



Tribal communities in California, often located in high fire threat zones, face higher costs, interconnection fees, and frequent blackouts. To address this, they are increasingly adopting energy resilience strategies, reducing their dependence on the main power grid due to ongoing power shut-offs by major utility companies.

Background:

In the heart of tribal lands, a brighter and more sustainable future is within grasp. Communities like the San Pasqual Band of Mission Indians and many others are embracing the power of solar microgrids to transform their energy landscape. These aren't just energy solutions; they're pathways to self-sufficiency and environmental stewardship.

Why local sustainable power plants matter:

Energy Sovereignty: Solar microgrids empower tribal communities to take control of their energy future. By generating their own electricity, they reduce reliance on external sources, ensuring a consistent power supply, even in challenging times.

Sustainability: Solar microgrids are a testament to a commitment to sustainability. They significantly reduce carbon footprints, preserving the natural beauty of tribal lands and contributing to a healthier environment for all.

Resilience: In the face of natural disasters and grid outages, solar microgrids stand unwavering. They provide a dependable energy source, keeping critical services operational and communities safe.

Cost Savings: Most uderserved communities are always working under strict budgets; microgrids can help save on energy expenses, freeing up resources for essential services and community development.

Job Creation: These projects bring employment opportunities within tribal communities, fostering economic growth and self-sustainability.

Environmental Guardianship: Embracing solar energy demonstrates a profound commitment to preserving the Earth's future for generations to come.

Reliable. Resilient. Renewable. ROI

Microgrids: Powering a Sustainable Future:

Microgrids are dynamic energy ecosystems that combine renewable energy sources, energy storage, and smart controls. Gridscape is the largest renewable energy microgrid developer and operator in California with over 65 microgrids in contact or deployed. Its vertically integrated microgrid solution is intended to serve as a locally produced sustainable power plant. These microgrids allow sites to become less reliant on the grid by using local sources of energy. They can provide as much as 90% independence from the grid energy, and thus reduce overall energy cost & provide backup clean emergency power during PSPS or other power disruption events.





San Pasqual Band of Mission Indians

SPBMI is a thriving community of over 1,500 residents. The region, however, is notoriously affected by wildfires and the devastation reaches far beyond the loss of homes and businesses. The community gets hit often due to the reoccurring forest fires and this affects every aspect of life here from power disruption to infrastructural damage. This unreliable power supply here at SPBMI creates an opportunity for a decentralized system; a local sustainable power plant can give resiliency, reliability, savings and above all, safety to the community. This DOE-sponsored \$2.5M project was commissioned in January 2022 and has been operational since then. Gridscape provided the microgrid technology and EV charging infrastructure. Industria Power was the EPC on the project.

The project site includes

181kW Solar PV Carport System

480kWh Microgrid BESS System

Gridscape EnergyScopeTM Microgrid Control System

6 EV Charging Stations

480V/3ph Interconnection with SDG&E on a master meter

Software-driven Load Control and Management

Integration with Google Nest Cloud for HVAC load Control

Additional benefits:

- 1. The project will save approx. \$78,286 in energy costs annually.
- 2. The project will also offset 112 MT of GHG annually.
- 3. The project will reduce the peak demand and will contribute to additional cost savings.

About Gridscape

Gridscape, a leading and established name, specializes in creating and implementing future-proof solutions for renewable energy microgrids and fleet charging. These microgrids function as sustainable power plants, reducing reliance on the grid by utilizing local energy sources. With up to 90% independence from the grid, they cut energy costs and provide backup during disruptions. Gridscape's 'Product Centric' microgrid approach, integrated with EV charging, streamlines installation and lowers integration challenges. With 65 microgrids in California, Gridscape partners with notable clients like City of San Diego, EBCE, IWP (Denali), Fremont, SPBMI, and Chabot College.