

With a focus on manufacturing flexibility, Wildcat leaps into high-capacity CAM production

Dee Strand, PhD, CSO, R&D, Wildcat Discovery Technologies, Inc. The intersection of Wildcat Discovery Technologies' materials experience with the U.S. goal of a domestic supply chain provides a unique opportunity. We will describe Wildcat's plan and progress to manufacture advanced cathode materials. Our product pipeline consists of materials that 1) provide a range of energy densities; 2) are free of cobalt and nickel; 3) show promising material safety performance; and 4) have synergies in manufacturing unit operations.



Among the bustling labs and engineering spaces at Wildcat Discovery Technologies headquarters is the John B. Goodenough Conference Room. Named for the esteemed Nobel laureate and inventor of lithium iron phosphate (LFP), the room is an inspiration for the company's bold, new strategy to manufacture high-performance cathode materials in the United States.

Dr. Goodenough discovered LFP at the University of Texas in the 1990s, and Chinese companies soon were mass producing the technology. Today, China produces more than 95% of LFP, leading to supply chain risk as cell producers face the related costs and geopolitical uncertainties.

For Wildcat, the lopsided global CAM supply is a ripe opportunity to serve customers in a new way. The company has been a leading battery materials developer since 2006, and it is leveraging its broad expertise, unique technology, and worldwide partnership network to bring LFP production back to the U.S.

"Customers worldwide seek dependable nearshore alternatives to

China-based cathode materials, and Wildcat's strategy is to manufacture and supply the high-performance products they need," said Wildcat President and CEO Mark Gresser.

Building a plant and providing samples

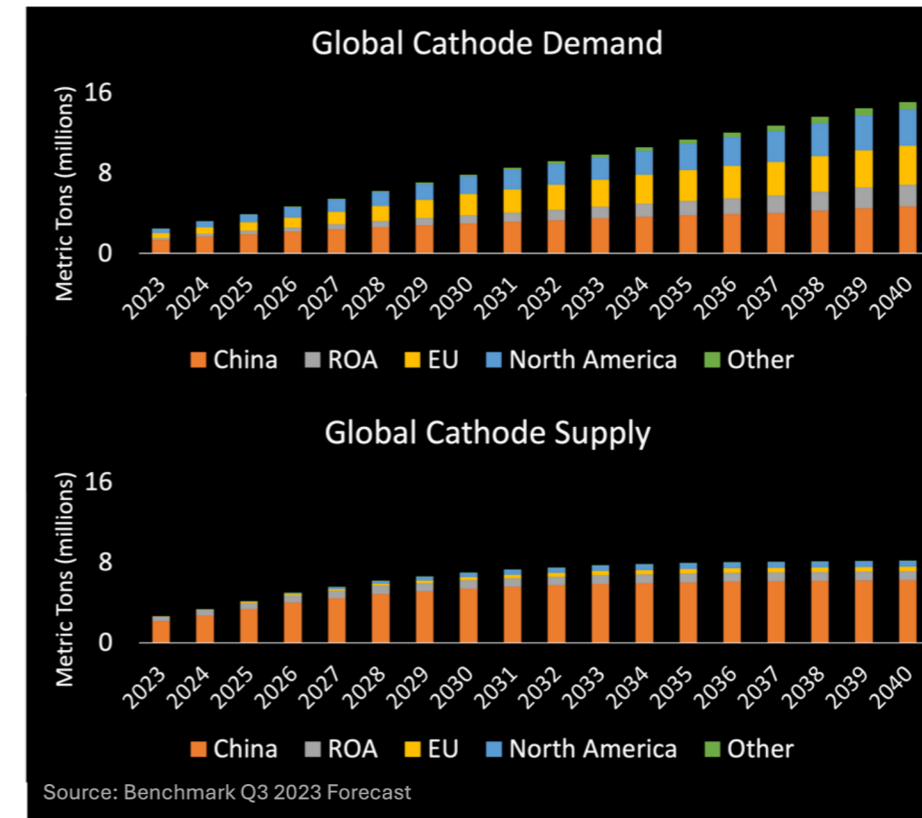
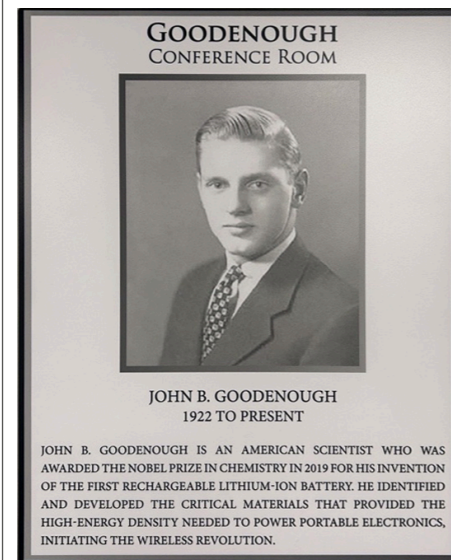
Wildcat is a battery materials pioneer known for its unique high throughput platform (HTP) that performs comprehensive materials testing 10 times faster than conventional methods. In collaboration with

85 companies, Wildcat has optimized solutions for battery components in 225 projects and more than 500,000 unique experiments spanning multiple industries.

Leveraging its experience and technology, Wildcat plans to build a U.S. plant to manufacture a portfolio of nickel-free and cobalt-free materials: LFP in late 2026, lithium manganese iron phosphate (LMFP) in 2027, and disordered rock salt (DRX) in 2028. The plant will open in 2026 with a 15,000-metric ton capacity, and it is set to double to 30,000 metric tons in 2028.

Wildcat already is providing pilot-scale LFP samples, enabling product testing with several battery cell makers and commercial truck and automotive manufacturers. The company is also advancing the design-build for its U.S. plant, adding top experts to its manufacturing team, and establishing a manufacturing advisory board.

"Customers' feedback on our LFP samples and overall strategy has been overwhelmingly positive, and their multiple offtake agreements represent enough volume to fill our 15,000-metric ton manufacturing capacity in the first year," said Dr. Dee Strand,



Wildcat Chief Scientific Officer and a presenter at AABC Europe.

Flexibility to meet customer needs

Wildcat's unique product strategy involves using the same manufacturing process for all cathode materials, which enhances flexibility and reduces the risk of not meeting changing customer needs. With one common

process, it will be easier and less costly for Wildcat to keep pace with industry changes and transition plant capacity from LFP to LMFP and DRX.

After proving its manufacturing capabilities with LFP, LMFP is the next logical step for production. LMFP will help bridge the gap between low-cost LFP and today's high-energy nickel manganese cobalt (NMC) batteries,

relieving some of the supply chain pressure and sustainability concerns of NMC cells, while delivering superior cost and safety.

"We've garnered a lot of interest in our planned product offering of safe, low-cost, high-performance cathode materials, and customers seem pleased with our flexible manufacturing plan which enables us to shift product mix to suit customer demands," Gresser said.

Leading tomorrow with DRX and AI

Beyond the two phosphate-based products, Wildcat is poised to disrupt global CAM markets with DRX, which has gained significant attention in the field of energy storage due to its high energy density.

DRX cathodes can deliver high specific capacities due to redox on both the transition metals and the anion in the structure. Wildcat has harnessed its HTP methodology to advance the development of DRX cathodes, establishing strategic partnerships with BMW, McGill University, and other industry leaders to further drive innovation.

Wildcat's CAM development also benefits from the company's unique advantage in artificial intelligence. Since the most effective AI models require large amounts of data, Wildcat's 500TB of experimental data generated over 15 years of HTP testing ensures it has the foundation for accelerating materials development and predicting cell performance – which are critical to a customer-focused manufacturing strategy for the long term.

"Wildcat's vision is to be the first choice for battery materials development, integration, and supply, and our team continues to make great strides toward its execution," Gresser said.

