ABCWUA WATER TREATMENT CENTER

Project Highlights

- Project Name: ABCWUA II Water Treatment Center
- Project Type: Carport Solar
- Project Location: Albuquerque, New Mexico, USA
- Project Size: 6.268 MW DC
- Project Operation Date: November 2020
- PV Module Supplier: Boviet Solar
- Project Developer: Affordable Solar Installation Inc.
- Project Owner: Albuquerque Bernalillo County Water Utility Authority (ABCWUA)

Albuquerque Bernalillo County Water Utility Authority (ABCWUA)

The Albuquerque Bernalillo County Water Utility Authority (ABCWUA) provides reliable water and wastewater services to more than 650,000 residents in the Albuquerque metropolitan area. As one of the largest public utilities in New Mexico, ABCWUA is committed to resource conservation, infrastructure modernization, and operational sustainability. Its San Juan–Chama Water Treatment Plant is a cornerstone facility that supplies safe drinking water to the region. Through investments in renewable energy such as solar power, ABCWUA continues to demonstrate leadership in climate action, fiscal responsibility, and community stewardship.

Project Overview

The ABCWUA II Solar Carport Project is a 6.268 MW DC behind-the-meter, grid-tied solar installation at the San Juan–Chama Water Treatment Plant in Albuquerque. Developed by Affordable Solar Installation Inc. and powered by Boviet Solar's top-performing PV modules, the expansive carport arrays provide clean, renewable electricity directly to plant operations, significantly reducing reliance on utility-supplied power while providing long-term cost savings and energy stability.

The project delivers broad economic, social, and environmental benefits. Economically, it generates approximately 12.08 GWh of electricity annually, cutting operating expenses, hedging against energy-price volatility, and stabilizing budgets—all while creating local jobs in design, construction, and operations. Socially, it showcases ABCWUA's sustainability leadership and serves as a scalable model for other critical infrastructure facilities. Environmentally, the system avoids about 4,771 metric tons of CO_2 emissions per year, equivalent to removing 1,037 cars from the road, planting 227,000 trees, saving 1.59 million gallons of water, or eliminating 4,904 short tons of coal annually.

Economic Benefits

The project produces roughly 12.08 GWh of clean electricity each year, offsetting a significant portion of the energy consumed by high-horsepower pumps, motors, aeration systems, SCADA controls, and plant HVAC operations. On-site generation reduces electricity expenses, trims demand and time-of-use charges, and provides stable, inflation-resistant energy for long-term budgeting. Construction of the carport system created numerous local jobs across engineering, permitting, fabrication, electrical installation, and commissioning. Ongoing operations and maintenance continue to support skilled clean-energy employment in the region.

Social Benefits

The solar carport system stands as a visible symbol of ABCWUA's commitment to sustainability and innovation in municipal water management. Developed by Affordable Solar Installation Inc., the project supported New Mexico's solar workforce and advanced regional clean-energy capacity. It also serves as an educational opportunity, offering staff, visitors, and community members a real-world example of renewable-energy integration within essential public infrastructure. The project reinforces public confidence in ABCWUA's responsible governance and its proactive approach to climate resilience.

Environmental Benefits (Estimated)

Generating approximately 12.08 GWh of clean energy annually, the solar carport avoids around 4,771 metric tons of CO_2 emissions each year, equivalent to planting 227,000 trees, saving 1.59 million gallons of water, or eliminating about 4,904 short tons of coal. Over its 25-plus-year lifespan, the project will prevent more than 119,000 metric tons of CO_2 emissions, significantly improving local air quality and supporting Albuquerque's and New Mexico's broader carbon-reduction and sustainability 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.