

## **Lyten Secures \$4 Million Department of Energy Grant to Accelerate Commercialization of High-capacity, Long Cycle-life Lithium-Sulfur Batteries**

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Lyten was awarded a \$4 million grant from the U.S. Department of Energy (DoE) to accelerate the manufacturing of lithium-sulfur battery technology to help alleviate offshore supply chain risk for EV batteries.

The U.S. Department of Energy is investing in lithium-sulfur battery chemistry as part of a strategy to support technologies that can alleviate supply chain concerns for EV batteries and increase EV driving range.

[Lyten, Inc.](#), a supermaterial applications company and leader in 3D Graphene materials, announced it has secured a \$4 million grant from the U.S. Department of Energy (DoE) to accelerate the manufacturing of its advanced lithium-sulfur battery technology.

The grant, awarded by the DoE's Energy Efficiency and Renewable Energy / Vehicle Technologies Office, specifically targets lithium-sulfur technologies that can alleviate offshore supply chain risk for EV batteries and increase EV driving range. Utilizing abundantly available and low-cost sulfur, the lithium-sulfur chemistry has the potential to deliver greater than twice the energy density of lithium-ion NMC (nickel, manganese, cobalt) chemistries. Additionally, the chemistry does not require critical minerals such as nickel and cobalt in the cathode or graphite in the anode, enabling a locally sourced, locally manufactured EV battery.

The DoE grant awards for lithium-sulfur follow the passage of National Defense Authorization Act, signed into law last month with bi-partisan support, which will prohibit the U.S. Defense Department from buying batteries produced by [China](#)'s largest manufacturers starting in October 2027. This ban reinforces the urgency to accelerate the development and rapid scale up of rechargeable cells with alternative battery chemistries, like lithium-sulfur, that offer

localized supply chains for strategic defense applications and high energy density to support mobility and transportation electrification.

"We are encouraged by both the Department of Defense and Department of Energy's support for alternative battery technologies, in particular breakthrough technologies like lithium-sulfur that are critical to establishing energy security and supply chain independence," said Dan Cook, CEO and co-founder of Lyten. "The U.S. has an opportunity to gain the lead in technological breakthroughs necessary to overcome barriers holding back mass scale electrification."

The DoE award is supporting both private industry and university research as part of this round of funding for lithium-sulfur. For this grant, Lyten is working with Stanford University, the University of Texas-Austin, and industrial partner Arcadium Lithium (formed via merger of Livent and Allkem). Separately, Lyten is a subrecipient on a DoE grant awarded to Purdue University to improve modeling capabilities for lithium-sulfur cells.

Lithium-sulfur is a chemistry known for decades to potentially hold two to three times the energy density of lithium-ion but was not envisioned to come into the market until the 2030s due to material science challenges. Lyten has accelerated this timeline by using its 3D Graphene material to develop a sulfur-graphene composite cathode. In June 2023, Lyten opened a semi-automated, lithium-sulfur pilot line producing pouch and cylindrical cells on its 145,000-square-foot campus in Silicon Valley and will begin to deliver non-EV cells commercially in 2024.

In 3Q 2023, Lyten announced it had raised \$200 million through a Series B round, bringing total investment up to \$410 million to scale 3D Graphene applications and lithium-sulfur battery manufacturing. Lyten investors include a broad range of industry leaders, including Stellantis (third-largest auto manufacturer in the world), FedEx, Honeywell, and Walbridge.

Read the [original article](#) on Business Wire.