



Zentek Subsidiary Albany Graphite Corp. Awarded \$500,000 Critical Minerals Innovation Fund Grant for Purification and Anode Development Project

Guelph, ON – September 2, 2025, Zentek Ltd. (“Zentek” or the “Company”) (Nasdaq: ZTEK; TSX-V: ZEN), an intellectual property technology development and commercialization company, is pleased to announce that its wholly owned subsidiary, Albany Graphite Corp. (“AGC”) has been awarded a grant of \$500,000 from the Ontario Government’s Critical Minerals Innovation Fund (“CMIF”) for its Albany Graphite Purification and Anode Material Development Project.

Highlights

- **Grant Award:** AGC has been awarded \$500,000 from Ontario’s CMIF
- **Project Collaboration:** AGC will be collaborating with five highly reputable North American companies and NRCan
- **Funding Contributions:** AGC will contribute \$314,500 to the project, and Natural Resources Canada (“NRCan”) will provide \$200,000 of in-kind support
- **Project Goals:** The project aims to produce approximately 5-6 tonnes of flotation concentrate (~85%). Concurrently, testwork will also involve purification with NRCan’s newly developed electrothermal fluidized bed reactor (“FBR”) (and suitability testing of previous samples of ultra-high purity Albany graphite for lithium-ion battery (anode and cathode additive) and nuclear applications
- **Recent Achievements:** Zentek achieved a preliminary, proof-of-concept five-nines purity directly from the Albany graphite deposit flotation concentrate

With electric vehicle batteries requiring up to 125 kg of graphite per vehicle, graphite is a key mineral identified in Ontario’s Critical Minerals Strategy 2022–2027. Unlike other critical minerals, the value of graphite varies widely based on its specific use cases, which require different purity, crystallinity, shape, and flake size thresholds. CMIF provides funding to projects that help strengthen Ontario’s critical minerals sector. AGC will contribute \$314,500 to the project and is also collaborating with NRCan CanmetENERGY’s G3M project to include purification testing of Albany Graphite in their custom-built electrothermal “FBR”. NRCan CanmetENERGY will provide \$200,000 of in-kind support (technical expertise, specialized equipment and custom testwork).

The project will entail the production of approximately 5-6 tonnes of flotation concentrate (~85%) from the 110-tonne bulk sample that was collected in 2019. Concurrently, testwork will also involve purification testwork via NRCan’s newly developed Canadian FBR, and suitability testing of ultra-high purity Albany graphite samples for lithium-ion battery (anode and cathode additive) and nuclear applications.

On January 8, 2025, Zentek [announced](#) that AGC had achieved a preliminary, proof-of-concept five-nines purity of 99.9991% directly from a larger sample of the remaining 2017 Albany graphite deposit flotation concentrate utilizing an operational FBR. AGC supplied a one-kilogram sample of the homogenized bulk flotation concentrate to a highly reputable North American manufacturing company specializing in industrial graphite and carbon materials. A platinum crucible Loss on Ignition analysis on a sample of the purified material indicated an ash content of 0.0009 wt.% corresponding to a purity of 99.9991 wt.%. Notably, the manufacturing company reported that the Albany material was easily purified to an ultra-high purity level without the use of chlorine gas or any other halogen gases that are commonly used for graphite purification when 5N nuclear purity levels need to be achieved.

Additionally, as part of the purification work above, the Albany feed material was characterized with an elemental analysis (59 elements) to identify the impurity elements. In its report, the manufacturing company noted that the feed material contained concentrations of Rare Earth Elements (“REEs”) and other potential elements of value that could be recovered as part of the thermal purification process. Impurity elements, including the REEs, that were removed from the graphite during the purification process are routinely collected and concentrated in a scrubber that handles all the FBR exhaust products. This scrubber material could be a potential by-product.

Next Steps

Beyond this CMIF funded testwork, the bulk sample beneficiation will permit purification scaleup testwork using continuous feed reactors. This process will result in the subsequent production of larger volumes of ultra-high purity Albany graphite material which will be supplied to OEMs and end users for assessment and qualification in applications such as energy storage, clean energy, nuclear, advanced materials and other potential high-value uses. The results from these activities will inform project valuation and supply essential engineering data for potential future NI 43-101 technical studies, including an updated Preliminary Economic Assessment and subsequent Pre-Feasibility Study

With significant investment being made in the North American battery supply chain, and growing demand for finished anode material, the Company is exploring both graphite production from the Albany deposit and processing the graphite to produce a battery ready anode material.

The CEO of Zentek and Albany Graphite Corp., Greg Fenton commented: “We are thrilled to be working with the Ontario Ministry of Economic Development Job Creation and Trade on this project. The CMIF grant will enable AGC to build on its recent purification successes and produce additional flotation concentrate that will be used for subsequent purification and anode development testwork, and produce marketing samples of ultra-high purity graphite samples for third-party evaluation in advanced material applications.”

“The unique nature of the Albany deposit has created a competitive advantage for Zentek and its partners. In addition, we are pursuing the value-add processing component of the anode supply chain to create a vertically integrated, anode solution. Based on the previous successes AGC anticipates the project will help to further de-risk the Albany project and enhance its investment potential.”

Mr. Peter Wood, P.Eng., P.Geo., Vice President, Development of AGC, a “Qualified Person” under NI 43-101, has approved the technical information contained in this news release.

About the Ontario Critical Minerals Innovation Fund (“CMIF”) Program

The CMIF is dedicated to building a stronger Ontario by supporting the mining industry through research, development, and the commercialization of innovative technologies, processes, and solutions for the critical minerals supply chain. Part of the government’s Critical Minerals Strategy, the CMIF aims to establish a made-in-Ontario supply chain that meets the growing global demand for critical minerals essential for manufacturing technologies like batteries and electric vehicles.

“We’re not just leading—we’re accelerating Ontario’s role in critical minerals, and the Critical Minerals Innovation Fund is how we are making it happen,” said Stephen Lecce, Ontario’s Minister of Energy and Mines. “By investing in the Purification and Anode Development Project, we’re positioning Ontario as a global leader in clean energy minerals—creating good jobs, driving economic growth, and powering the future of electric vehicles and sustainable industries across the province.”

Overview of the Albany Graphite Project

The Albany Graphite Project, is a unique igneous-hosted, fluid-derived graphite deposit, located in Ontario and has been developed to an advanced exploration stage. The project is located northwest of the communities of Constance Lake First Nation and Hearst, Ontario, within 30 km of the Trans-Canada Highway, close to established infrastructure including roads, rail, power transmission lines, and a natural gas pipeline.

About Zentek Ltd.

Zentek is an ISO 13485:2016 certified intellectual property technology company focused on the research, development and commercialization of novel products seeking to give the Company's commercial partners a competitive advantage by making their products better, safer, and greener.

Zentek's patented technology platform ZenGUARD™ is shown to have enhanced viral filtration efficiency for surgical masks and HVAC (heating, ventilation, and air conditioning) systems. Zentek's ZenGUARD™ production facility is in Guelph, Ontario

Zentek has a global exclusive license to the Aptamer-based platform technology developed by McMaster University which is being jointly developed Zentek and McMaster for both the diagnostic and therapeutic markets.

For further information:

investorrelations@zentek.com

Ryan Shacklock
Tel: (306) 270-9610
Email: rshacklock@zentek.com

To find out more about Zentek, please visit our website at www.Zentek.com. A copy of this news release and all material documents in respect of the Company may be obtained on Zentek's SEDAR profile at <http://www.sedar.com/>.

Forward-Looking Statements

This news release contains forward-looking statements. Since forward-looking statements address future events and conditions, by their very nature they involve inherent risks and uncertainties. Although Zentek believes that the assumptions and factors used in preparing the forward-looking information in this news release are reasonable, undue reliance should not be placed on such information, which only applies as of the date of this news release, and no assurance can be given that such events will occur in the disclosed time frames or at all. Zentek disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, other than as required by law.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.