# Questions and Answers

**GFO-24-306**

**Applications of Open Data to Support Climate Resilience**

**in California’s Electricity Sector**

**March 17, 2025**

The following answers are based on California Energy Commission (CEC) staff’s interpretation of the questions received during the pre-application workshop and those submitted in writing prior to the deadline of 5 p.m. (PST) on February 27, 2025. It is the Applicant’s responsibility to review the purpose of the solicitation and to determine if the proposed project is eligible for funding by reviewing the Eligibility Requirements within the solicitation manual. The CEC cannot give advice as to whether a particular project is eligible for funding, because not all proposal details are known.

## General/Administrative Questions

**Q1: Can you expand upon the meaning of Scoring Criteria 6: Funds Spent in California?**

A1: As stated in Part I, Section L of the Solicitation Manual, "Spent in California" means that:

(1) Funds in the "Direct Labor category and all categories calculated based on direct labor (e.g., fringe benefits, indirect costs and profit) are paid to individuals that pay California state income taxes on wages received for work performed under the agreement. Payments made to out-of-state workers do not count as “funds spent in California.” However, funds spent by out-of-state workers in California (e.g., hotel and food) can count as “funds spent in California.”; AND

(2) Business transactions (e.g., material and equipment purchases, leases, and rentals) are entered into with a business located in California.

(3) Total should include any applicable, subrecipients, sub-subrecipients, and vendors.

Airline ticket purchases for out-of-state travel and payments made to out-of-state workers are not considered funds “spent in California.” However, funds spent by out-of-state workers in California (e.g. lodging) and airline travel originating and ending in California are considered funds “spent in California.” A business located in California means: 1) businesses registered with Secretary of State, AND 2) transaction is with a location in California that is directly related to the grant project (e.g., direct purchase of material and equipment to be used in the grant) and results in the support of California business and jobs.

* Example 1: CEC funds will be spent on temperature sensors. The temperature sensors are manufactured in Washington. The grant recipient orders the temperature sensors directly from a CA based supply house. The invoice shows that the transaction occurred with the CA based supply house. This transaction is eligible and can be counted as funds spent in CA.
* Example 2: CEC funds will be spent on temperature sensors. The temperature sensors are manufactured in Washington. The grant recipient orders the temperature sensors directly from Washington. The manufacturer has training centers in CA that instructs purchasers on how to use the sensors. The invoice shows that the transaction occurred in Washington. This transaction is not eligible and cannot be counted as funds spent in CA.

**Q2: Has a CAM been selected for this solicitation?**

A2: A Commission Agreement Manager (CAM) will be assigned to each of the awarded agreements. These CAMs will be identified after the Notice of Proposed Award has been issued.

**Q3:** **Will there be only one recipient/project per project group (i.e., Group 1, Group 2, Group 3), or will there be multiple funded projects per group?**

A3: The CEC expects to award one application per group. The CEC reserves the right to: increase or decrease the available funding and the minimum and maximum award amounts; allocate any additional or unawarded funds to passing applications, in rank order; reallocate funding between any of the groups; or reduce funding to an amount deemed appropriate if the budgeted funds do not provide full funding for agreements.

**Q4:**  **How can I find collaborators in California to partner with?**

A4: Prospective applicants looking for partnering and collaboration opportunities for this solicitation should register on the CEC’s Empower Innovation website at: www.empowerinnovation.net.

**Q5: What does ‘transfer to CEC’ mean for websites and tools, etc.?**

A5: Successful applicants must be able to maintain any websites or tools developed through the performance period of the agreement. It is also expected that the recipient will include dedicated funds in the budget to support transfer of these websites and tools to CEC, or to a CEC-designated recipient, near the end of the agreement term. The CEC or a CEC-designated recipient will then provide for continued hosting, maintenance, and/or development.

**Q6: Are there examples of previous successful applications available?**

A6: Below and in the footnotes of the Solicitation Manual Addendum 1, links to publicly available materials, including Scopes of Work and Budgets, for CEC grants EPC-21-038 and EPC-18-026 are available. While those two grants inform the scope of this solicitation, this solicitation is unlike previous grant funding opportunities related to Cal-Adapt or wildfire planning. For example, this solicitation makes available morefunding for the Cal-Adapt web application than was provided through previous grant funding opportunities, and the solicited wildfire resources have not previously received standalone funding. For this reason, there is no example of a prior successful application for the efforts anticipated by the current (GFO-24-306) grant funding opportunity.

* EPC-18-026 CEC Business Meeting materials: <https://web.archive.org/web/20230726112749/https:/www.energy.ca.gov/filebrowser/download/928>
* EPC-21-038 CEC Business Meeting materials: <https://www.energy.ca.gov/filebrowser/download/4286?fid=4286#block-symsoft-page-title>

**Q7: Could you share more about the successful implementation criteria and further involvement?**

A7: The scoring criteria are detailed in the Solicitation Manual (Part IV Section F), which describes what CEC is looking for in terms of technical merit, technical approach, team qualifications, and other criteria. Each applicant should study the Project Focus Section (Part I Section C) of the respective group it is applying for to ensure its application is responsive. Regarding “implementation criteria,” another component of the application package is the Project Performance Metrics (Attachment 10), where the applicant identifies metrics by which it proposes to measure the success of the proposed project. The applicant is responsible for proposing project performance metrics that will capture the impacts and outcomes of the project.

**Q8: After successful implementation of this project, what is the plan for scaling or commercialization of the project products?**

A8: The intent of this solicitation is to enable open access to best-available scientific and data-driven resources that can support electricity sector resilience. For this reason, there is no expectation that the project products will be commercialized.

**Q9: The Solicitation Manual states in the introduction that “Projects funded by this solicitation will deliver open-source, best available climate and wildfire tools…”  Does the CEC require that all underlying source code and/or development tools be available to the general public for use following the project?**

A9: Yes, the tools and all underlying source code and data developed for this solicitation must remain open source after the completion of the project. The products developed under this solicitation will be transferred to the CEC or its designee for continued public availability, operations, and maintenance at the end of the agreement term.

**Q10:**  **Regarding transfer of technology and web platforms: over what time horizon does the recipient need to anticipate supporting this past the end of the funded period of performance?**

A10: The recipient is not expected to support the web platforms beyond the period of performance. CEC’s relationship with a grant recipient for the relevant Scope of Work ends when the performance period ends. See question 5 for further information on transferring project deliverables to the CEC or a CEC-designated recipient.

**Q11:** **Our proposal would involve an unorthodox new type of wind conversion system. We would be asking for funds to conduct a scaled model prototype investigation. We are confident that this system would have a resounding impact on California's energy resilience. Would this be applicable to this solicitation?**

A11: No. The purpose of GFO-24-306 is to fund projects that support electric sector resilience through the development of web-based tools that enable access to best-available climate and wildfire data. It does not include funding for prototype development. Applicants must be responsive to the requirements articulated in the Project Focus Section (Part I Section C) for the relevant group.

## Technical Questions

### **Group 1: Development of Tools and Visualizations for an Updated Cal-Adapt Web Application**

**Q12:** **Instead of utilizing the Fifth Assessment Data in this project for developing data processing tools, can we rely on the data that we collected in the past with our sensors for the development of the Cal-Adapt tools if we can demonstrate that the developed tools are capable of processing data in a similar magnitude of the Fifth Assessment Data? Or can a combination of the Fifth Assessment Data and data measured by our own be utilized in this project?**

A12: The intent of Group 1 is to enable user-friendly access to, and visualization of, data portraying projected climate developed to support California’s Fifth Climate Change Assessment. Sensor data may provide a helpful complement to projected climate data but would not suffice to meet the requirements of Group 1. The applicant should keep in mind the specific project focus and requirements for Group 1, as well as the scoring criteria, when preparing a project proposal. If the applicant can meet the criteria, additional data (including, for example, sensor data) could be part of the project. It is the responsibility of the applicant to propose and justify a credible approach to meeting project requirements goals.

**Q13:** **Does CEC anticipate employing staff members with the expertise to maintain the Cal-Adapt Explorer and web resources following the conclusion of the project, or will the Group 1 contractor be expected to build these skills in the CEC or its designee?**

A13: Near the end of the agreement, the recipient needs to have budgeted for the transfer of web resources and tools they have developed to the CEC, or to a CEC-designated recipient for future work. This would involve, at a minimum, basic orientation to the platform’s design and functions as well as provision of documentation. However, the recipient is not expected to transfer general web development expertise or skills to CEC staff or the designee’s staff as part of this process. Rather the recipient’s role would be to provide sufficient information for a skilled, trained, well-resourced team to carry the effort forward.

**Q14:** **For improvements to Cal-Adapt under Group 1, has the CEC pre-identified priority improvements from the March 2020 Final Project Report or June 2024 Final Project Report or otherwise?**

A14: The recipient’s engagement efforts in the project will result in identification and prioritization of existing Cal-Adapt tools that merit redevelopment to portray California’s Fifth Climate Change Assessment data. These results may also be informed by the above-mentioned reports, which were produced by prior recipients. The Local Climate Change Snapshot tool has been touted as a highly useful resource on various occasions and by various entities.

**Q15:** **It seems like the current Cal-Adapt development team would have to be part of this project. Is that team within CEC, or is it the Berkeley team that still develops/maintains it?**

A15: No, there is no requirement that the current Cal-Adapt development team would be part of the project. The current Cal-Adapt development team (recipient of EPC-21-038) is Eagle Rock Analytics, Inc., with University of California, Berkeley’s Geospatial Innovation Facility as a major subrecipient. As noted in the solicitation, the awarded Group 1 agreement from this solicitation and EPC-21-038 will have some overlap in their period of performance, during which the EPC-21-038 team will provide the Group 1 recipient with access to the cal.adapt.org domain. The data and documentation associated with the web application are openly available for the Group 1 recipient’s use.

As noted in Group 1 requirements (Part I Section C of the Solicitation Manual), the applicant must describe (in the Budget and Cost-Effectiveness section of the Project Narrative) any anticipated costs associated with the transfer process as well as any dedicated funding that may be needed to support interactions with other grant recipients that work on Cal-Adapt. There is no requirement that the applicant include any specific party as part of the project. However, if an entity’s services are required, they must be budgeted for. For example, any proposed consulting or technical support from the EPC-21-038 team beyond what is included in its Scope of Work must be provided through the Group 1 recipient’s budget.

**Q16:** **It was mentioned that Amazon Web Services (AWS) hosts 2 petabytes (PB) of data. It was also mentioned that the new data will be two orders of magnitude bigger. Does that mean 200 PB will need to be hosted?**

A16: No. The reference to two petabytes of data approximates the size of climate data associated with California’s Fifth Climate Change Assessment, which is two orders of magnitude larger than projected scenarios that were produced in support of the California’s Fourth Climate Change Assessment.

**Q17:** **Would Amazon continue to support data storage after January 2026? If not, would the cost to store the data be covered under the project budget?**

A17: Currently, Amazon is providing Amazon Web Services (AWS) storage free of charge under the Amazon Sustainability Data Initiative (ASDI). As articulated in the Solicitation Manual, the applicant is asked to develop a strategy for long-term data storage management. In the event that the generous AWS match contribution is not renewed beyond January 2026, the expenses for data storage would be proportionally borne by the recipient of Group 1 and by recipients of other active EPIC awards for which match funds were previously relied upon to support data storage.

**Q18:** **Is there budget for ongoing implementation of the platform? Who is expected to host - awardee or State?**

A18: There is no sustained budget for ongoing implementation of Cal-Adapt. Since its inception approximately 15 years ago, Cal-Adapt has been funded by a series of competitive research and development grants, primarily from CEC. For all groups (1, 2, and 3), the recipient is responsible for hosting, maintaining, and operating the tools and resources throughout the duration of the agreement performance period. Near the end of the agreement, the recipient needs to have budgeted for the transfer of the resources it has developed to CEC or a CEC-designated recipient for future work. See question 5 for further information on transferring project deliverables to the CEC or a CEC-designated recipient.

### **Group 2: Wildfire Planning Tool Leveraging Long-Term Scenarios Developed for California’s Fifth Climate Change Assessment**

**Q19:** **Will a tool to assess wildfire impact on transmission lines and predict overload or outage scenarios fall within the scope of Group 2?**

A19: Applicants will select and justify use cases that the proposed tool can serve, either in their applications or as a task in their projects. The Solicitation Manual does not prescribe or limit these use cases as long as they serve the electricity sector and are responsive to input received in the engagement process proposed in the application.

**Q20:** **Can enhancements to existing datasets be budgeted for in this agreement?**

A20: If an applicant wishes to propose data enhancements, it should make clear how that aligns with the research purpose of the solicitation while ensuring that all expectations for Group 2 are sufficiently met as scoped in Part I Section C of the Solicitation Manual.

**Q21:** **One of the requirements in the solicitation listed is that the data visualization that is generated uses the data from EPC-18-026. The topics of wildfire and climate change are rigorously being engaged at present, and there is lot of research in this space. Is there opportunity to submit a proposal that uses an alternative dataset representing future projections of wildfire risk in California? Or must the recipient use the data generated in EPC-18-026?**

A21: Revisions articulated in Solicitation Manual Addendum 1 clarify that the intent of Group 2 is to portray long-term wildfire risk *based on CEC-funded climate-related data products*, which include, *but are not limited to*, long-term wildfire risk scenarios produced by EPC-18-026. An alternative publicly available dataset for long-term wildfire risk that aligns with underlying CEC-funded climate-related data would similarly qualify. It is the applicant's responsibility to propose and justify a credible approach that meets the requirements and purpose of Group 2.

### **Group 3: Integration of Climate-Informed Science into Open Near-Term Wildfire Modeling Platform**

**Q22:** **Will wildfire-related air quality forecasts and modeling fall within the scope of the Group 3 topics?**

A22: Wildfire-related air quality forecasts are not the proposed focus of Group 3. However, if an applicant meets the Group 3 requirements of the solicitation and *also* includes air quality forecasts, its proposal will be considered.

**Q23:** **Can enhancements to existing datasets be budgeted for in this agreement?**

A23: For Group 3, the recipient is expected to continue the advancement of wildland fuels data. If an applicant wants to propose other data enhancements, it should make clear how that fits in with the research purpose of the solicitation while ensuring that all expectations for Group 3 are sufficiently met as scoped in Part I Section C of the Solicitation Manual.