



## **CSUB Solar + Battery Microgrid Project**

### **Project Overview**

California State University, Bakersfield (CSUB) is developing a solar and battery storage project designed to strengthen the campus energy system while supporting long-term sustainability and cost stability.

The project includes:

- A 3.5 megawatt solar installation
- A battery energy storage system to store and use electricity when demand is highest

Once operational, the system is expected to supply approximately 40 percent of the university's electricity needs, reducing reliance on external energy sources.

### **Advancing Environmental Sustainability**

The project represents a significant step toward reducing the university's environmental footprint.

- Annual greenhouse gas emissions will be reduced by more than 775.6 metric tons
- Electricity will be generated from renewable solar energy rather than fossil fuels
- On-site generation improves energy efficiency by using power where it is produced

These outcomes contribute to broader state sustainability goals while supporting improved environmental conditions in the surrounding region.

### **Improved Energy Reliability and Resilience**

The addition of battery storage enhances the reliability and flexibility of the campus energy system.

- Energy generated during the day can be stored and used during peak demand periods
- Reduced reliance on the broader electrical grid
- Increased stability for academic operations, research activities, and campus services

This integrated system supports a more dependable and responsive energy supply.

### **Supporting Education and Workforce Development**

The project will serve as a valuable academic resource and support the university's teaching and research mission.

- Provides access to real-time and historical energy data for students and faculty
- Supports coursework and research in renewable energy, engineering, and sustainability.

- Enables hands-on learning and interdisciplinary collaboration.

By integrating infrastructure with academics, the project creates opportunities for practical learning and prepares students for careers in the growing clean energy sector.

### **Community and Regional Benefits**

The project contributes to broader community priorities by:

- Supporting regional efforts to expand clean and renewable energy
- Strengthening long-term energy resilience in the region
- Demonstrating leadership in sustainable infrastructure and responsible resource management

### **Conclusion**

The CSUB Solar + Battery Microgrid Project represents a forward-looking investment in clean energy, financial stability, and institutional resilience.

By combining on-site renewable generation with energy storage, the university is:

- Reducing environmental impact
- Managing long-term energy costs
- Improving reliability of campus operations
- Expanding opportunities for education and research

This project reflects a comprehensive and strategic approach to meeting CSUB's energy needs while delivering lasting benefits to both the campus and the surrounding community.