

**DOCKETED**

<b>Docket Number:</b>	16-OIR-06
<b>Project Title:</b>	Senate Bill 350 Disadvantaged Community Advisory Group
<b>TN #:</b>	262271
<b>Document Title:</b>	Item 6 - EPIC Strategic Objectives and Criteria Staff Proposal
<b>Description:</b>	N/A
<b>Filer:</b>	Dorothy Murimi
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	3/21/2025 7:30:57 AM
<b>Docketed Date:</b>	3/21/2025

# Electric Program Investment Charge (EPIC)

## Energy Division Staff Proposal Identifying Strategic Objectives and Criteria for EPIC

**Presentation to the Disadvantaged Communities Advisory Group**

March 21, 2025

**Energy Division, Climate and Equity Initiatives Section**

Fredric Beck, Senior Analyst

Cheryl Cox, Supervisor



**California Public  
Utilities Commission**

*This program is funded by California utility customers under the auspices of the California Public Utilities Commission*

# Agenda

1. EPIC Program Overview
2. EPIC Strategic Goals and Objectives
3. Energy Division Staff Proposal on Strategic Objectives
4. Status and Next Steps

# 1. EPIC Program Overview

- Program Administration
- Budget
- Program Evaluation

# Program Administration and Budget

***Mission:** EPIC invests in innovation to ensure equitable access to safe, affordable, reliable, and environmentally sustainable energy for electricity ratepayers.*

- **Purpose:** EPIC initiated in 2011 via D.11-12-035 to conduct research, development, and demonstration (RD&D) on new, emerging, and pre-commercial clean energy technologies for ratepayer benefit.
- **Program Budget:** \$185 million annually through 2030 sunset date.
- **Administrator Program Areas:**
  - Applied Research and Development (CEC only)
  - Technology Demonstration and Deployment
  - Market Facilitation (CEC only)

Administrator	Funding Share	2021-2025 Annual Budget
CEC	80.0%	\$148,000,000
PG&E	10.02%	\$18,537,000
SCE	8.22%	\$15,207,000
SDG&E	1.76%	\$3,256,000

# 2017 EPIC Program Evaluation Informs Program Improvements

*The EPIC Evaluation found a need to clarify and focus EPIC investment priorities, leading to a new paradigm focusing on measurable progress and impact.*

2017 Program Evaluation Findings	Subsequent Commission Orders
<b>No Clear Priorities:</b> Portfolio optimization unrealized due to no prioritization of research gaps or needs.	Public process developing Strategic Goals and Strategic Objectives to clarify and focus EPIC investment priorities. (D.23-04-042)
<b>Need to Supplement Existing Administrative Structure:</b> Convene an independent body to provide coordination and facilitation support.	Formation of the EPIC Policy + Innovation Coordination Group (PICG) to improve coordination with CPUC proceedings. Consultant Accelerate hired to manage. (D.18-01-008, D.18-10-052)
<b>Inefficiencies in Outreach and Information Dissemination:</b> Each administrator used its own website and listservs without cohesive program approach.	Creation of the online EPIC Database to improve program transparency and oversight. (D.18-10-052)
<b>Program Documentation is not Sufficient:</b> Results in causal disconnection between EPIC-funding activities and any measurable changes in metrics associated with the mid- and long-term outcomes.	Adopted foundational principles for development of a Uniform Impact Analysis Framework to enable evaluation and tracking of EPIC project impacts. (D.23-04-042)

## 2. EPIC Strategic Goals and Objectives

- Commission Updates Strategic Planning
- Process to Develop Strategic Objectives
- Stakeholder Input

# CPUC Outlines EPIC Program Improvement Guidelines (D.23-04-042)

Requirement	Description
<b>Strategic Goals and Objectives</b>	<ul style="list-style-type: none"><li>• Establish clear, measurable, and reasonable program-level goals and administrator-level objectives aligned with achieving the State's climate and equity goals, including guidance by the DER Action Plan</li></ul>
<b>Equity</b>	<ul style="list-style-type: none"><li>• Utilize CPUC's ESJ Action Plan to guide investment plans</li><li>• Continue AB 523 Disadvantaged and Low-Income Community allocation requirements for TD&amp;D projects and expand to IOUs</li></ul>
<b>Uniform Impact Analysis Framework</b>	<ul style="list-style-type: none"><li>• Establish a process to develop criteria and reporting of project impacts on a consistent basis, including equity</li></ul>
<b>Program Evaluation</b>	<ul style="list-style-type: none"><li>• Establish a process to assess current program progress and compliance</li><li>• Improve oversight by requiring an Advice Letter for Annual Reports and Database compliance; fund ongoing database updates and improvements</li></ul>



# Strategic Planning Targets EPIC Investments and Supports Progress Measurement Over Time

EPIC Strategic Goals align with State Goals through 2045.



# Commission-Approved Strategic Goals (D.24-03-007)

## Strategic Goals

- Transportation Electrification
- Distributed Energy Generation
- Achieving Net Zero Carbon and the Coordinated Role of Gas
- Building Decarbonization
- Climate Adaptation



## Cross-cutting Principles

- Equity
- Resilience
- Reliability
- Affordability
- Safety (Cybersecurity)

### **3. ED Staff Proposal on Strategic Objectives**

- Process to Develop Strategic Objectives
- Example Strategic Objectives
- Cross-Cutting Elements

# Stakeholder Process to Identify Strategic Objectives

## Building the Record for the Staff Proposal

- More than 530 stakeholders participated in 12 in-person and virtual interactive Strategic Objectives working groups in 2024.
  - Outreach to DACAG members and ESJ community members.
- All EPIC Strategic Objectives Technical Working Group reports, presentations, and videos are publicly available and are part of the record as attached to Staff's Proposal in the Ruling. The outcomes of the public process are:
  - Introduction of Strategic Goals<sup>1</sup> and Strategic Objectives Kickoff Presentations
  - Five Technical Working Group Reports (one per Strategic Goal)
  - Final Workshop Report

# Policy + Innovation Coordination Group (PICG) Synthesis of Strategic Objectives Aligned with Strategic Goals Forms the Basis of Staff Proposal

EPIC Strategic Objective	EPIC Strategic Goal				
	Transportation Electrification	Building Decarbonization	Achieving 100% Net-Zero Carbon	Climate Adaptation	DER Integration
1. Reducing Medium- and Heavy-Duty Vehicle Charging Infrastructure Costs	✓				
2. Overcoming Barriers to EV Benefits in DVCs	✓				
3. Smart Systemwide Planning Tools for New Load	✓	✓	✓		
4. Reducing Cost of Whole-home Electrification		✓			
5. Innovative Approaches for Difficult-to-Decarbonize Sectors		✓	✓		
6. Community-Scale Decarbonization	✓	✓	✓	✓	✓
7. Impacts Research for New Generation and Storage			✓		✓
8. Increase Predictability of Weather, Intermittent Resources, and Load	✓	✓	✓	✓	✓
9. Leveraging DERs for Grid and Community Resiliency	✓	✓		✓	✓
10. Expediting and Streamlining Interconnection and Energization Processes	✓				✓
11. Providing Data Input into a Value of DER Framework	✓	✓			✓
12. Reducing Feeder/Circuit Peaks	✓	✓	✓		✓
13. Cost-Effective Grid Hardening for Long-Term Climate Impacts	✓	✓		✓	

# Staff Proposal: Recommended EPIC Strategic Objectives

## Staff Built off Stakeholder Input to Develop Proposed Strategic Objectives

The Staff Proposal focuses on three major elements:

### 1. **Measurable Strategic Objectives with Metrics**

- Aligns with CPUC Proceedings

### 2. **Equity in RD&D framework and affordability guidance**

### 3. **Processes to implement and measure Strategic Goals and Strategic Objectives**

- Public Symposia by Goal
- Impact Analysis Framework including a Market Transformation Initiative

# Example Strategic Objective: Overcoming Barriers to EV Benefits in DVCs

Comparison of Final Report Proposed Strategic Objective to ED Staff Proposed Strategic Objective
Final Report Description: No Modifications
The EPIC program will accelerate innovation, demonstration, and innovative approaches to deployment to overcome obstacles to equitable transportation electrification benefits (including alleviation of pollution, bridging transportation access, and addressing energy burden) in Disadvantaged and Vulnerable Communities, low-income communities, and non-attainment air districts.

<sup>1</sup> Energy burden is defined as the percentage of gross household income spent on energy costs. Pacific Northwest National Laboratory (2021). Metrics for an Equitable and Just Energy System.  
<https://www.pnnl.gov/sites/default/files/media/file/Metrics%20for%20Energy%20Equity.pdf>

<sup>2</sup> Disadvantaged Vulnerable Communities (DVCs) include disadvantaged, low-income, and tribal communities as defined by D.20-08-046.

<b>Related Strategic Goals</b>	Transportation Electrification
<b>Related Proceedings</b>	R.23-12-008: Transportation Electrification Policy and Infrastructure. R.18-12-006: Development of Rates and Infrastructure for Vehicle Electrification.
<b>Staff Modification</b>	No Staff modification.
<b>Gap Addressed</b>	Lack of DVC <sup>2</sup> access to transportation electrification benefits.
<b>Metrics</b>	<ul style="list-style-type: none"> <li>Improvement in air quality metrics as related to transportation sector emissions (NOx, PM2.5, PM10).</li> <li>Reduction in household energy burden for targeted DVCs: Amount that energy burden decreased (percent reduction in share of income paid for energy bills) for participating households. <sup>1</sup></li> <li>Annual rate of new EV charging infrastructure installation in DVCs, in comparison to the overall system.</li> <li>Number, MW, and MWh of customers in DVCs participating in transportation electrification use cases.</li> <li>Program and technology accessibility: Percent change in program awareness and share of priority community participation over time.</li> </ul>

# Example Equity Metrics Across Strategic Objectives

Impact	Metric
<b>Affordability</b>	Affordability Ratio (AR) regarding essential utility services
	Customer cost savings (\$) in aggregate and by low-income household served.
	Energy (MWh, MCF, MMBtu) and cost savings (\$) for customers in aggregate or by low-income household served
	Energy utility bill cost savings in priority populations after program implementation.
	Reduction in DVC household energy burden (%)
	Sandia Resilient Node Cluster Analysis Tool (ReNCAT) social burden metrics.
<b>Community Engagement</b>	Community Acceptance Rating: Community Satisfaction Score indicating acceptance and support for investment
	Documented impacts from community consultations held with community leaders.
	Number of community consultations held with community leaders.
	Percentage of EPIC project funding invested in and benefitting DVCs
	Responsiveness of planning processes to participation and fairness of decisions, as measured by perceived output legitimacy for DVCs



## Example Equity Metrics Across Strategic Objective (cont.)

Impact	Metric
<b>Deployment</b>	Number, MW, and MWh of customers in DVCs participating in transportation electrification use cases.
	Percent change in electrification in DVCs.
	Share (%) of DVCs enrolled in relevant programs pertaining to DER, Transportation Electrification, Building Decarbonization, and/or dynamic rates.
<b>Health &amp; Safety</b>	Air pollution and GHG reduction in DVCs (NOx, PM2.5, PM10, CO2eq).
	Health and safety issues abated
	Tenant comfort
<b>Reliability &amp; Resiliency</b>	Number of DVC residents who had access to power during an outage, number of minutes of power supplied by alternative methods during an unplanned outage (wildfire, calamity, etc.).
	Reduction in system resilience variability among service areas, particularly in DVCs.

# Equity Framework and Affordability Guidance

- Principles to Guide Equity for EPIC Planning and Evaluation
- Requires EPIC Investment Plans to Address Affordability of Electric Bills
- Returns EPIC Funds to Ratepayers Expeditiously
- Requires Program Budget Transparency
- Beginning 2023, continued the sunseting AB 523 requirement and broadened it to include the IOUs.

## Equity in RD&D Framework

Principle	Description
Prioritization	Prioritize investments and measure impacts on the most vulnerable communities
Engagement	Develop deeper and ongoing engagement with DVCs
Metrics	Develop clear and measurable metrics for assessing the impact of RD&D investment in DVCs
Access	Make information on innovative technologies, incentives, and financial mechanisms easily accessible and understandable to DVCs
Outreach	Work to enable better integration and coordination with local communities throughout the entire RD&D process

# Measuring Progress

## Impact Framework

- Proposes public processes to implement and measure Strategic Goals and Strategic Objectives.
  - Includes formal development of crosscutting equity metrics
  - Refines the Foundational Principles for Impact Analysis

## Market Transformation Initiative

- Proposes a Market Transformation Initiative to scale and deploy EPIC innovations comparable to the Energy Efficiency proceeding.

## Pre-Application Public Symposia

- Proposes public symposia three months before investment plan applications are filed to demonstrate alignment of proposed investment plans with EPIC Strategic Goals and Objectives.

## 4. Status and Next Steps

- Proceeding Schedule
- Opportunities for DACAG Engagement

# Proceeding Schedule

Date	Event Description
March 7, 2025	ED Staff Proposal Identifying Strategic Objectives and Criteria for EPIC Issued
March 28, 2025	Party Opening Comments Due
April 18, 2025	DACAG formal action by next meeting
Anticipated Q3 2025	EPIC 5 Guidance Proposed Decision (PD) Issued
20 days after PD Released	Comments on Proposed Decision Due
Anticipated Q4 2025	Anticipated Vote on EPIC 5 Guidance Proposed Decision

# DACAG Engagement in Formal CPUC Process

- The DACAG may submit a member-approved letter to the CPUC seeking its comments to be entered into the record of the proceeding via DACAG staff.
- Proceeding staff will distribute the letter to:
  - The EPIC service list for awareness
  - The EPIC public informational docket
  - Assigned Commissioner and Judge for consideration to enter into the record at their discretion
- If the Commissioner and Judge determine to enter the letter into the record, the Judge will issue the letter to the service list via Ruling seeking party comment and enter the letter into the docket.

# Additional Opportunities for DACAG Engagement

## DACAG Meetings

- Continued Presentations at DACAG meetings seeking timely formal feedback.
- Presentations from EPIC administrators at DACAG meetings seeking informal feedback.

## Meet with Staff

- DACAG Priority Area members can meet with ED Staff to provide input on policy and oversight.
- DACAG Priority Area members can meet with CEC RD&D staff to provide input into EPIC Initiatives and Research Projects.

## Public Stakeholder Meetings

- Participation in workshops, technical working groups, and Symposia.

# EPIC Contacts and Resources

Fredric Beck, [fredric.beck@cpuc.gov](mailto:fredric.beck@cpuc.gov)

Cheryl Cox, [cheryl.cox@cpuc.ca.gov](mailto:cheryl.cox@cpuc.ca.gov)

To access the ED Staff Proposal on Strategic Objectives and the latest EPIC Decisions, please see the EPIC Webpage, [www.cpuc.ca.gov/energyrdd](http://www.cpuc.ca.gov/energyrdd)

EPIC Strategic Goals Workshop Resources,  
[www.epicpartnership.org/strategicgoals.html](http://www.epicpartnership.org/strategicgoals.html)

EPIC Strategic Objectives Workshop Resources,  
[www.epicpartnership.org/strategicobjectives.html](http://www.epicpartnership.org/strategicobjectives.html)

To participate in a CPUC Proceeding, visit the following webpage:  
[www.cpuc.ca.gov/proceedings-and-rulemaking](http://www.cpuc.ca.gov/proceedings-and-rulemaking)