



COPPER RIDGE ELEMENTARY SCHOOL

Project Highlights

- **Project Name:** Copper Ridge Elementary School Solar (Vail School District)
- **Project Type:** Carport Solar System
- **Project Location:** Vail, Arizona, USA
- **Project Size:** 140 kW DC
- **Project Completion Date:** June 2023
- **PV Module Supplier:** Boviet Solar
- **Project Installer:** Solon Corp.
- **Project Owner:** Vail School District

Vail School District

The Vail School District, located near Tucson, Arizona, is nationally recognized for its innovation, academic excellence, and dedication to sustainability. The district has actively integrated renewable energy into its operations to reduce energy costs, lower emissions, and create meaningful learning opportunities for students. The Copper Ridge Elementary School Solar Project continues this leadership, supporting the district's long-term goal of achieving energy independence through clean, cost-effective solar power.

Project Overview

The Copper Ridge Elementary School Solar Project is a 140 kW DC carport solar system developed and installed by Solon Corp. and powered by Boviet Solar's top-performing PV modules. The grid-tied installation provides reliable, clean electricity directly to the school, supplying a significant portion of its annual energy demand while offering shaded parking for staff and visitors.

The system generates approximately 225 MWh (225,000 kWh) of renewable electricity annually, offsetting a large share of the school's power consumption. Economically, it reduces operating expenses and stabilizes future energy costs. Socially, it enhances sustainability education and community engagement. Environmentally, it prevents roughly 90 metric tons of CO₂ emissions per year, equivalent to planting 4,100 trees, saving 30,000 gallons of water, or eliminating 95 short tons of coal annually.

Economic Benefits

Producing about 225 MWh of renewable energy each year, the system reduces the school's utility costs and shields the district from future energy-price volatility. The carport structure also provides functional benefits, offering shaded, weather-protected parking areas that improve the school's infrastructure. The project supported local construction and electrical jobs during its implementation, contributing to Arizona's clean-energy workforce and economy.

Social Benefits

The Copper Ridge Elementary School Solar Project embodies the district's commitment to sustainability, education, and community leadership. The installation serves as a hands-on learning tool for students, helping them understand the science and benefits of renewable energy. It also demonstrates environmental responsibility to parents, faculty, and local residents, fostering community pride in the district's proactive approach to sustainability and energy efficiency.

Environmental Benefits (Estimated)

By producing approximately 225 MWh of renewable electricity annually, the system avoids around 90 metric tons of CO₂ emissions each year, equivalent to planting 4,100 trees, saving 30,000 gallons of water, or displacing 95 short tons of coal. Over its 25-year operational lifespan, the project will prevent more than 2,200 metric tons of CO₂ emissions, improving local air quality and supporting Arizona's clean-energy and climate goals.

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.