CalNEXT Request for Ideas (RFI) Q2 2025

May 8, 2025

CalNEXT ENERGIZING CALIFORNIA'S FUTURE

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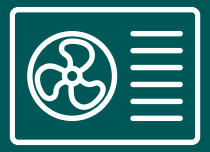
Agenda

1	Introduction	5 min
2	RFI Details	10 min
3	Review Submission Process	5 min
4	Q&A	15 min

About CalNEXT

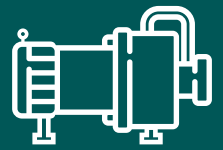
CalNEXT's vision is to identify emerging technology trends and bring commercially available technologies to the energy efficiency program portfolio.

Lighting, Plug Loads & Appliances



HVAC

Portfolio Enhancement



Process Loads

Water Heating

Whole Buildings

What are we looking for?

Opportunity

In planning for our 2025 portfolio of CalNEXT projects we are soliciting a Technology Support Research (TSR) project from the public. The project needs to meet the following criteria:

- Belonging to the Process Loads technology area
- Has a budget within $200,000
- Can start in 2025 and be completed within 18 months
- Does not overlap with any past or on-going CalNEXT projects

What are we looking for?

Conflict of Interest

CalNEXT projects needs to be **manufacturer-agnostic**.

In the evaluation process, we screens project submissions for conflict-of-interest issues where the project lead benefits financially from the commercialized product being validated in the submission.

Those with COI will be paired up with a CalNEXT program partner and the partner will perform third party validation in the submission.

About the Process Loads technology priority map

Description

The Process Loads technology category encompasses a wide range of energy in non-residential services excluding general lighting, space conditioning, domestic water heating, appliances, and building envelope.

This category is broadly focused on projects that will lead to expanded incentive program offerings (energy efficiency or fuel substitution) and/or the establishment of new codes and standards. High priority is given to projects that can provide significant savings in avoided GHG production and/or demand flexibility.

About the Process Loads technology priority map

2024 Technology Research Areas	Role	Priority	
Controlled Environment Horticulture	LEAD	MEDIUM	+
Commercial Kitchen Decarbonization	COLLABORATE	HIGH	+
Refrigeration, Commercial & Industrial	COLLABORATE	HIGH	+
Advanced Motors	COLLABORATE	MEDIUM	+
Pumping Systems	COLLABORATE	MEDIUM	+
Data Centers & Enterprise Computing	COLLABORATE	MEDIUM	+
Process Air Systems	COLLABORATE	LOW	+
Process Heating Technology	OBSERVE	MEDIUM	+

About the Process Loads technology priority map:

Commercial Kitchen Decarbonization

Research Initiatives
New Electric Foodservice Equipment for Gas Equipment without Historical Electric Alternative (Woks, Tandoor Ovens, Rack Ovens, Rotisseries)
Economics of Foodservice Electrification
Hard-to-Reach (HTR)/Disadvantaged Community (DAC) Engagement on Foodservice Electrification

Refrigeration, Commercial & Industrial

Research Initiatives
Natural Refrigerant Condensing Units (CO_2, Propane and Other Emerging Natural Refrigerants)
Low-GWP Drop-in Refrigerants for Retrofit Applications
Natural Refrigerant (Ultra-Low-GWP) C&I Refrigeration System Modeling Tools
Refrigerant Management and Leak Monitoring, Detection and Mitigation

What is Technology Support Research (TSR)?

Project Types

Technology Development Research (TDR)

Early-stage technologies or products not currently available in the market — developing the commercial capability and improving their ability to generate energy savings or reduce energy consumption or demand.

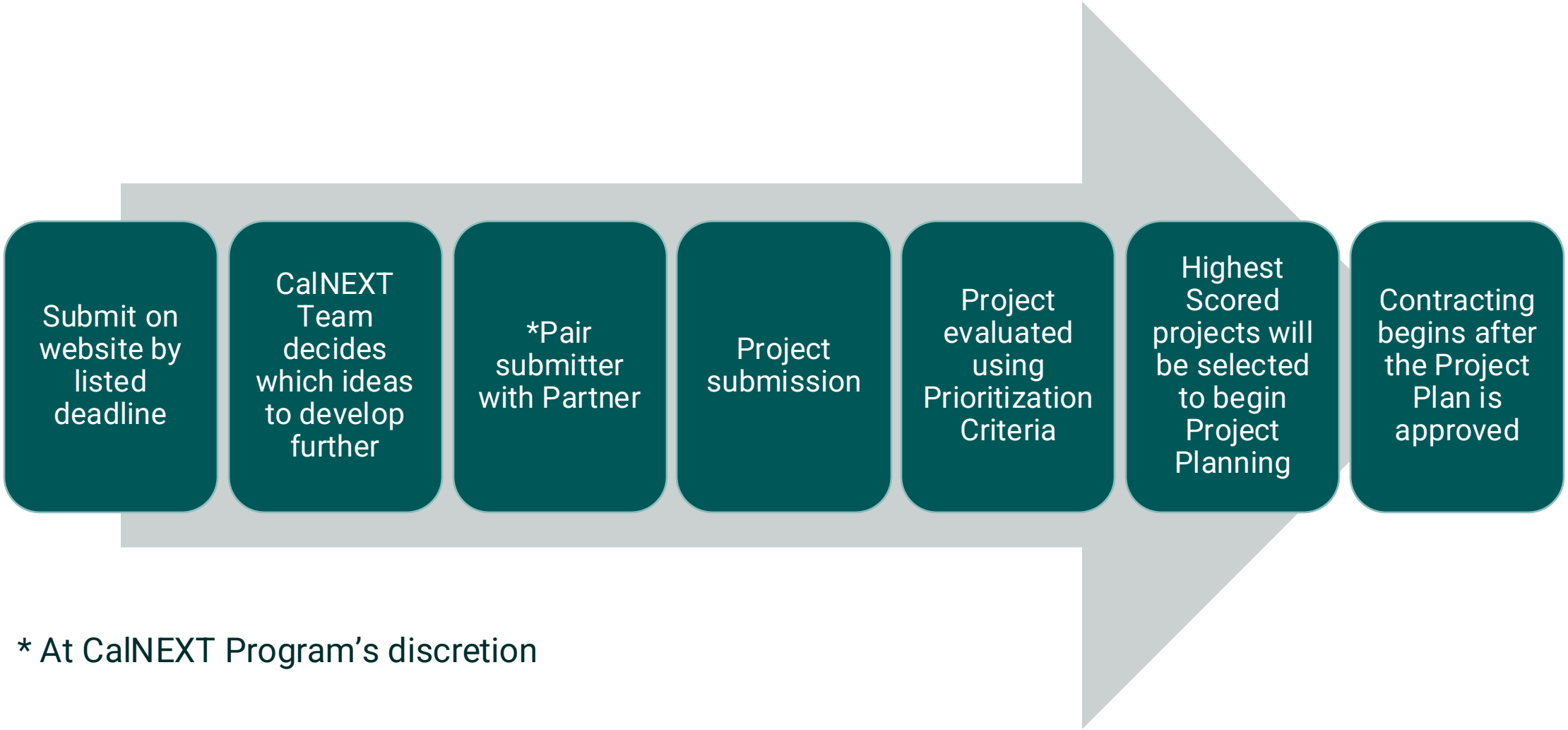
Technology Support Research (TSR)

Market-ready technologies or products — addressing market barriers or developing the commercial capability to improve their ability to generate energy savings, reduce energy consumption or demand, or support new measures eligible for energy efficiency resource programs. Projects may address barriers like customer behavior, retro-commissioning, and operational efficiencies.

Prioritization Criteria

Criteria	Weighting	Details
TPM Priority	10%	The project TPM is a high priority TPM, in an research area of high need.
TPM Alignment	10%	How well the project aligns with the CalNEXT TPMs
Technology Transfer	10%	How well will the research support technology inclusion in IOU and non-IOU EE, DR, Decarbonization programs, codes & standards, or market adoption?
Efficiency Program Alignment	10%	Project has defined clear benefits to utilities with emphasis on Total System Benefits (TSB), kWh and kW savings, Total Resource Cost (TRC), and lifecycle kWh savings.
Underserved Community Benefit	10%	Project Spend, Project Engagement, Project Outcomes
Justification/ Innovation	10%	Project clearly differentiates research or technology from past or present research or technology. It provides energy, carbon or demand reduction estimates and calculations
Project Execution	40%	Clarify of scope, how innovative it is, whether it's ready for implementation, has a clear market strategy, has a reasonable timeline, and has reasonable cost. **Stakeholder engagement**

RFI Response Submission & Selection Process



* At CalNEXT Program's discretion

Project Submission on CalNEXT.com

Requests for Ideas

Each quarter we will be identifying technologies that could use additional focus. We will issue a "Request for Ideas" and share why we are prioritizing these technologies, as well as the opportunities and considerations.

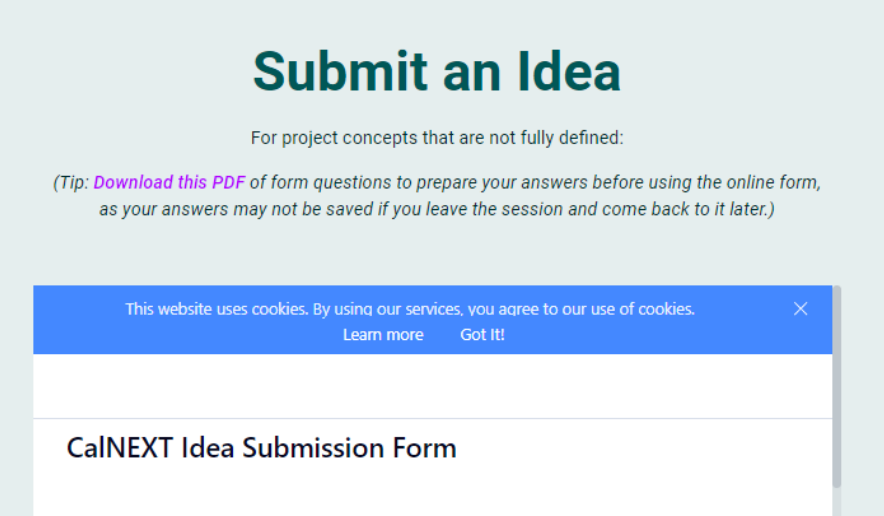
View the Q2 2025 RFI here. *Submission deadline: May 29, 2025*

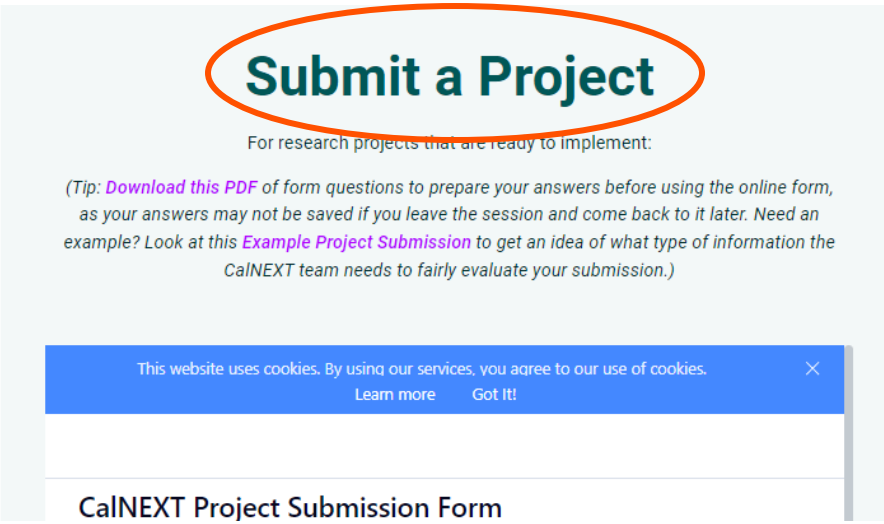
View the Q4 2023 RFI here. *Submission deadline: November 30, 2023*

View the Q3 2023 RFI here. *Submission deadline: August 31, 2023*

View the Q2 2023 RFI here. *Submission deadline: May 25, 2023*

View the Q1 2023 RFI here. *Submission deadline: February 23, 2023*





Q&A

Thank You!

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