

# ABTC Hits Major Technical Milestones on Path to Commercializing Lithium Hydroxide Refining Operations in Nevada

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Achievement of Milestones Results in Approval of Next Phase of US DOE Funding for the Continued Acceleration of Demonstration and Commercial-Scale Operations

RENO, June 6, 2023 - American Battery Technology Company (ABTC) (OTCQX: ABML), an American critical battery materials company that is commercializing both its primary minerals manufacturing and secondary minerals lithium-ion battery recycling technologies, is proud to announce that it has achieved all required milestones for the first phase of its U.S. Department of Energy (DOE) \$4.5M grant project for the design, construction, and operations of its lithium hydroxide from Nevada sedimentary claystone system.

"We are excited to have achieved these technical and performance milestones for our internally developed processing train for the manufacturing of battery grade lithium hydroxide from our unconventional Nevada-based sedimentary claystone resource," stated ABTC CEO Ryan Melsert. "There is near-infinite demand from automakers, battery manufacturers, and cathode refiners for this type of domestically produced low cost and low environmental impact lithium hydroxide material, and we are rapidly scaling up our commercial operations to meet this demand from our strategic partners."

While the U.S. does not hold large deposits of conventional lithium resources, such as hard rock ores and lithium-rich brines, it does have significant amounts of lithium held in unconventional deposits, such as sedimentary claystone resources. To date, attempts to produce battery-grade lithium products from these vast quantities of lithium-bearing unconventional sedimentary resources have utilized processes that were designed for conventional hard rock or brine-based resources, and as a result were not economically competitive.

In order to broaden the resource base for U.S. domestic production of critical lithium materials, ABTC in collaboration with DuPont and the University of Nevada, Reno, and supported by funding from the US DOE, has developed an integrated, first-of-kind process train specifically designed to access the lithium in these types of unconventional resources to produce a low-cost and low environmental impact lithium hydroxide monohydrate product that meets the rigorous specifications for use in high energy density battery cathode manufacturing.

ABTC has successfully completed the first phase of this project and has demonstrated these critical project milestones:

- **Manufacturing of Battery Grade Lithium Hydroxide Product from ABTC's Tonopah Flats Claystone Resource:** The manufacturing of lithium hydroxide product that has been analytical characterized and shown to meet all third-party battery cathode grade specifications; this included the collection of feedstock material from ABTC's domestic sedimentary claystone resource, the selective leaching of lithium from this feedstock, the purification of the generated leachate solution, the conversion of this solution into a lithium hydroxide material, and the purification and crystallization of this material into solid lithium hydroxide monohydrate powder.
- **Completion of Techno-Economic Analysis Demonstrating Production Costs Lower than with Conventional Resources:** The empirical data generated from the processing of this lithium hydroxide product was used to produce a techno-economic analysis (TEA) that demonstrates that at commercial scale ABTC's internally-developed technologies produce a lithium hydroxide material with production costs that are lower than when manufactured from conventional resources and with conventional technologies.

The next phase of this project includes \$3.3M for the integrated field operations of this set of internally

developed technologies in order to further de-risk the commercial scale up of these refinery operations.

Due in part to the positive results from these operations and the successful achievement of technical milestones, in Spring 2022 the ABTC team applied for an additional grant from the U.S. DOE to further evolve this project and to construct a commercial scale lithium hydroxide refinery utilizing this system design. In October 2022, ABTC with its partners, DuPont Water Solutions, University of Nevada, Reno, and Argonne National Laboratory, was notified that its proposal for its \$115M commercial scale refinery project was selected for funding. ABTC has now engaged one of the premier global construction firms, Black & Veatch, for the engineering, procurement, and construction firms of its commercial scale lithium hydroxide refinery based on these fundamental metallurgical and mineral processing techniques.

#### About American Battery Technology Company

American Battery Technology Company, which recently changed its name from [American Battery Metals Corp.](#), is uniquely positioned to supply low-cost, low-environmental impact, and domestically sourced battery metals through its three divisions: lithium-ion battery recycling, primary battery metal extraction technologies, and primary resources development.

American Battery Technology Company has built a clean technology platform that is used to provide a key source of domestically manufactured critical and strategic battery metals to help meet the near insatiable demand from the electric vehicle, electrical grid storage, and consumer electronics industries. This ESG-principled platform works to create a closed-loop circular economy for battery metals that champions ethical and environmentally sustainable sourcing of critical and strategic materials.

#### Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, are "forward-looking statements." Although the American Battery Technology Company's (the "Company") management believes that such forward-looking statements are reasonable, it cannot guarantee that such expectations are, or will be, correct. These forward-looking statements involve a number of risks and uncertainties, which could cause the Company's future results to differ materially from those anticipated. Potential risks and uncertainties include, among others, interpretations or reinterpretations of geologic information, unfavorable exploration results, inability to obtain permits required for future exploration, development or production, general economic conditions and conditions affecting the industries in which the Company operates; the uncertainty of regulatory requirements and approvals; fluctuating mineral and commodity prices, final investment approval and the ability to obtain necessary financing on acceptable terms or at all. Additional information regarding the factors that may cause actual results to differ materially from these forward-looking statements is available in the Company's filings with the Securities and Exchange Commission, including the Annual Report on Form 10-K for the year ended June 30, 2022. The Company assumes no obligation to update any of the information contained or referenced in this press release.

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