

# One Provo company's goal to shift the lithium battery market

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Hailey Brown —Lithium car batteries consist of a number of rare earth minerals, a majority of which the U.S. imports from China. Graphite is the main component of these batteries, but nanosilicon can replace it — and even do a better job. Ordinarily, it is difficult and expensive to produce, but halloysite contains silicon nanotubes, opening a streamlined pathway to obtain nanosilicon. [Ionic Mineral Technologies](#) has an open pit halloysite mine in Juab County, Utah, and plans to produce 20,000 tons of nanosilicon a year from the deposits. If successful, the company could break into the supply [network](#) at a critical time for the U.S.

[Networks](#) connect different points, known as nodes. In the case of lithium-ion batteries, there are many nodes, consisting of the extraction of raw materials, the refinement of these materials, and then the manufacturing of the battery. Without the connection of these nodes, the batteries cannot be made. [On Friday, China](#) will implement new restrictions on graphite exports to the U.S., leaving it vulnerable to a gap in the network, because the U.S. imports around one-third of its graphite supply from China. As tension between China and the U.S. continues, finding other graphite sources is crucial to maintaining a consistent supply. The Provo based company could become an important node, or part of the lithium-ion battery network. The positive impact extends beyond establishing a new node in the supply chain for the United States. It would also bring hundreds of jobs and billions in revenue.

Ionic Mineral Technologies is a [non-state actor](#). While states are often viewed as the only actors that influence politics globally, non-state actors such as businesses are very influential. The main goal of Ionic Mineral Technologies is likely to profit from the nanosilicon they are seeking to produce, so the gap created by China's export restrictions might be seen as more beneficial than harmful, as it creates a gap in the market. Companies like Ionic Mineral Technologies are likely to pursue and support policies that benefit U.S.-based mining and manufacturing.

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