CALIFORNIA E.P.A. HEADQUARTERS

Sacramento, California

$437,000
Verified Annual Savings

8,872 MMBTU
Verified Annual Energy Savings

1.5MM GAL.
Annual Water Savings

At a glance

CEG Solutions modernized the data center for the Environmental Protection Association (EPA) California Headquarters through an ESPC, cutting energy use 34% and boosting resilience for mission-critical operations.

Project Highlights

- 34% reduction in total building energy consumption
- $437K verified annual savings
- 8,872 MMBtu saved annually
- 2.6M kWh electricity & 1.5M gallons water saved per year
- 42% IT load reduction through consolidation & virtualization
- 40% reduction in data center footprint (~4,700 SF freed)
- Redundant power system with battery storage & backup generator
- $92K+ in rebates & incentives

OVERVIEW

The 951,000 SF CalEPA Headquarters was already LEED Platinum and had an Energy Star score of 100 when CEG was engaged. With few traditional efficiency opportunities left, CalEPA sought innovative ways to drive further energy reduction while addressing critical data center resiliency gaps. CEG was tasked with delivering both — without disrupting 24/7 operations.

STRATEGIES

Electrification & Carbon Reduction, Energy & Operational Efficiency, Incentives, Performance Contracting, Resiliency

Awards

- LEED Platinum Certification
- Energy Star

Energy Conservation Measures

- Server consolidation & virtualization
- CRAC replacement with air-side economization
- Expanded temperature & humidity ranges
- Hot aisle/cold aisle containment
- High-efficiency UPS replacement
- 2N-redundant power distribution
- Low-load chiller plant shutoff
- Battery storage & backup generator microgrid

SOLUTIONS

CEG applied a three-pronged approach: (1) reduce IT load through server consolidation and virtualization, cutting demand by 42%; (2) modernize cooling with hot aisle/cold aisle containment, CRAC upgrades, expanded temperature/humidity ranges, and air-side economization; (3) redesign electrical infrastructure with redundant PDUs, high-efficiency UPS, dual battery storage, and a standby generator, creating a resilient microgrid. Together, these upgrades decoupled the data center from the central chiller plant, enabling major operational savings.

RESULTS

The project reduced building energy use by 34%, delivering $437K in annual savings and verified reductions of 8,872 MMBtu, 2.6M kWh, and 1.5M gallons of water each year. Beyond efficiency, CalEPA gained a modernized, resilient data center with redundant power, enhanced cooling reliability, and reduced risk of system failure. The footprint was reduced by 40%, freeing up ~4,700 SF of valuable office space.