

DOCKETED

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California Energy Commission

Title: Electric Program Investment Charge (EPIC) 4 Investment Plan, Empower Innovation Workshop

Presenters: Erik Stokes and Misa Werner, CEC Energy Research & Development Division

Date: May 10, 2021

EPIC Background

- The EPIC Program was established by the California Public Utilities Commission (CPUC) in 2011 to **fill a critical gap in California's clean energy policy.**
- EPIC provides ~ **\$162 million annually to develop and demonstrate new technology innovations** that can provide benefits to electric ratepayers.
- The CPUC named the CEC as one of four administrators of EPIC along with PG&E, Southern California Edison and SDG&E.
- The CEC administers 80 percent of the EPIC funding, investing in the areas of **Applied Research and Development, Technology Demonstration and Deployment, and Market Facilitation.**
- Senate Bill 96 provides additional statutory direction to the CEC to award EPIC funds for projects that will lead to **technological advancements and breakthroughs** to overcome the barriers that prevent achieving the state's statutory energy goals.
- Assembly Bill 523 requires a **minimum of 25% and 10%** of the CEC's EPIC Technology Demonstration and Deployment funds **to go to disadvantaged and low-income communities, respectively.**

CALIFORNIA'S INVESTMENT IN CLEAN ENERGY INNOVATION



Entrepreneurial Ecosystem

\$143 million invested

Through EPIC, the CEC is building a world-class ecosystem supporting clean energy entrepreneurship.



Grid Decarbonization & Decentralization

\$154 million invested

Improving the cost competitiveness and performance of key technologies.



Resiliency & Safety

\$106 million invested

Helping communities, businesses, and public agencies build a safer, more resilient energy system.



Industrial & Agricultural Innovation

\$113 million invested

Scaling specialized technology solutions to drive energy efficiency without compromising production.



Building Decarbonization

\$170 million invested

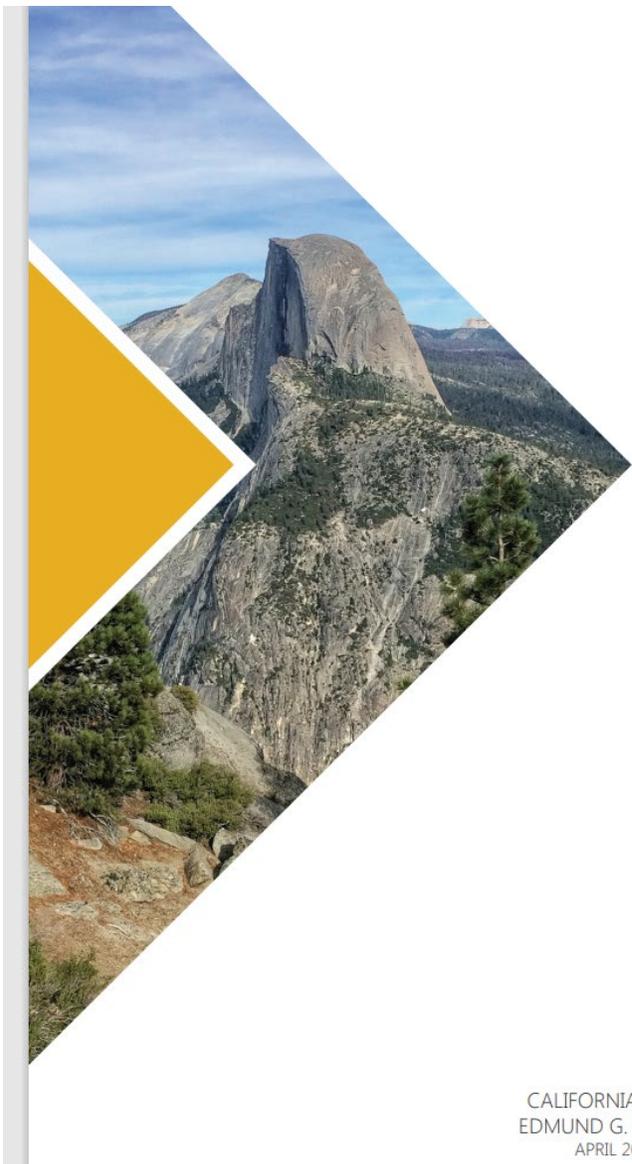
Improving the affordability, health, and comfort of buildings.



Transportation Electrification

\$33 million invested

Supporting advances that reduce the cost of electric vehicle ownership and support the grid.



EPIC

**PROPOSED
2018-2020 TRIENNIAL
INVESTMENT PLAN**

ELECTRIC PROGRAM
INVESTMENT CHARGE

CALIFORNIA ENERGY COMMISSION
EDMUND G. BROWN JR., GOVERNOR
APRIL 2017 | CEC-500-2017-023-CMF



EPIC 4 Investment Plan Background

- The CPUC requires each EPIC administrator to submit an Investment Plan.
- The Investment Plan lays out the proposed investments for the funding period.
- The Investment Plan is developed through an open and transparent stakeholder process.
- EPIC 4 will describe the CEC's proposed investments for funding collected from 2021-2025.
- The most recent CEC EPIC Investment Plan can be found at: [185575884.PDF \(ca.gov\)](https://www.cec.state.ca.gov/energy/epic/185575884.PDF)

EPIC 4 Plan Schedule

| Task / Event | Date(s) |
|---|-----------------------------|
| Public workshops to solicit stakeholder input | May – July 2021 |
| Public workshop to get input and feedback on the CEC’s draft research initiatives being considered for EPIC | Late Summer 2021 |
| EPIC 4 Investment Plan considered at CEC Business Meeting for approval | September 2021 (tentative) |
| EPIC 4 Investment Plan submitted to CPUC | October 1, 2021 (tentative) |
| CPUC Decision on EPIC 4 Plan expected | Spring-2022 (tentative) |
| The first EPIC 4 solicitations released | Summer-Fall 2022 |

EPIC 4 Investment Plan Research Themes



Decarbonization

Reduce GHG emissions and use of fossil fuels.



Resilience and Reliability

Manage through and recover from *large-area or long-duration outages*.

Reduce the frequency or impact of *small-scale or short-duration disruptions* in electric service.



Entrepreneurship

Support clean energy entrepreneurs developing breakthrough technology solutions from idea to market.



Affordability

Improve the affordability of energy services for all electric ratepayers.

EQUITY is an overarching theme for EPIC investment planning. Initiatives will include funding set-asides for projects in under-resourced communities and other equity-targeting elements.

Policy Direction: Equity in EPIC

CEC Chair Weisenmiller, in a letter to CPUC President Peevey, announced the CEC's commitment to advance diversity and equity in EPIC.

AB 523 codified the recommendation in the SB 350 Barriers study and added additional requirements to increase equity in EPIC.

2013

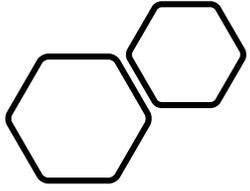
2016

2017

2018

SB 350 Low Income Barriers Study recommends a minimum of 25% of EPIC TD&D funds go to projects located in and benefitting a disadvantaged community.

CPUC Decision 18-10-052 requires the administrators to conduct at least two workshops for the purpose of providing training about EPIC, and related technical support, to *Disadvantaged Communities* and interested *community-based organizations*.



CEC Equity Strategy



Increase awareness of EPIC and the opportunities it provides to vulnerable communities

Participated in ~100 outreach and community events.

Conducted two public workshops focused on equity as part of the public process to develop the 2018-20 EPIC Investment Plan;

Created and distributed funding materials translated for non-English speakers

Created and published a "How to Apply for Research Funding" video for new applicants.



Encourage technology/project developers to seek out project sites in vulnerable communities

29 CEC EPIC Competitive Solicitation have included a set-aside or bonus points

~65% of TD&D funds have gone to project located in and benefitting disadvantaged- and low-income communities.

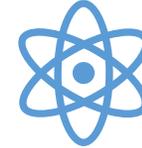
\$7.6 million have gone to projects located in and benefitting a tribal community, including the world-renowned microgrid at the Blue Lake Rancheria.



Scope solicitations around specific issues facing ratepayers in vulnerable communities

A 2018 solicitation targeted projects that could overcome barriers to energy efficiency upgrades in low-income multi-family housing sector.

Provide public forums for environmental justice stakeholders and community leaders to articulate communicate issues and discuss lessons learned from EPIC projects in a DAC/LI community..



Embed equity in clean energy entrepreneurship

Ensure clean energy entrepreneurs in every part of the state have access to incubator/accelerator programs and testing facilities.

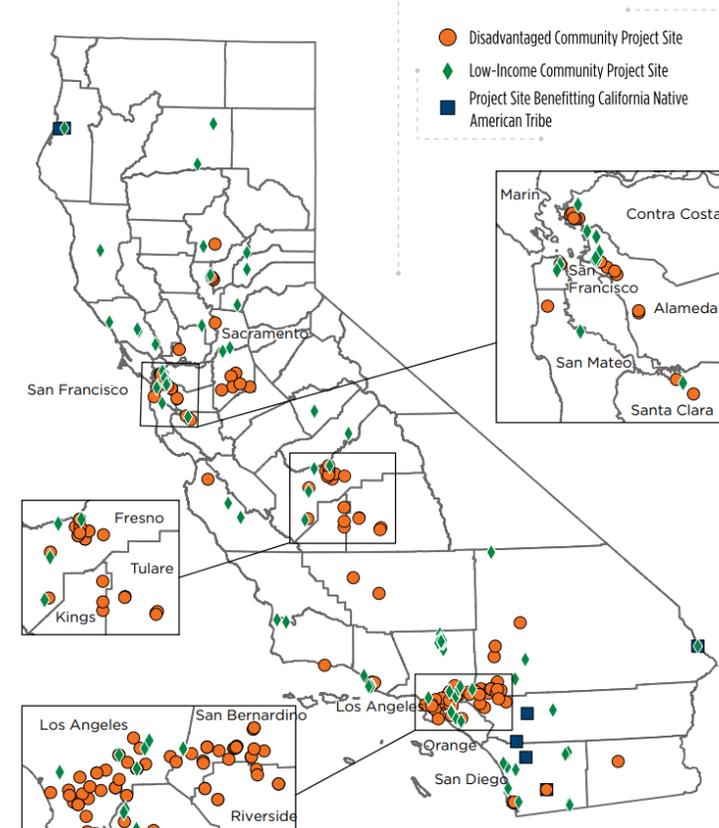
Require CalSEED to target a minimum amount of funding to underrepresented groups.

The Entrepreneurial Ecosystem has secured ~\$4 million in federal funding to expand entrepreneurial assistance for underrepresented geographic locations and businesses.

DIVERSITY, EQUITY & INCLUSION IN EPIC

- **68% of EPIC Technology Demonstration and Deployment funds** have gone to projects located in and benefiting under-resourced communities including disadvantaged communities, low-income communities and tribes.
- 22 percent of EPIC agreements include a women-, minority-, or LGBTQ-owned business or DVBE as the prime recipient or a subcontractor.
- In 2020, CEC staff and EPIC recipients participated in 25 outreach and community events to promote knowledge about EPIC funding opportunities.
- The first cohort of RAMP companies have collectively **hired 65 skilled workers** since project start and are **expected to hire another 181** by the time their RAMP projects have completed.
- Small- and medium-sized businesses increased their employment numbers by 28% after receiving an EPIC award.

EPIC DEMONSTRATION PROJECTS IN UNDERRESOURCED COMMUNITIES



Lessons Learned

Issue/Lesson Learned

CEC Action Taken/Planned

Communities felt like an afterthought in projects

- Scoring criteria to better assess the potential for projects to benefit disadvantaged- and low-income communities
- All AB 523 projects require a CBO on project team and funding for engagement
- Training for CEC staff to better evaluate project benefits for DAC/LI communities

Information overload/ receiving information not relevant to their interests

- Centralize and curate information on Equity Opportunities.
- Provide visibility into who the technology solution providers are

Need to actively cultivate relationships and partnerships

- Longer lead times for project/technology developers and communities to build relationships
- Take a more active role in creating opportunities for networking

Need for additional training on EPIC

- Events will provide targeted training on how to participate.

Empower Innovation Equity Objectives

- Centralize and curate equity opportunities
- Create a directory of support services and technology solution providers to potentially partner with.
- Enable organizations to communicate their community's cleantech priorities.
- Enable organizations to profile host sites within their communities for clean energy technology projects.

EMPOWER INNOVATION EQUITY DIGEST

FUNDING OPPORTUNITIES

NEW FUNDING OPPORTUNITIES THAT PROMOTE ENERGY AND CLIMATE EQUITY
LOG IN TO MAKE A "FIND A PARTNER" REQUEST AND MESSAGE POTENTIAL PARTNERS

- The Next EPIC Challenge: Reimagining Affordable Mixed-Use Development in a Carbon-Constrained Future**
The Next EPIC Challenge is envisioned as a two-phase competition that will challenge teams to design and build a mixed-used development concept capable of achieving zero greenhouse gas emissions.
- Funding Opportunity Announcement: Energy Technology Deployment on Tribal Lands**
This FOA from DOE's Office of Indian Energy solicits applications from Indian tribes for the installation or deployment of energy generating resources, energy efficiency measures, or energy storage for Tribal buildings or as community resources.
- 2020-2021 Sustainable Communities Program**
The 2020/21 Sustainable Communities Program (SCP) will provide local jurisdictions with multiple opportunities to seek funding and resources to meet the needs of their communities and support regional goals.

[SEE MORE](#)

EQUITY CATEGORIES
Disadvantaged Community
Opportunity Zone
Low Income Community

LOCATION
200 Campus Drive, P.O. Box 548, Arvin, California, United States, 93203

AREA OF EXPERTISE
Renewable Energy | Climate | Carbon | Transportation | Energy Efficiency & Demand Response
Engagement & Outreach | Air Quality | Resilience | Environmental Justice | Equity

WHAT ARE YOUR COMMUNITY'S MOST PRESSING CONCERNS?

- ✓ Air pollution
- ✓ Water Pollution
- ✓ Access to Transportation
- ✓ Energy Affordability
- ✓ Environmental Literacy
- ✓ Job Training

HOW WOULD YOU DESCRIBE YOUR ORGANIZATION'S NEEDS?

- ✓ We need to improve fundraising

SAN DIEGO ENERGY EQUITY CAMPUS @ VALENCIA PARK

< ALL PROJECTS AND PLACES

SAN DIEGO URBAN SUSTAINABILITY COALITION

PROJECT OR A PLACE
Place

SNAPSHOT
We are no longer in the age or place where it's just the thought that counts. What is needed now is radical community engagement, sustainable equitable resiliency and advanced operational structure.

CONCEPT
Funding Community Benefit Initiative Support Targets

[WEBSITE LINK](#)



Get timely leads on funding and new connections to accelerate your work and advance a clean economy for all.

[JOIN NOW](#)

Empower Innovation is an initiative of the California Energy Commission

EMPOWER INNOVATION BY THE NUMBERS

522

ORGANIZATIONS

1,783

MEMBERS

179

OPPORTUNITIES

\$1.4B

AVAILABLE FUNDING

Empower Innovation Events

- **Empower Innovation Event Objectives**
- Provide an opportunity for parties to come together, network, and form partnerships
- Expand access to grant funding through training, outreach, community engagement, and enhanced collaboration
- Provide the opportunity for communities to define their clean energy priorities
- Onboard users onto the EIN platform provide demonstration of key features



EMPOWER
INNOVATION

empowerinnovation.net

To stay involved in EPIC 4:

Visit CEC's website for workshop info, presentations, docket, e-commenting, and EPIC listserv sign up:
www.energy.ca.gov/epic4

Submitting Written Comments:

Comments may be submitted using CEC's **e-commenting** system:
<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=20-EPIC-01>

See this event's **notice for e-mail and U.S. Mail** commenting instructions:
<https://efiling.energy.ca.gov/getdocument.aspx?tn=237563>

For all comments, please include docket # **20-EPIC-01** and "Empower Innovation Event: Co-Creating Clean Energy Research Opportunities with California's Communities" in the subject line and on the cover page.