See the formatting recommendations in Part III, Section A.

The Project Narrative must respond to each sub-criterion below.

1. **Technical Merit and Need**
2. Describe the facility including food products produced and the function the affected equipment or systems serve in the facility.
3. What technology(ies) will be implemented?
4. Describe how the technology(ies) will reduce greenhouse gas (GHG) emissions, energy reductions, and provide grid support in each plant identified in the application.
5. Justify why the proposed technology(ies) meets all the following:
* Commercially available.
* Energy efficient equipment that is drop-in ready replacement equipment or an addition to current systems.
* Result in greater GHG emission reductions, energy efficiency, and/or grid support than current best practices or industry-standard equipment.
* Provide a clear and concise description of the technological or scientific knowledge advancement, and/or innovation that will overcome barriers to achieving the State’s statutory energy goals.

**OR**

* Commercially available cutting-edge emerging technology, not widely used in California, not drop-in ready replacement equipment or an addition, and how it will lead to technological advancement.
* **Has a minimum technology readiness level 8 or higher that has been commercially proven elsewhere in similar food processing facilities with documented results of continued performance of at least 12 months.**
* Result in greater GHG emission reductions, energy efficiency, and/or grid support than current best practices or industry-standard equipment.
* Provide a clear and concise description of the technological or scientific knowledge advancement, and/or innovation that will overcome barriers to achieving the State’s statutory energy goals.

1. **Technical Approach**
2. Describe the technique, approach, and methods to be used in performing all work.
3. Summarize the key tasks from the Scope of Work (Attachment 3) and discuss how past experiences will lead to the successful implementation of the project.
4. Identify and discuss the factors critical for success including:
* Risks, barriers, environmental permitting requirements, California Environmental Quality Act (CEQA), food processing scheduling, funding, and other limitations and how these will be mitigated to complete the project within the grant term. Discuss any outstanding permitting issues (e.g., local air district), 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) can handle and deal with events such as COVID-19, include impact on energy use, operating schedule and budgets, staffing, volume, and type of products produced, and any other impacts that could affect the successful implementation of the proposed project. Discuss how these impacts have been handled in the past or will be mitigated to improve the chance of project success.
* How the facility(ies) will overcome potential equipment supply chain, lack of availability of equipment installers, increasing equipment cost and other project impacts.
1. What is the measurement and verification (M&V) plan for determining how GHG emission reductions, energy savings, grid support, and other benefits will be determined and verified once the funded equipment or systems are installed? Include a discussion of the minimum M&V duration needed to justify emission/energy reductions and how this would be accommodated during processing periods.
2. Provide team qualifications, capabilities, and resources.
* Explain the team structure and how various tasks will be managed and coordinated. Include all prime and subcontractor key personnel along with M&V key members.
* Describe the facility(ies) infrastructure and resources available that directly support the project.
* If the applicant is the operator of the food processing facility(ies) but not the building owner, explain the relationship to the building owner and the disposition of any grant funded equipment.
* Note: Evaluations of ongoing or previous California Energy Commission-funded projects, including project performance by applicant and team members, will be considered in scoring this criterion.
1. **Impacts and Benefits**
2. For each facility, provide all calculations and assumptions for the following:
* Quantitative estimates of GHG emissions emitted by existing equipment or systems to be affected or replaced due to proposed project.
* Quantitative estimates of annual electricity usage, energy costs, and peak loads by existing equipment or systems to be affected or replaced due to the proposed project.
* Quantitative estimates of the annual GHG emission reductions in metric tons of CO2 reduced (CO2e) as a result of the technologies being implemented.
* Quantitative reduction estimates of electricity usage (kWh), energy costs, and peak load and/or shifting (kW) as a result of the technologies being implemented. Ensure to include any infrastructure reliability and resiliency benefits as well.
* Quantitative estimates of other potential benefits, such as fossil fuel and thermal savings (kWh, Btus, therms), other quantifiable air emission reductions (e.g., criteria pollutants such as NOx), water savings, system resiliency, safety increases, and any other quantifiable co-benefits[[1]](#footnote-2).
* Provide justification for all assumptions and why they are reasonable.

# **PROJECT NARRATIVE FORM**

* Summarize information in item 3a by completing the Food Production Investment Program Benefits Calculator (Attachment 8) – the latest FPIP Benefits Calculator Tool is available for download at: <https://www.caclimateinvestments.ca.gov/tools>.
1. What is the ratio of dollars spent to potential GHG emission reductions for facility(ies)? This ratio should be the requested amount (excluding match funds) from Attachment 1 divided by the estimates of GHG emissions. Show all assumptions and calculations.
2. What is the timeframe, assumptions, and calculations for the estimated benefits, and explain why they are reasonable. Provide all calculations and summarize results in Attachment 8.
3. **If required in the technology description column in Section II.B.2, provide the requested information, such as, an economics/costs plan with the required detail.**
4. **Market Potential and Information Sharing**
5. What are the other industrial sectors/facilities in California that can use the technology(ies) being funded, including size and penetration or deployment rates, and underlying assumptions, timeline, and assumptions used to support the estimates of market potential?
6. Explain how the knowledge gained from the project will be shared with others.
7. Discuss how the facility has previously shared information on energy projects implemented with food processors, such as at meetings and workshops.
8. **California-Based Vendors**
* Discuss whether the equipment listed in Attachment 5 will be purchased from a California-based vendor, including the following:
* Estimated equipment cost from California-based vendors
* Total equipment cost (California and non-California-based vendors)
1. **Priority Populations**

Explain how the project(s) meet the requirements of Section III.C.2.a in the Solicitation Manual for priority populations. All facilities listed in the application must meet the requirements for priority populations in order to get points for this criterion. Complete the following for each facility in the application:

* Step 1: Identify the Priority Population. The entire project must be located within the priority population(s) that benefit from the project. Visit the California Climate Investment Resources Portal for the Priority Populations Map at [www.caclimateinvestments.ca.gov/resource-portal-priority-populations/#map](http://www.caclimateinvestments.ca.gov/resource-portal-priority-populations/#map).
* Step 2: Identify a Need. The project must identify an important community need for the priority population. The community needs for the population identified in Step 1 by one of the following methods:
	+ Engage with local residents and community groups in meetings, workshops, or other opportunities as part of the planning process to identify community or household needs, and document how the engagement informed the design and/or selection of projects to address those needs.
	+ Receive documentation of broad support from local community-based organizations and/or residents (e.g., letters, emails) identifying a need that the project addresses or confirm the project furthers the goals identified in a local plan or initiative designed to address local needs (e.g., regional sustainability plan, local transit agency plan, community needs assessment) that was developed through, or as a result of, a robust community engagement process.
	+ Refer to one of the following tools provided at <https://www.caclimateinvestments.ca.gov/benefit-assessment-guide/#step2>, and confirm that the project will reduce the impacts related to at least one of the factors or indicators:
		- CalEnviroScreen 4.0 to identify communities disproportionately burdened by multiple sources of pollution and with population characteristics that make them more sensitive to pollution, and confirm that the project will reduce the impacts of at least one of the individual factors that are most impacting an identified disadvantaged or low-income community (i.e., factors that score at or above the 75th percentile).
		- California Health Places Index, a data and policy platform created to advance health equity through open and accessible data. Users can evaluate project areas for vulnerabilities or ways projects can benefit priority populations. Look at the individual indicators that are most impacting an identified priority population (i.e., indicators that score 25 or below on the Healthy Place Index Percentile Ranking) and confirm that the project will reduce the impacts of at least one of those indicators.
* Step 3: Provide a Benefit. The project must provide one of the direct, meaningful, and assured benefits. The benefit must be to the priority population identified in Step 1 and must directly address the need identified in Step 2. Identify at least one direct, meaningful, and assured benefit that the project provides to priority populations. Projects must meet at least one of the following benefit criteria:
* Project provides direct energy cost savings or reduces energy cost burden to priority population(s).
* Project reduces on-site criteria air pollutant or toxic air contaminant emissions through the reduction of fossil fuel consumption.
* Project improves energy or community resilience or provides grid outage mitigation.
* Project provides increased access to clean and reliable energy

For applications with multiple locations, the applicant must address and discuss each of the three steps for each location, along with the amount of CEC funds to be spent in each location. Preference points will be awarded only if all facilities identified in the application meet the requirements indicated in CARB guidance, which is posted at the following: [www.arb.ca.gov/cci-fundingguidelines](http://www.arb.ca.gov/cci-fundingguidelines). No preference points will be awarded if any facility fails to meet the requirements.

1. **Electric Grid Benefits**

Explain how the project(s) meet the requirements of Section III.C.2.c in the Solicitation Manual to benefit California’s electrical grid. This can be shown by measures to reduce annual electricity (kilowatt-hour) during peak periods, impact energy costs, reduce peak load and/or result in shedding/shifting (demand response) load to off-peak periods, and improvements to grid infrastructure resiliency and reliability. State the timeframe, assumptions with sources, and calculations for the estimated benefits, and explain their reasonableness. Include baseline or “business as usual” over the stated timeframe. Include any specific programs which the proposed project technology intends to leverage (e.g., feed-in tariffs, Investor-Owned Utility rebates, demand response, storage procurement) and the extent to which the proposed technology meets program requirements.

* Using the formula below, give the ratio of the total annual energy reduced (kilowatt-hour) and/or generated during the facility’s utility rate peak periods over the facility(ies) total annual electrical usage during the facility’s utility rate peak periods. Additionally, explain whether these reductions are resulting from energy efficiency or load flexibility projects and explain whether the reduction and/or generation are occurring continually or only during peak periods.

$$\frac{Electrical energy \left(\frac{kWh}{yr}\right)Reduced+Electrical Energy \left(\frac{kWh}{yr}\right)Generated}{Total Facility Energy Usage (\frac{kWh}{yr})} X 100$$

1. California Air Resources Borad Co-Benefits [[www.arb.ca.gov/cci-cobenefits](http://www.arb.ca.gov/cci-cobenefits)](http://www.arb.ca.gov/cci-cobenefits) [↑](#footnote-ref-2)