2024 EPIC HIGHLIGHTS

ELECTRIC PROGRAM INVESTMENT CHARGE

California's premier public interest research program | Drives affordability, clean energy innovation, and entrepreneurship | Helps meet the state's climate and energy goals

EPIC Investments (2012 – 2024): Cumulative Accomplishments

Building Decarbonization

Improves affordability, energy efficiency, resilience, health, and comfort in the built environment, while reducing fossil fuel use.

$322 Million – 126 Projects

Entrepreneurial Ecosystem

Supports innovative clean energy technologies from laboratory to market, accelerating breakthroughs to meet state goals, reduce costs, and create local jobs.

$262 Million – 63 Projects

Grid Decarbonization & Decentralization

Promotes the adoption of clean distributed renewable energy, grid innovation, and grid interactivity to avoid cost impacts and help future-proof California infrastructure.

$271 Million – 149 Projects

Industrial & Agricultural Innovation

Advances decarbonization of large, emissions-intensive sectors, while supporting California businesses, communities, and public health.

$174 Million – 77 Projects

Low-Carbon Transportation

Optimizes and scales zero-emission vehicle adoption and grid integration to enhance clean mobility solutions, lower pollutants, and reduce costs.

$106 Million – 40 Projects

Resiliency, Health, & Safety

Elevates non-energy benefits; strengthens climate resilience; and advances an equitable, safe, and affordable clean energy transition.

$222 Million – 88 Projects

EPIC INVESTMENT IMPACTS

$1.4 BILLION
EPIC clean energy investments in research, development, demonstration, and commercialization

$18.9 BILLION
Private follow-on investments

$727 MILLION
Project match funding received

$30 MILLION
EPIC investments in projects on tribal lands

60% OF DEMONSTRATION FUNDS
EPIC investments benefitting and located in low-income or disadvantaged communities

EPIC IN 2024

$149 million awarded and 45 projects completed

90 grant recipients represented small businesses (100 or fewer employees)

EPIC grantees reported:

- Over $600,000 saved on utility bills
- 2.1 gigawatt-hours of electricity consumption avoided — equivalent to powering 1.5 million homes for one hour
- 3,500 metric tons of carbon dioxide equivalent emissions avoided — comparable to taking 800 gasoline cars off the road for one year

HIGHLIGHTED PROJECTS

WattEV, Bakersfield: Avoiding Costly Upgrades

- The nation's first solar-powered electric truck charging depot.
- Integrates solar and battery storage microgrid technologies with heavy-duty vehicle charging to minimize stress on the grid and reduce the need for electricity infrastructure upgrades.
- Reduces negative air quality impacts along Interstate 5 and State Highway 58, two of the state's busiest transportation corridors.

> "EPIC funding significantly advanced WattEV's 21st Century Truck Stop, enabling the deployment of a Distributed Energy Resource system in Bakersfield. This system includes a 5-megawatt solar array and a 2.7 megawatt-hour Battery Energy Storage System supporting 18 chargers on site. These chargers operate independently from the electric grid, saving ratepayers from costly utility upgrades."
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> **– Salim Youssefzadeh, WattEV, Co-Founder and Chief Executive Officer**

C-Crete Technologies, San Leandro: Healthier Air and Water

- First-of-its-kind demonstration poised to revolutionize the carbon-intense cement industry.
- Potential to reduce millions of tons of carbon dioxide emissions annually.
- Replaces binders in carbon-intensive Portland cement with zeolite rock, an abundant noncarbonate alternative.
- Unique electrified production without traditional industrial kilns, supporting healthier air and water for local communities.

> "We are very pleased that the state of California supports our science-based technology and manufacturing goals of reducing the environmental footprint of the construction industry. Scaling up C-Crete's manufacturing process using non-carbonate rocks such as zeolite moves us closer to our goal of converting locally available materials into cementitious binders for use in homes, schools, hospitals, and other infrastructure everywhere. This is a significant milestone towards putting an end to the 200-year dominance of carbon-heavy, limestone-based Portland cement in construction."
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> **– Rouzbeh Savary, Ph.D., C-Crete Technologies, Founder and President**

Form Energy, San Francisco: Enhancing Grid Reliability

- Funded to demonstrate a prototype of a 100-hour, iron-air battery — a novel form of long-duration energy storage. Multiday energy storage will be critical to meeting California's commitment to a zero-carbon grid by 2045.
- Significantly improved and validated its technology with EPIC funding, resulting in its first factory built in West Virginia in 2024 and $405 million in Series F financing.
- Awarded subsequent funding from the CEC's Long Duration Energy Storage Program to deploy a 1.5 MW/150-MWh iron-air energy storage system at PG&E's Redwood Valley substation in Mendocino County.

> "EPIC funding supported the verification of the basic performance of a kilowatt-scale prototype module of Form's iron-air energy storage system. This grid-connected system will be capable of delivering power continuously for 100 hours — or about four days — enabling the integration of renewable energy in the California Independent System Operator market on a daily basis and providing reliable service during multi-day periods of energy scarcity, extreme weather, wildfires, and renewable energy lulls."
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> **– RJ Johnson, Form Energy, Chief Commercial Officer**

The EPIC program is funded by California utility customers under the auspices of the California Public Utilities Commission.