



Notice of Funding Opportunity

Title: The Next EPIC Challenge: Reimagining Affordable Mixed-Use Development in a Carbon-Constrained Future

Website: <https://www.energy.ca.gov/solicitations/2020-12/gfo-20-305-next-epic-challenge-reimagining-affordable-mixed-use-development>

Funding: Total: \$48,000,000. Maximum awards: \$1M-\$9M, depending on phase.

Dates: Pre-Application Workshop: January 7, 2021
 Deadline for Written Questions: January 08, 2021
 Deadline to Submit Concept Application Abstracts: March 26, 2021
 Deadline to Submit Full Applications for the Design Phase: July 14, 2021
 Deadline to Submit Application Materials for the Build Phase: June 23, 2023

Summary: The purpose of this solicitation is to fund a design-build competition that will challenge multi-disciplinary project teams to design and build a mixed-use development – using cutting-edge energy technologies, tools and construction practices - that is affordable, equitable, emissions-free and resilient to climate change impacts and extreme weather events. This solicitation will be conducted as a two-phase design-build competition. The CEC may consider adding a third-phase grand prize challenge that will be awarded to the best of the four Build Phase projects to scale their design across the state. There is currently up to \$12,000,000 available for the Design Phase portion of this solicitation. There is an additional \$36,000,000 in funding available for the Build Phase of this competition contingent upon approval of the CEC’s 2021-2025 EPIC Investment Plan. This would result in a total of up to \$48,000,000 planned for grants awarded under this solicitation. Projects for this solicitation must fall into one of four regionally based groups. There will be up to 12 teams selected for the Design Phase, with up to 3 teams selected per region. Up to 4 teams will advance to the Build Phase, with up to 1 team selected per region.

Project Topic Areas:

The CEC is seeking to fund projects that can demonstrate an innovative and integrated approach – using cutting edge energy technologies, tools and construction practices - to designing and building mid-rise, mixed-use developments that are affordable, equitable, climate-resilient, cost-competitive, and emissions-free.

Funding:

There is currently up to \$12,000,000 available for the Design Phase portion of this solicitation. There is an additional \$36,000,000 in funding available for the Build Phase of this competition contingent upon approval of the CEC’s 2021-2025 EPIC Investment Plan. This would result in a total of up to \$48,000,000 planned for grants awarded under this solicitation. The above does not include the Scale Phase. Match funding is not required for this solicitation. However, applications that include match funding will receive additional points based on the proposed total match (cash + in kind) contributions relative to the total amount of EPIC funds requested during the scoring phase. Only CEC reimbursable funds counts towards the funds spent in California total.

Project Group	Number of Project Teams (Design Phase)	Maximum Project Award (Design Phase)	Number of Project Teams (Build Phase)	Maximum Project Award (Build Phase)
Group 1: Bay Area Region	3	\$1 million	1	\$9 million
Group 2: Central Valley/Northern California	3	\$1 million	1	\$9 million
Group 3: Los Angeles Region	3	\$1 million	1	\$9 million
Group 4: Imperial Valley, Inland Empire, and San Diego County	3	\$1 million	1	\$9 million

Project Requirements:

Overall Project Requirements



MOMENTUM

925.719.2704



anna@buildmomentum.io



Projects must fall within the “technology demonstration and deployment” and “market facilitation” stages. The “technology demonstration and deployment” stage involves the installation and operation of pre-commercial technologies or strategies at a scale sufficiently large and in conditions sufficiently reflective of anticipated actual operating environments to enable appraisal of operational and performance characteristics, and of financial risks. The “market facilitation” stage includes activities such as program tracking, market research, education and outreach, regulatory assistance and streamlining, and workforce development to support clean energy technology and strategy deployment.

California Public Resources Code Section 25711.5(a) requires EPIC-funded projects to: (1) benefit California IOU ratepayers by increasing reliability, lowering costs, and/or increasing safety; and (2) lead to technological advancement and breakthroughs to overcome barriers to achieving the state’s statutory energy goals. To maximize the impact of EPIC projects and to promote the further development and deployment of EPIC-funded technologies, a minimum of 5% of CEC funds requested should go towards knowledge transfer activities. The Project Narrative for the Build Phase (Attachment) must include a Measurement and Verification Plan that describes how actual project benefits will be measured and quantified.

In TD&D solicitations for proposed projects located in and benefiting low-income and/or disadvantaged communities within IOU service territories, the project must allocate appropriate funding for CBO engagement for relevant tasks under the scope of work. Community Based Organizations (CBO) should meet, and will be evaluated on, the following criteria for this solicitation: Has an office in the region (e.g., air basin or county) and meets the demographic profile of the communities they serve; Has deployed projects and/or outreach efforts within the region (e.g., air basin or county) of the proposed disadvantaged or low-income community; Have official mission and vision statements that expressly identifies serving disadvantaged and/or low-income communities. Currently employs staff member(s) who specialized in and are dedicated to – diversity, or equity, or inclusion, or is a 501(c)(3) non-profit.

Minimum Site Requirements

The following describes the minimum site requirements that project teams must meet in their designs for the competition: A single development project of one or more buildings. If multiple buildings, must be located within ¼ of a mile, part of the same overall masterplan development, and have functional integration among buildings, such as DER aggregation. The development can be new construction or an adaptive reuse of an existing development. Adaptive reuse refers to the renovation and reuse of existing structures for new purposes. (Simple retrofits to existing buildings are not eligible.) The development must physically and functionally integrate residential space with non-residential space (retail, commercial, office, institutional, etc.). Mixed-use projects that include industrial uses are excluded from this solicitation. (Here, “industrial” refers to land use definitions in the applicable local zoning code and General Plan, or if the applicant has not selected a site, then “industrial” refers to its common usage in the land use planning field.) The project site must be located within the service territory of Pacific Gas & Electric (PG&E), Southern California Edison (SCE), or San Diego Gas and Electric (SDG&E). The development must dedicate a minimum of 20% of the units to affordable housing with at least half (10% of total units) dedicated to lower income units. Developments with a higher percentage of affordable housing units will be given preference points. The development must include a minimum of 50 housing units. The development must achieve a minimum density of 30 residential units per acre, and must exceed 90% of the maximum density for the local jurisdiction. For example, if the maximum density in the location is 60 units per acre, the development must have a density greater than 54 units per acre.

Minimum Design Requirements

The following describes the minimum design requirements that project teams must meet in their designs for the competition: All building end-uses must be electric (no gas consumption is allowed). A minimum of 20% of the building’s peak load must be available to be temporarily managed or curtailed to respond to grid conditions. The building’s residential load during peak demand hours, 4-9pm, must be met through a combination of onsite renewables, onsite storage, and load management. All residential end uses must be controllable through the home energy management system and be capable of responding to real-time pricing signals. The microgrid controller(s) must be interoperable with DER aggregation platforms such as



MOMENTUM

925.719.2704



anna@buildmomentum.io



Virtual Power Plants. The building(s) must be able to island from the main grid during an outage and be able to shed discretionary loads to provide power to Tier 1 critical loads (10% of peak load) and Tier 2 priority loads (25% of peak load). The microgrid must be sized for indefinite renewables-driven backup power of Tier 1 critical loads using any combination of onsite renewables, onsite storage, and load management. 20% of all parking spaces associated with the development must have EV-charging stations that can respond to grid- and building-signals. All remaining parking spaces must be EV-ready, meaning they must have a dedicated electrical circuit with the capacity to eventually become a charging station.

Successful applicants will likely include

A skilled, well-resourced management team to ensure coordination between the different aspects of the proposed project as well as coordination between related research efforts. A clearly articulated approach to stakeholder engagement, including dedicated funding and expertise. This includes project team members that can think critically and creatively about how to engage a diverse range of stakeholders, and how to best incorporate the needs of the community and prospective tenants into the design. A multi-disciplinary project team with a wide array of expertise that may include the following: Architectural firms; Developers; Electric Utilities, CCAs; Local Governments; Community-based Organizations; Energy technology experts/solution provider.

Eligible Applicants:

The Concept Application of this solicitation is open to all public and private entities with the exception of local publicly owned electric utilities. In accordance with CPUC Decision 12-05-037, funds administered by the CEC may not be used for any purposes associated with local publicly owned electric utility activities. The Design Phase of this solicitation is only open to Applicants who passed the screening criteria shown in Section IV.E from Concept Application Phase. The Build Phase of this solicitation is only open to awarded Recipients from the Design Phase.

Eligible applicants must be located within one of the following regions:

Group 1: Bay Area Region – Alameda, Contra Costa, Mendocino, Marin, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma

Group 2: Central Valley/Northern California – Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Inyo, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Mono, Monterey, Nevada, Placer, Plumas, Sacramento, San Joaquin, San Benito, San Luis Obispo, Shasta, Sierra, Siskiyou, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, Yuba

Group 3: Los Angeles Region – Los Angeles, Orange, Santa Barbara, Ventura

Group 4: Imperial Valley, Inland Empire, and San Diego County – Imperial, Riverside, San Bernardino, San Diego