HUALAPAI TRIBE GRAND CANYON WEST

Project Highlights

- Project Name: Grand Canyon West Solar + Storage (Microgrid Project)
- Project Type: Off-grid microgrid upgrade with solar PV + battery energy storage
- Project Location: Grand Canyon West, Peach Springs, Arizona, USA
- Project Size: 884.5 kW DC solar array /2.145 MWh battery energy storage system (BESS)
- Project Operation Date: June 2023
- PV Module Supplier: Boviet Solar
- Project Developer / EPC / Installer: SOLON Corporation
- Project Owner: Grand Canyon West

Grand Canyon West and the Hualapai Tribe

Grand Canyon West, operated by the Hualapai Tribe, is one of Arizona's premier tourism destinations, attracting visitors from around the world to experience the Skywalk and the breathtaking natural landscape of the Grand Canyon. Located far from the nearest utility infrastructure, the site previously relied solely on diesel generation for electricity. The Hualapai Tribe's investment in renewable energy represents a transformative step toward sustainability, energy independence, and long-term economic and environmental stewardship for tribal lands.

Project Overview

The Grand Canyon West Solar + Storage Project is an 884.5 kW DC solar photovoltaic array paired with a 2.145 MWh battery energy storage system (BESS). Developed, engineered, and installed by SOLON Corporation and powered by Boviet Solar's top-performing PV modules, the system integrates into the site's existing off-grid microgrid, substantially reducing diesel fuel use and carbon emissions while improving reliability and energy security.

The hybrid microgrid produces approximately 1.5 GWh (1,500,000 kWh) of clean electricity annually, supplying power to visitor facilities, operations, and critical infrastructure across Grand Canyon West. Economically, it reduces fuel expenses and generator maintenance costs. Socially, it enhances local resilience and tribal self-sufficiency. Environmentally, it avoids around 600 metric tons of CO_2 emissions each year, equivalent to planting 27,000 trees, saving 190,000 gallons of water, or eliminating 650 short tons of coal annually.

Economic Benefits

Generating roughly 1.5 GWh of clean energy per year, the solar and storage microgrid sharply reduces diesel fuel consumption and operating costs associated with transport, storage, and generator maintenance. The project enhances long-term financial stability for Grand Canyon West while creating local technical jobs in installation, operations, and maintenance. Over a 25-year system life, the hybrid energy system will generate approximately 37.5 GWh of renewable power and deliver millions of dollars in cumulative fuel savings.

Social Benefits

The Hualapai Tribe's solar + storage project embodies community empowerment and self-determination. By investing in renewable energy, the tribe is advancing energy sovereignty and creating a sustainable foundation for future generations. The installation provides a reliable source of power for tourism, hospitality, and essential services—supporting economic development while reinforcing cultural values of respect for nature and environmental preservation.

Environmental Benefits (Estimated)

By generating approximately 1.5 GWh of renewable electricity annually, the system avoids about 600 metric tons of CO_2 emissions each year, equivalent to planting 27,000 trees, saving 190,000 gallons of water, or displacing 650 short tons of coal. Over its 25-year operational life, the hybrid system will prevent

more than 15,000 metric tons of CO_2 emissions, eliminating most diesel dependence and supporting Arizona's and the Hualapai Tribe's clean-energy and climate objectives.

BOVIET SOLAR

Boviet Solar Technology Co., Ltd. is a leading solar technology company founded in 2013 in Vietnam, specializing in the manufacturing of high-performance monocrystalline PV cells and premium Gamma Series™ monofacial and Vega Series™ bifacial PV modules. Our top-performing modules are engineered for a wide range of applications, including residential, commercial, industrial, community, and utility-scale solar projects.

Boviet Solar combines business acumen, financial strength, technological expertise, and manufacturing excellence to deliver reliable, high-efficiency solar solutions to industry clients worldwide. The company is deeply committed to sustainability, supply chain traceability, and compliance with international trade standards, while fostering long-term, trust-based partnerships across the global energy sector. Boviet Solar has earned industry-wide recognition for quality and reliability. The company has maintained a Tier 1 PV Module Manufacturer ranking by Bloomberg New Energy Finance (BNEF) since 2017, has been recognized as one of the Top 10 Most Bankable Global PV Module Manufacturers by Wood Mackenzie, and is ranked among the Top 10 Most Financially Reliable PV Module Manufacturers by Sinovoltaics. Boviet Solar's modules have also been consistently rated as Top Performers in Kiwa PVEL's PV Module Reliability Scorecard since 2019.

Headquartered in Vietnam, Boviet Solar operates manufacturing facilities in both Vietnam and the United States, with an annual production capacity of 3.0 GW for PV cells and modules. The company also maintains regional operations in the United States, Germany, and other key international markets. To learn more, visit www.bovietsolar.com.