

## North Carolina wins Wolfspeed semiconductor materials plant

September 9 2022, by GARY D. ROBERTSON



North Carolina Gov. Roy Cooper, right, presents Wolfspeed CEO Gregg Lowe with a piece of pottery as a gift during an economic development announcement ceremony at the Executive Mansion Friday, Sept. 9, 2022, in Raleigh, N.C. Wolfspeed, a Durham silicon chip manufacturer, will build a new factory in Chatham County promising 1,800 new jobs. Credit: Travis Long/The News & Observer via AP



A North Carolina-based semiconductor company announced Friday it will build a \$5 billion manufacturing plant in its home state to produce silicon carbide wafers, which is emerging as a favored part for renewable energy products.

Wolfspeed Inc. said it plans to create 1,800 new jobs by the end of 2030 at a location in Chatham County, about 45 miles (72 kilometers) southwest of its Durham headquarters.

Wolfspeed could benefit from \$775 million in cash incentives, infrastructure improvements and other sweeteners from North Carolina and local governments and the state legislature to build on the outskirts of Siler City, according to a state document. The lion's share would be in the form of local property tax rebates.

A state committee voted earlier Friday to award Wolfspeed up to \$76 million over 20 years if it met investment and job-creation goals. The company is also likely to benefit financially from legislation signed by President Joe Biden last month that encourages semiconductor research and production.

The company, formerly known as Cree, already employs over 3,000 jobs in the state. The former LED light pioneer has turned to the production of silicon carbine chips, which are known to be more efficient and solid than traditional silicon chips.

"It's a game-changing technology for electric vehicles, renewable energy, storage, rail systems, appliances ... and countless other electric applications," Wolfspeed CEO Gregg Lowe said at the announcement outside the Executive Mansion in Raleigh.

Lowe said the company already operates the world's largest silicon carbide materials factory in Durham. Output at the new plant, which



Lowe said could begin production in about two years, would be more than 10 times what the Durham plant produces.

The materials produced at the new plant will help supply the company's new chip fabrication facility in upstate New York, Lowe said.

This "East Coast silicon carbide corridor will dramatically improve the way the world consumes energy," Lowe said.

Average annual salaries for the new jobs, which would be generated starting in 2026, are projected at \$77,753, well above the county average of \$41,638, according to state officials.

Gov. Roy Cooper said Wolfspeed's news was an "historic capital investment" in the state and called Friday "another step in our drive toward a clean energy economy" as well as "an amazing day for high-paying jobs."

Lowe likened an electric vehicle with silicon chips to a car with a combustion engine whose gas tank is poked full of holes. Meanwhile, he said, a silicon carbide chip within an inverter that converts electricity to turn the vehicle's motor results in super-fast recharging, he said—20 minutes to add another 300 miles to his vehicle's range, for example.

The jobs announcement marked another big economic win for central North Carolina during the past 17 months.

Apple announced plans in April 2021 to build its first East Coast campus in Research Triangle Park between Raleigh and Durham. Toyota revealed in December it would build a battery plant in Randolph County, followed the next month by Boom Supersonic picking Greensboro for its first full-scale manufacturing facility for next-generation supersonic passenger jets.



Chatham County also got the brass ring in March when Vietnamese automaker VinFast said it would build its first North American plant there to make electric vehicles. The investment, which could generate 7,500 jobs, would follow several near-misses by the state to attract a carmaker.

Wolfspeed had considered the expansion in Marcy, New York, where its new production facility is located and where it had additional space for expansion, according to a state Commerce Department document.

Lowe said after the announcement that the company looked at several states, and New York "put together a really strong package."

But the winning site's proximity to Wolfspeed's current operations in Durham, along with the company's relationship with North Carolina A&T State University in Greensboro, a historically Black college, "gave it a little bit of a tipping edge," he said. Wolfspeed on Friday also announced expanded initiatives to attract the school's engineering students to the semiconductor field.

Graduate students at North Carolina State University in Raleigh helped start what is now Wolfspeed in 1987.

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Citation: North Carolina wins Wolfspeed semiconductor materials plant (2022, September 9) retrieved 28 April 2024 from

https://techxplore.com/news/2022-09-north-carolina-wolfspeed-semiconductor-materials.html

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