

Ultra-High-Purity Graphite. Advanced Materials: Developed on Demand.

A landmark catalyst delivered. Revenue today. An advanced materials growth platform.

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Mr. Peter Wood, P.Eng., P.Geo., Vice President, Development of AGC, a "Qualified Person" under National Instrument 43-101, has reviewed and approved the technical information contained in this presentation.

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Zentek at a glance.

Albany is the principal critical mineral asset. ZenGUARD™ and the R&D pipeline provide unique support and optionality.

01 · ALBANY GRAPHITE

Critical Mineral Foundation.

Preliminary Economic Assessment modelling 5N+ purity at premium pricing.

TECHNICAL REPORT

5N+ PEA results delivered

POSITIONED

Potential nuclear & defence-grade markets

FUNDED

\$18M raised in May 2026

02 · DEVELOPMENT ON DEMAND

Proof the model works.

Our deep-science platform makes existing products better.

ZENGUARD — REVENUE TODAY

Commercially available across masks, filters, filtration media & mask media. Federal procurement active; U.S. commercial underway.

R&D PIPELINE

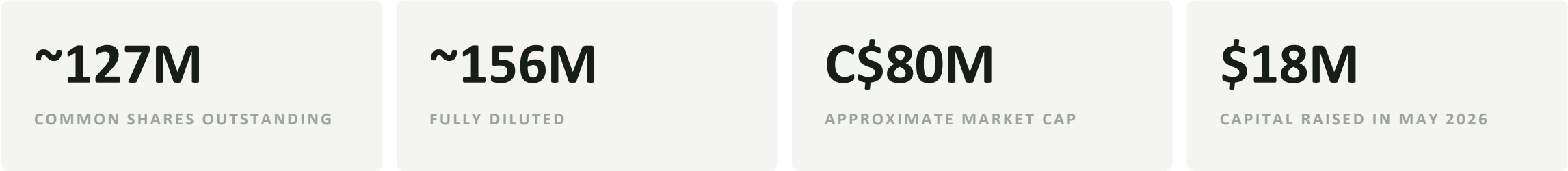
Batteries, coatings, and Trier's 20-year exclusive aptamer license — new applications on the same science foundation.

■ A landmark critical mineral PEA delivered. Revenue today. An advanced materials growth platform.

■ CAPITAL STRUCTURE

Capital Structure.

As of August 2026



SECURITY BREAKDOWN

Common shares outstanding	126,619,532
Stock options (exercisable)	5,311,750
Restricted share units (RSUs)	1,006,000
Warrants outstanding	22,461,060
Shares issuable upon conversion of convertible debentures (at \$2.20)	~909,091
Fully diluted shares	~156,307,433

Fully diluted assumes exercise of all outstanding options, warrants and RSUs, and conversion of the \$2.0M secured convertible debentures at \$2.20 per share.

DUAL-LISTED

NASDAQ: ZTEK

TSX-V: ZEN

Access to both U.S. and Canadian capital markets.

Why Now.

Nuclear graphite is synthetic, and its feedstock chain runs through China

NUCLEAR RENAISSANCE, FUNDED

SMR deployment timelines are accelerating, backed by real capital commitment.

BUYERS ARE ALREADY PAYING UP

X-energy paid SGL Carbon over **\$100M** for synthetic graphite; Toyo Tanso signed a **\$40M** XE-100 contract — mostly to offshore producers.

SUPPLY IS ONE THING. REFINING IS ANOTHER.

China produces most of the world's natural graphite and refines nearly all of it — including material mined elsewhere.

UNRELIABLE EXPORT POLICY

China has tightened and eased graphite export controls repeatedly in two years — the pattern allied buyers are now pricing in.

Albany's 5N+ PEA.

Preliminary Economic Assessment modelling 5N+ purity at premium pricing.

HEADLINE ECONOMICS

US\$3.9B

AFTER-TAX NPV

27.4%

AFTER-TAX IRR

US\$817M

INITIAL CAPEX

4.4 years

AFTER-TAX PAYBACK

DEPOSIT FUNDAMENTALS

23.1 Mt

INDICATED RESOURCE

4.14 % Cg

FEED GRADE

99.9992 %

CARBON PURITY, BENCH SCALE

2.60 ppm

EQUIVALENT BORON CONTENT

INDEPENDENTLY VERIFIED Specification, pricing, and environmental work were each verified independently — where most PEAs lean on a single engineering firm across all three.

See Zentek's press release dated August 10, 2026. The PEA is preliminary in nature. It includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability. Readers are cautioned not to assume that all or any part of the Indicated or Inferred Mineral Resources will ever be converted into Mineral Reserves or that the PEA represents, or will result in, an economically viable mining operation.



■ INDIGENOUS PARTNERSHIP

Constance Lake First Nation & Local Benefits

Setting a new standard for a compliant natural graphite study and benefit sharing.

Albany is located in the traditional territory of Constance Lake First Nation. Zentek's relationship with Constance Lake First Nation is close and active, built on collaboration, transparency, and respect for the land and community.

CLFN is an integral partner in Albany's development. Our partnership helped shape the PEA, and will continue to shape the project as it moves forward.

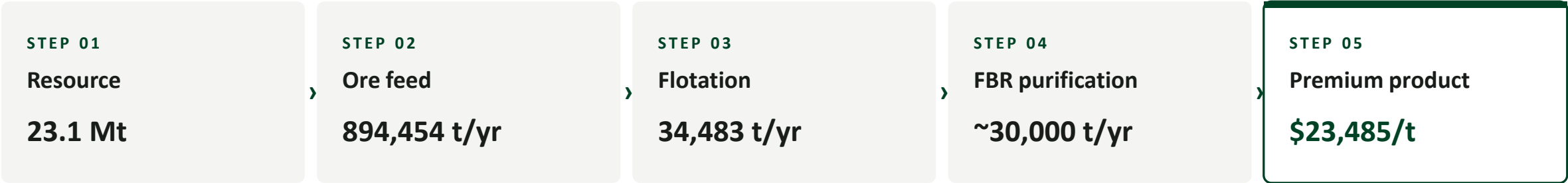
Zentek's intent is clear: set a new standard for benefit sharing with CLFN, through specific, well-defined initiatives as the project advances.

WORKFORCE & LOCAL BENEFITS

Approximately 1,050 personnel during construction and approximately 230 during operations. Zentek intends to work with CLFN on training, employment, and business opportunities tied to the Project.

Deposit to demand.

Albany is designed to own the integrated production chain end to end — from the deposit through flotation, FBR purification, and into premium product markets.



WHY INTEGRATED PRODUCTION MATTERS

Margin capture.

Owning purification captures the value-add from raw resource to high-purity product, rather than selling concentrate at commodity pricing.

Specification control.

Owning purification means Zentek controls the variables that determine final product quality — essential for nuclear-grade qualification.

Nuclear and defence programs depend on high-purity graphite. Albany’s potential integrated production could be positioned to serve them.

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Why Albany.

A unique combination of geology, process, and market position.

01

Starts lower, still reaches 5N.

Albany's process takes 86% Cg feed-grade material all the way to 5N purity.

02

Lower environmental and capital cost.

The FBR process avoids the hydrofluoric acid used in conventional purification.

03

Potential revenue beyond graphite.

Potential recovery of rare earth elements from the FBR exhaust scrubber.

04

Less exposure to commodity graphite.

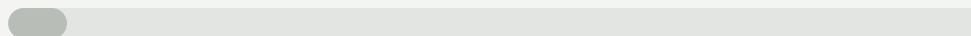
Albany potentially positioned for nuclear and specialty markets instead.

Premium Specification. Premium Pricing.

Public, third-party benchmarks

Flake concentrate

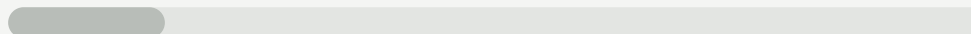
94–97% Cg, standard flake



~\$500–1,500/t

Spherical purified (anode)

99.95% C, battery grade



~\$2,500–4,500/t

ALBANY'S TARGET TIER

5N–6N ultra-high purity

Nuclear · Defence & Aerospace · Semiconductor



~\$25,000–120,000/t

Nearly every publicly disclosed graphite PEA to date is priced against battery-grade, commodity graphite. Until Now.

Public reference ranges (USD/t) from Fastmarkets, Argus, Benchmark Mineral Intelligence, IAEA/OECD-NEA literature, and published DOE/NNSA contract awards. Reference values may reflect processed materials or engineered components, not bulk feedstock. Not Zentek pricing assumptions. Actual transaction pricing is highly specification-dependent.

Strategic Graphite Partners.

A U.S. joint venture built to bring Albany graphite into U.S. defence and nuclear energy supply chains.

THE VEHICLE

Zentek USA Inc. holds **90%**; ALO Graphite Partners LLC — owned by Perkin Industries and Jeremy Roenick — holds **10%**. The Albany Deposit has not been contributed to the JV and remains a 100% Zentek-owned Canadian asset.

THE MANDATE

U.S. customer engagement and material qualification, offtake discussions, strategic industry engagement, U.S. government relations, and evaluation of U.S. federal and allied funding opportunities.

WHY IT MATTERS NOW

The United States imports 100% of its natural graphite and mines none domestically. Strategic Graphite Partners intends to access the federal and allied funding now being directed to secure this supply chain, which depends on qualified, allied-sourced material.

What's next.

Albany's path forward runs on two parallel tracks — engineering and permitting.

CONDITIONAL ENGINEERING & MILESTONES



PERMITTING, RUNNING IN PARALLEL

Environmental assessment · Indigenous consultation and engagement (ongoing) · Provincial permitting and approvals · Federal permitting, where applicable · Construction and operating permits

Two tracks, one goal: engineering and permitting advancing together toward a construction-ready project.

■ APPENDIX

ZenGUARD™ and the R&D Pipeline

Unique support and optionality.

01 ZenGUARD™ — the Commercial Platform

02 Development-on-Demand & R&D Pipeline

03 Peer Valuation & Catalysts

04 What's Ahead & Why Zentek

What it is. How it helps.

ZenGUARD™ began by making an existing product better — a standard surgical mask. The same molecule now makes another everyday product better: the HVAC filter.



MASKS, MADE BETTER

ZenGUARD™ Antimicrobial Surgical Masks: > 99.9% viral filtration efficiency



FILTERS, MADE BETTER

NRC Canada testing showed an approximately **fivefold** improvement in aerosol filtration efficiency over a standard filter in a single air exchange — documented in three peer-reviewed ASHRAE publications.

MEETS THE STANDARD ZenGUARD™'s tested infectious-aerosol removal efficiency meets ASHRAE Standard 241-2023 clean-airflow requirements, at the low pressure drop of a MERV-A 9 filter. Patented in the United States and Canada.

Product lines.

One molecule. Four potential models.

PRODUCT LINE	CUSTOMER	MODEL
ZenGUARD™ Enhanced Air Filters	Institutions, government, education	Finished product, direct sale
ZenGUARD™ Enhanced Air Filtration Media	Filter manufacturers	Input — improves a partner's product
ZenGUARD™ Antimicrobial Surgical Masks	Direct commercial sale	Finished product
ZenGUARD™ Antimicrobial Mask Media	Mask manufacturers	Input — improves a partner's product

ZenGUARD™ becomes part of a finished product. The difference in each scenario is who makes and sells the end product.

Real products. Real revenue.

ZenGUARD™ makes existing products better and people safer — proven in masks commercially available today, and in filters active in the field. Revenue now, while Albany advances.

MCKINNON PARK SCHOOL PILOT

22%

FAN ENERGY SAVINGS

Up to 6 months

SERVICE LIFE VS. ~3 MONTHS

Results from a single three-month field pilot showed an estimated filter change out frequency of ~16 months for ZenGUARD™ Enhanced Air Filters based on dust loading compared to ~2 months for the MERV 13 filters; not necessarily indicative of product performance in all environments.

■ Masks, selling today

Antimicrobial Surgical Masks are available in Canada through Henry Schein (dental), with healthcare and veterinary expansion underway.

■ Federal procurement

Enhanced Air Filters are on the ISC Pathway to Commercialization source list — any federal department can buy directly, no competitive bid.

■ First U.S. order

Quality Filters Inc. completed validation for Enhanced Air Filtration Media and placed its first commercial order — pilot to production.

■ Proven in the field

A three-month pilot at Grand Erie DSB's McKinnon Park Secondary School delivered the fan-energy and service-life results shown at left.

■ Expanding footprint

The same product, certifications, and validation extend to healthcare, institutional, provincial, municipal, and international buyers.



ZENGUARD COATING LINE · MANUFACTURING FACILITY

■ PRODUCTION & APPLICATION

One facility. One molecule.

Every ZenGUARD™ product starts here — as an input, or a finished good — making air filtration and surgical masks better.

AIR FILTRATION

INPUT

Enhanced Air Filtration Media

FINISHED

Enhanced Air Filters

SURGICAL MASKS

INPUT

Antimicrobial Mask Media

FINISHED

Antimicrobial Surgical Masks

Every application becomes a finished product — the only difference is who makes and sells it. Patented in the U.S. and Canada.

The model behind ZenGUARD™.

ZenGUARD™ is what happens when Zentek points one molecule at one problem. These are the next problems.

UHP graphite batteries

UHP graphite purified via fluidized bed reactor as anode material for high-voltage, high-charge-density batteries for defence and clean energy. With the University of Toronto.

Fire-protection coating

Graphene-enhanced coating for construction materials, including wood and mass timber. Prior testing demonstrated 'Class A' protection on oriented strand board (ASTM E84).

Corrosion-protection coating

Graphene-enhanced coating to extend the service life of metal assets. Priority applications across defence platforms, marine, energy, and transportation.

Ice-accretion protection coating

Refined icephobic formulation; sample packages in production for third-party characterization. Interest from energy, defence, aerospace, and transportation.

BEYOND CARBON Triaera Biosciences holds a 20-year exclusive McMaster University aptamer license spanning diagnostic, therapeutic, and CRO applications.

What's ahead.

Albany, ZenGUARD™, and the next commercial opportunities being developed.

ALBANY

- PEA announced

CONDITIONAL ENGINEERING & MILESTONES

- PFS + FEED, in parallel
- Feasibility Study
- Final Investment Decision
- Permitting, alongside throughout

ZENGUARD

- Federal procurement, open now
- U.S. commercial, underway (QFI)
- Mask sales — healthcare, veterinary, dental
- In-house mask production, planned

R&D PIPELINE

- UHP graphite batteries (U of T)
- Fire-protection coating
- Corrosion-protection coating
- Ice-accretion protection coating

R&D pipeline programs are exploratory; results preliminary, and commercialization subject to further testing, verification, qualification, and funding. See Forward Looking Statements.

Why Zentek.

\$18M raised. A unique opportunity set, funded to execute.

- | | | |
|-----------|--|--|
| 01 | Advancing beyond a delivered PEA. | 5N+ PEA is complete. Albany's potential value could continue to grow through PFS, Feasibility, and Final Investment Decision. |
| 02 | Revenue today. | ZenGUARD™ is commercially available and generating revenue now — across masks, filters, filtration media, and mask media. |
| 03 | A protected, compounding platform. | Patents granted in both the U.S. and Canada. One molecule already making multiple products better, with more programs in development. |
| 04 | Government-scale opportunity ahead. | Albany's 5N+ specification and Strategic Graphite Partners' U.S. footprint position Zentek for potential offtake and government programs. |
| 05 | The capital to execute. | \$18M in gross proceeds funds the continued advancement of the Albany Graphite Project — targeting SMR developers, defence, and other high-purity end-users. |