

How a new solar panel deal highlights a US manufacturing push

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For years, a glut of cheap Chinese-made solar panels decimated America's solar cell makers, including two Georgia companies that shut their doors several years ago.

But last week's announced order for 2.5 million solar panels from Qcells in northwest Georgia—which was announced by Vice President Kamala

Harris—put an exclamation point on the U.S. solar industry's rebound.

The nation's solar comeback has been aided by protectionist trade policies started under President Donald Trump and continued by President Joe Biden. Massive incentives—from Republican state lawmakers in Georgia, and Democrats in Washington, D.C.—have also played a huge part.

The solar panel deal is part of the federal government's response to foreign powers, such as China, dominating the production of energy technology, a critical industry that's only expected to grow as countries slash their use of fossil fuels.

"We invented the solar panel in America and then basically stopped trying to make it here," Qcells spokeswoman Marta Stoepker told The Atlanta Journal-Constitution. "We're trying to jumpstart that again."

Qcells, which recently launched its own historic expansion at two Georgia plants, is among a wave of clean technology facilities growing across the Peach State as the U.S. tries to bolster its own internal supply chain.

The order from Summit Ridge Energy represents more than eight months of output for Qcells' current Dalton facility. The project will deploy 1.2 gigawatts of solar power to community projects, which consists of installations that provide electricity for clusters of buildings and apartments.

It isn't Qcells' largest contract. Microsoft ordered 2.5 gigawatts of solar capacity earlier this year. Qcells' expansion includes adding additional capacity to its existing facility and building a new plant in Bartow County, which will help ramp up production to meet both orders, Stoepker said.

Qcells, which is owned by a South Korean conglomerate, builds several solar panel models, ranging from roughly 6 to 9 feet in length and requiring robust supply chains to produce.

COVID-19 threw a wrench into global computer chip and rare metal production, leading to shortages, rising prices and heartburn across many industries. While Stoepker said Qcells is confident in its capabilities to fulfill this large order, strengthening domestic parts production has been a core policy goal of Biden's administration.

Juan-Pablo Correa-Baena, an assistant professor at Georgia Tech specializing in materials science and engineering, said federal and state leaders recognize that the U.S. can't allow itself to fall behind other countries in clean energy development.

"We want to make sure that we don't have geopolitics in the middle of this, because the future of electricity production is going to heavily rely on solar panels," he said. "It's a matter of national security at this point."

Falling behind foreign countries

When Qcells came to Georgia in 2019, it became the only major solar panel manufacturer in the state, but that wasn't always the case.

Suniva, which got its start at Georgia Tech, and Mage Solar, a company recruited from Germany in 2010, both had Georgia facilities that would eventually shutter when China and other countries flooded the U.S. market with cheaper panels.

"It crashed our entire (solar) [manufacturing sector](#)," Georgia Department of Economic Development Commissioner Pat Wilson said in a recent interview.

Correa-Baena said Asian countries introduced hefty incentives to prop up their own solar panel manufacturers, helping them corner the market and quash U.S. and European rivals.

In 2018, Trump enacted steep tariffs on [solar panels](#) imported from China, which Biden has preserved. That policy helped even the playing field, Wilson said.

Correa-Baena said domestic solar production has accelerated as state and federal governments borrowed from China's incentives playbook.

The Inflation Reduction Act, Biden's signature climate change and health care law, provided billions to the solar industry. The Solar Energy Manufacturing for America Act, a provision within the IRA championed by U.S. Sen. Jon Ossoff, provided \$10 billion in tax credits for companies to build new solar manufacturing facilities.

"It's a game changer for the solar industry," Stoepker said. "... It's providing us the certainty that we need in order to build manufacturing facilities that are going to be around for decades."

The recent Bipartisan Infrastructure Law, also ramped up incentives for green initiatives like electric vehicle manufacturers. States, like Georgia, and local governments, meanwhile, have heaped billions in tax breaks and other freebies in the race for jobs.

'Where the future is heading'

Virginia-based Summit Ridge Energy ordered the panels from Qcells to support roughly 350 community projects across several states. Both companies declined to provide price estimates for the deal.

Leslie Elder, Summit Ridge Energy's vice president of political and

regulatory affairs, said the first shipment is expected from Qcells this year. It'll take up to four years to fulfill the order.

The first projects will be in states with existing community solar programs, such as Illinois, Maryland, Maine and Virginia. Elder said about 75% of Americans would not have access to solar power except through a community solar program.

While Georgia does have some community projects, it does not have an equivalent state-backed program.

"We are hoping that with the commitment from Congress and the Biden-Harris Administration through the Inflation Reduction Act that we will be able to expand the opportunity into states that don't currently give community solar to their customers," Elder said.

The electricity generated by the 2.5 million panels will be enough to power roughly 140,000 homes. During her speech at Qcells, Harris said these projects will result in 10% lower energy costs for participants.

These Summit Ridge Energy panels will avoid sending more than 1.3 million tons of greenhouse gas emissions into the atmosphere, which is the equivalent of taking more than 260,000 gasoline-powered cars off the road, according to the U.S. Environmental Protection Agency.

Ike Irby, the vice president's chief climate advisor, said solar power is among the technologies that U.S. leaders expect to be ubiquitous in the coming decades, which helps fuel their desire to see more panels built by Americans.

"We know where the future is heading, and that's the future where we have lower [pollution](#) and are running on clean energy," Irby said.

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