# GOLDEN TRIANGLE I & II SOLAR + STORAGE POWER PLANT

## Project Highlights

- Project Name: Golden Triangle I & II Solar + Storage Power Plannt
- Project Type: Utility Scale Solar + Battery Energy Storage System (BESS)
- Project Location: Lowndes County, Mississippi, USA
- Project Size: 350 MW AC I 450 MW DC Estimated + 100 MW BESS
- Project Operation Date: May 2024
- PV Module Supplier: Boviet Solar
- Project Developer: Origis Energy
- Project Owner: Tennessee Valley Authority (TVA)

## Project Overview

The Golden Triangle I & II Solar + Storage Power Plant is one of Mississippi's largest renewable energy investments, delivering 350 MW AC (~450 MW DC) of solar power paired with 100 MW of battery storage. Strategically located in Lowndes County, Mississippi, the project was developed by Origis Energy and powered by Boviet Solar's top-performing PV modules, with operations commencing in May 2024. Ownership and operation were assumed by the Tennessee Valley Authority (TVA) under its Green Invest program. Golden Triangle I alone is a 200 MW AC (~255 MW DC) solar facility paired with 50 MW of storage, producing approximately 455,520 MWh of clean electricity annually, enough to supply 41,000+ homes each year. The integrated 100 MW BESS provides enhanced grid flexibility, enabling TVA to store solar energy and dispatch it during periods of peak demand, strengthening grid resilience across its 10-million-customer service territory.

Economically, the project represents a landmark clean energy investment for Mississippi, generating hundreds of construction jobs, providing long-term O&M employment, and delivering millions in tax revenues to support schools, healthcare, and infrastructure. Socially, it advances energy security, workforce development, and rural economic revitalization, positioning Mississippi as a clean energy hub within the TVA region. Environmentally, the project offsets approximately 324,400 metric tons of $CO_2$ each year, conserves ~240 million gallons of water, and avoids the burning of ~320,000 tons of coal annually, delivering measurable climate and public health benefits.

## Economic Benefits

Golden Triangle I & II has delivered substantial economic impacts for Lowndes County and the wider TVA region. The project created hundreds of construction jobs spanning solar installation, civil works, electrical trades, and logistics. Local businesses benefit from service contracts, supply chain participation, and regional spending, ensuring value circulates throughout the community. In operation, Golden Triangle I generates ~455,520 MWh of electricity annually, enough to power 41,000+ homes. Across both phases, the combined capacity will deliver renewable energy equivalent to powering nearly 75,000 homes each year. Over its multi-decade lifespan, the project will provide millions in tax revenues, fund schools and healthcare, strengthen infrastructure, and provide steady lease income for landowners, making it a cornerstone investment in Mississippi's energy future.

## Social Benefits

Golden Triangle strengthens energy security for TVA's 10 million customers by combining solar generation with 100 MW of storage, delivering clean electricity when and where it's needed most. This helps reduce cost volatility, increase regional grid reliability, and support TVA's decarbonization strategy. The project also fosters workforce development, equipping local workers with skills in solar construction, electrical systems, and battery technologies. As one of the largest clean energy investments in the state, Golden Triangle inspires community pride, enhances Mississippi's profile as a renewable energy leader, and lays the foundation for further clean energy investment across the region.

## Environmental Benefits - Estimated

Golden Triangle I & II delivers significant environmental outcomes. Together, the facilities generate 455,520+ MWh annually (Phase I) with expanded capacity under Phase II, offsetting approximately 324,400 metric tons of $CO_2$ each year, equivalent to removing 39,600 gasoline-powered vehicles or

planting 3.1 million trees annually. The project conserves ~240 million gallons of water annually by avoiding the water-intensive cooling processes associated with fossil fuel plants and eliminates the need to burn approximately ~320,000 tons of coal each year. Collectively, these outcomes reduce greenhouse gas emissions, improve air quality, preserve water resources, and contribute directly to TVA's long-term sustainability and climate commitments.

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## BOVIET SOLAR

Boviet Solar 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. The company also maintains regional operations in the United States, Germany, and other key international markets. To learn more, visit www.bovietsolar.com.