Deadline to submit questions:

Wednesday, May 1 5:00 PM



Thank You!

