

GFO-25-308 Pre-Application Workshop



Distributed Clean Hydrogen Production with Onsite End Use (H2ONSITE)

Energy Research and Development Division

Presenter: Rizaldo Aldas, Program Technical Lead

Date: June 16, 2026

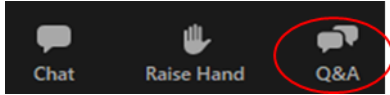


Agenda

Time	Item
10:00 am	Welcome and Introduction
10:05 am	Solicitation Background • Clean Hydrogen Program • Purpose of Solicitation • Available Funding
10:25 am	Application Requirements • Project Group Requirements • Attachments • Submission Process • Evaluation Process
11:00 am	Q&As
12:00 pm	Adjourn



Housekeeping

- This workshop will be recorded and posted to the CEC website.
- Attendees will be muted during the presentation. Please chat your question using the Q&A window. 
- Updates to solicitation documents will be posted at the Grant Funding Opportunity's webpage:
<https://www.energy.ca.gov/solicitations/2026-06/gfo-25-308-distributed-clean-hydrogen-production-onsite-end-use-h2onsite>



Commitment to Diversity

The Energy Commission adopted a resolution strengthening its commitment to diversity in our funding programs. The CEC 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!

Participation Survey

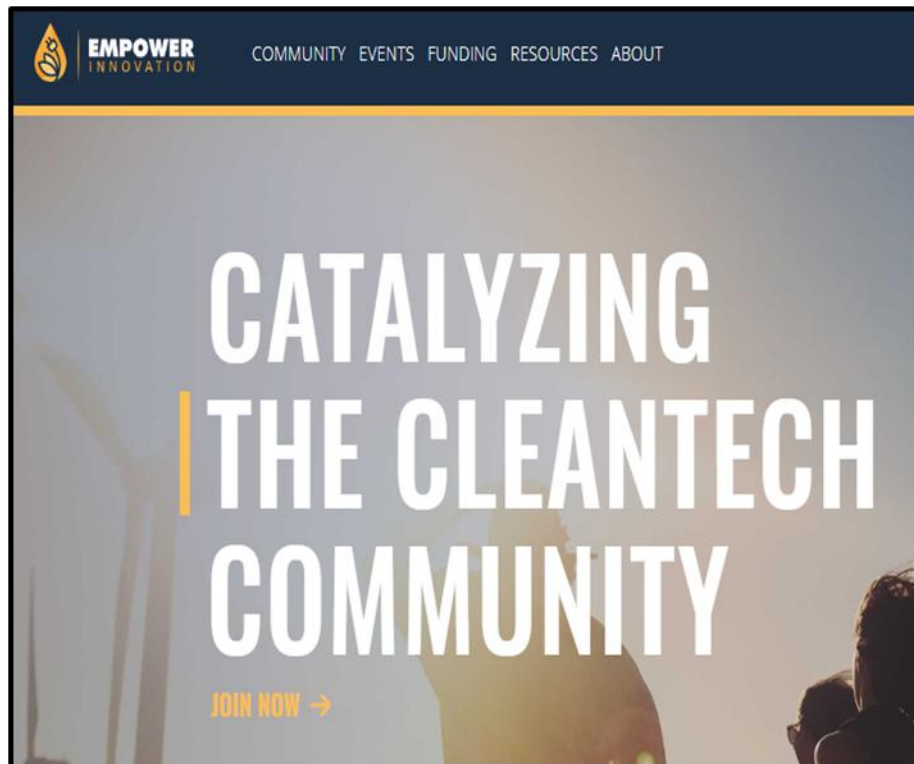
Survey responses will be summarized anonymously to track attendance of underrepresented groups in our workshops for public reporting purposes.

Online participants, please use this link:
<https://forms.cloud.microsoft/g/Fi44m08n7g>

Thanks!



Connect With Us





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.

<https://www.empowerinnovation.net/en/custom/funding/view/53837>



EmpowerInnovation.net





Clean Hydrogen Program Background

- This solicitation will award and fund projects from the **Clean Hydrogen Program**, established and administered by the CEC per AB 209 (2022) adding Chapter 7.6 (including Article 4. Hydrogen Program) to Division 15 of the Public Resources Code.
- Provide financial incentives to eligible in-state projects that produce, process, deliver, store, or use clean hydrogen.
- Projects receiving financial incentives must:
 - Reduce sector-wide emissions
 - Benefit geographically diverse areas of the state
 - Maximize air quality, equity, health, and workforce benefits



California Climate Investments (CCI)

- The Clean Hydrogen Program is part of California Climate Investments, which uses billions of Cap-and-Invest dollars to fund projects that reduce harmful emissions, protect public health, strengthen local economies, and support natural environments.
- With a strong focus on communities most impacted by pollution and limited access to resources, California Climate Investments helps build a more equitable and sustainable future.



To learn more:
<https://www.caclimateinvestments.ca.gov/>



Policy Drivers

AB 32	Reduce GHG emissions to 1990 levels by 2020.
SB 32	Reduce GHG emissions to 40% below 1990 levels by 2030.
SB 1020	Renewable and zero-carbon resources supply 100 percent of all retail sales of electricity by 2040.
SB 1075	Study and model potential growth for hydrogen and its role in decarbonization.
AB 209	Requires the CEC to establish and administer several clean energy programs, including the Clean Hydrogen Program.



Purpose of Solicitation

- Fund the demonstration of distributed-scale hydrogen production facilities that are co-located with storage and end use to reduce clean hydrogen production costs, reduce retail prices, and decarbonize hard-to-electrify sectors.
 - Clean hydrogen is defined as hydrogen produced from water using eligible renewable energy resources, as defined in Public Utilities Code 399.12, or produced from these eligible renewable energy resources.



Available Clean Hydrogen Program Funding

Project	Available Funding	Minimum Award Amount	Maximum Award Amount
Distributed Clean Hydrogen Production with Onsite End Use	\$4,000,000	\$2,000,000	\$4,000,000



Match Funding

- 50% of match funding is required.
- 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 for more details on match funding.



Unallowable Costs

CEC funds **cannot** be used for:

- Power acquisition of onsite renewable energy resources and other costs for installing or operating eligible renewable energy resources;
- Existing onsite eligible electricity resource equipment;
- Permit costs and expenses associated with obtaining permits; and
- Feedstocks, such as water.



Distributed Clean Hydrogen Production with Onsite End Use

- Production, storage, and end use on the same property, either at new facilities or at existing hydrogen production facilities that will be scaled up.
- Focus on decarbonizing hard-to-electrify sectors.
- Advance technology readiness from TRL 6 to TRL 7+.
- Demonstrate scalability and adoption potential within California.
- Bring direct benefits to local communities (e.g., reduce emissions, reduce waste, and increase economic development)



Project Requirements

- Produce an annualized average of up to 5 metric tons of clean hydrogen per day.
- Use 100% renewable energy resources onsite, a PPA, or a combination of these to source renewable energy in California.
 - Projects that have a greater proportion of their energy needs met by onsite renewable generation will receive a higher score.
- Use water not otherwise intended for human consumption (e.g., project uses purified reclaimed, recycled, or repurposed wastewater for water consumption).
- Demonstrate the system for a minimum of 10 cumulative months.
- Actively solicit, consider, and integrate community input and engagement and create tangible benefits to local communities.



Eligible End Uses

Eligible	Ineligible
• Transportation sector, particularly medium-duty and heavy-duty refueling stations, ports, and logistics centers • Hard-to-electrify industrial applications • Power generation	• Hydrogen blending • Petroleum refining • Applications that can be easily electrified • Applications within oil refineries



Examples of Possible Projects

- PEM electrolyzer powered by solar PV producing up to 5 metric tons of hydrogen per day for onsite hydrogen refueling of long-haul heavy-duty trucking.
- Onsite electrolysis system that can produce up to 5 metric tons of hydrogen per day for fuel cell electricity generation or long-duration storage solutions for local communities, thereby enhancing energy resiliency.
- A biomass-to-hydrogen production facility that can produce up to 5 metric tons of hydrogen per day for either powering local communities or be stored. The facility will make use of locally-sourced excess agricultural or forest biomass.



Target Metrics

- ❖ Note that these metrics are desired goals that projects should be aiming for but are not strict requirements.

Metric	Goal
Hydrogen Production Costs	<\$2 per kg of hydrogen by 2031 at point of production
Production System Efficiency	Maximize system efficiency, actual efficiencies to be included in project reports
Carbon Intensity	0 kg CO ₂ e per kg H ₂ lifecycle emissions
Direct Water Consumption	9 - 13.5 kg water per kg of hydrogen produced
Hydrogen Purity	>99.00% (for all projects); >99.99% (fuel cell end use)
Hydrogen Leakage	Meet baseline and minimized leakage throughout hydrogen system
Community Engagement	Model for onsite hydrogen facility with community partners and workforce development



Hydrogen Safety

- Consult with recognized hydrogen safety experts or organizations prior to application submission.
- Describe preliminary hydrogen safety discussions.
- Include a support letter verifying preliminary engagement.
- Recipient must commit to conducting safety plan review, early design review, and safety evaluations.
- Consider the services of the Hydrogen Safety Panel.
 - ❖ See the **Hydrogen Safety Panel** webpage for more information at <https://h2tools.org/hsp>
 - ❖ See also the **Center for Hydrogen Safety** (CHS) website at <https://www.aiche.org/chs> and the *Hydrogen Safety Considerations for California Report* at <https://californiahydrogen.org/wp-content/uploads/2025/10/CHBC-CHS-2025-Hydrogen-Safety-Report-Final.pdf>



Additional Requirements for CCI

- Report on the following items based on the guidance developed by CARB for CCI.
 - Annual GHG emissions reductions and other environmental impacts.
 - Benefits to Disadvantaged Communities and Low-Income Communities, if applicable, using CCI benefit assessment tools.
 - Annual employment data using the CCI jobs reporting template.



Eligible Applicants

- This is an open solicitation for public and private entities.
- Applicants must accept the Clean Hydrogen Program terms and conditions.
 - T&Cs 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 Requirements

Each Applicant must complete and include the following:

1. Application Screening Form (.pdf)	9. Past Projects Information Form (.docx, .pdf)
2. Executive Summary (.docx)	10. Commitment and Support Letters (.pdf)
3. Project Narrative (.docx)	11. Project Performance Metrics
4. Project Team (.docx, .pdf)	12. Applicant Declaration (.docx)
5. Scope of Work (.docx)	13. <i>(Optional) References for Calculating Energy End-Use and GHG Emissions</i>
6. Project Schedule (.xlsx)	14. <i>(Optional) Community Engagement, Benefits, and Impacts Reference</i>
7. Budget (.xlsx)	15. <i>(Optional) Appendix G: Environmental Checklist Form</i>
8. CEQA Compliance Form (.docx)	16. <i>(As Applicable) Special Terms and Conditions for California Native American Tribes and Tribal Organizations With Sovereign Immunity</i>



Project Narrative (Attachment 3)

- This is your opportunity to explain the entirety of the project. The narrative should explain:
 - Why is your project necessary and important to California?
 - What is your project approach and how will each major task be implemented?
 - How will the project be completed in the term proposed
 - Does the project have the appropriate resources (team and budget) to complete successfully?
 - How will the project outcomes benefit California?
 - Address the requirements as described in Section I.C.

Respond to the scoring criteria described in Section IV.F.



Scope of Work (Attachment 5)

- Tell us exactly what you are proposing to do in your project.
- Identify what will be delivered to the Energy Commission.
- Be sure to include in the technical tasks:
 - At least one product deliverable per task.
 - Address requirements in Section I.C. under Project Focus.
- Be sure to include in the Project Schedule (Attachment 6):
 - Product deliverables that correspond with the Scope of Work.
 - Realistic dates on when product deliverables can be completed.



Budget (Attachment 7)

- 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** estimated rates for the entire project term and any potential increases are included.
- Travel Restrictions:
 - CEC funds should be limited to project task specific in-state travel.
 - Travel to conferences are generally not considered applicable travel for projects and should not use CEC funds.



Commitment and Support Letter Forms (Attachment 10)

- Follow guidelines provided for 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.
- Match funding must be supported by a match fund commitment letter(s).
- 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.



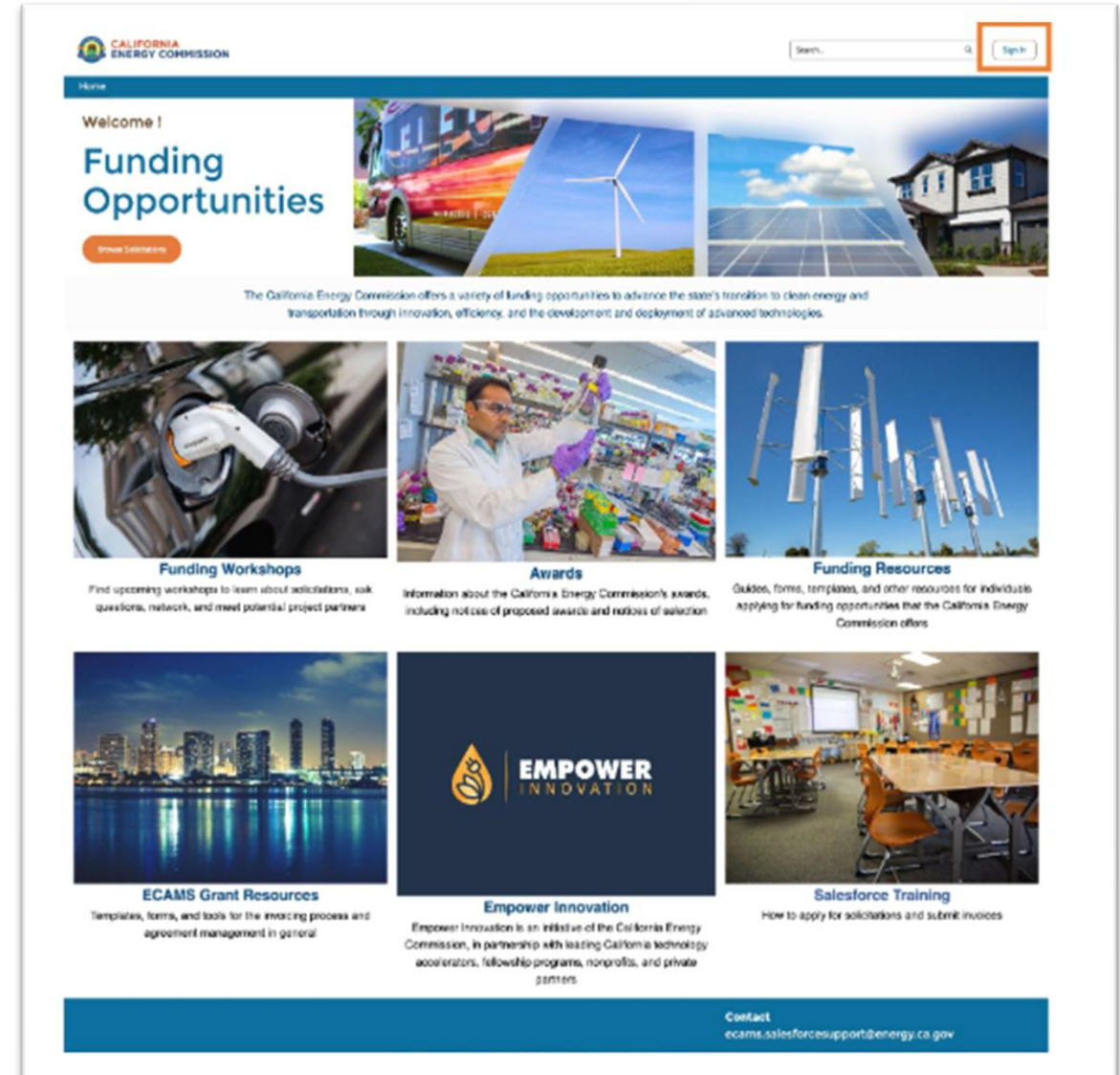
GFO Submission Requirements

- 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](#)

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

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

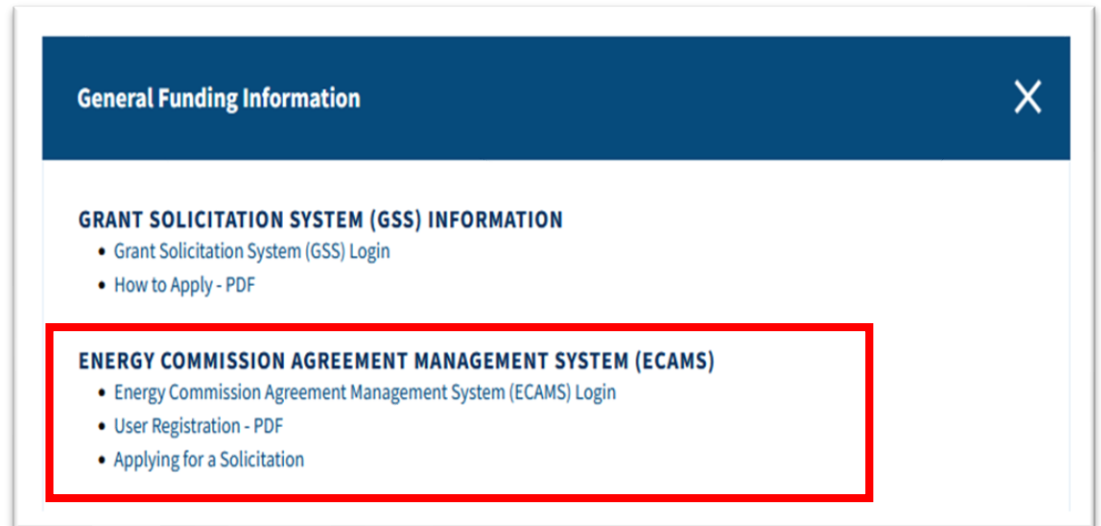
- Applications must be submitted through the Energy Commission Agreement Management System (ECAMS) at: <https://ecams.energy.ca.gov/>





GFO Submission Requirements (cont.)

- For detailed instructions on application submittal, please see the *Applying for a Solicitation* at: <https://www.energy.ca.gov/media/7956>
- Both referenced guidance documents are available at: <https://www.energy.ca.gov/funding-opportunities/funding-resources> under General Funding Information.
- Questions with the ECAMS system should be directed to: ECAMS.SalesforceSupport@Energy.ca.gov





GFO Submission Requirements (part 3)



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.



Attachments requiring signatures (Application Form and Support/Commitment Letters) may be signed, scanned, and submitted in PDF format.



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.



Application Submission

- Register as a New User (if applicable)
- Log In
- 4-Step Application Submittal Process:
 1. Select Solicitation
 2. Enter Application Information
 3. Upload Files
 - Select documents for upload
 - Tag files with document type
 - Designate confidential documents (if applicable)
 4. Review and Submit
 - Confirmation from ECAMS system that submission was successful

All steps must be complete BEFORE the submission deadline

Application Reminders



We recommend you carefully review your application before submission.

- ☐ Verify that all necessary documents have been uploaded.
- ☐ Verify that all documents uploaded are the accurate version you intend to submit as your final.
- ☐ Verify that your documents are not marked "confidential" unless the solicitation allows specific material to be confidential. Most solicitations do not allow submission of confidential information.
- ☐ Verify that your match commitment letters accurately reflect the match amounts included in your budgets, including the match provided by the prime applicant.
- ☐ Verify that support and commitment letters are included, if required.
- ☐ Verify that amounts entered within the system's budget (if any) concur with information included on uploaded budget worksheets.



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 63.00 points for Criteria 1-4 in order to continue evaluation.**
- **Applications must obtain a minimum passing score of 105 points for Criteria 1-8 in order to be considered for funding.**
- **Review Section IV of the manual and ensure the application provides a clear and complete response to each scoring criteria.**

Scoring Criteria	Maximum Points
1. Technical Merit	15
2. Technical Approach and Project Readiness	40
3. Impacts and Benefits for California	25
4. Team Qualifications, Capabilities, and Resources	10
5. Budget and Cost-Effectiveness	15
6. CEC Funds Spent in California	10
7. Use of On-Site Renewable Energy Resources	10
8. Benefits to Communities and Localized Health Impacts	25
Total	150
Minimum Points to Pass	105



Evaluating Criterion 8

Scoring Criteria	Maximum Points
8. Benefits to Communities and Localized Health Impacts	
8.1. Localized Health Impacts	15
8.2. Technology Replicability	5
8.3. Project Support Letters	5
Total Possible Points for Criterion 8	25
Total Possible Points for Proposal	150



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.

Applicant Debriefings: Applicants may request a debrief of their application evaluation within 30 days of the NOPA posting.

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 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	June 5, 2026
Pre-Application Workshop	June 16, 2026 at 10:00 a.m.
Deadline for Written Questions	June 23, 2026 at 5:00 pm
Anticipated Distribution of Questions and Answers	Week of July 23, 2026
Deadline for ECAMS Submission Support	Ongoing until August 19, 2026 at 5:00 pm
Deadline to Submit Applications	August 19, 2026 at 11:59 pm
Anticipated Notice of Proposed Award Posting	September 30, 2026
Anticipated Energy Commission Business Meeting	December 9, 2026
Anticipated Agreement Start Date	January 18, 2027
Anticipated Agreement End Date	March 29, 2030



Questions and Answers



Please chat your question into the Q & A window or raise your hand and you will be called on to unmute yourself. Please remember to introduce.



Keep questions under 2 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-25-308 to:

Brad Worster

Commission Agreement Officer

715 P St., MS-1

Sacramento, CA 95814

brad.worster@energy.ca.gov

Deadline to submit questions:

Tuesday, June 23rd 5:00 PM



Thank You!