



BUILT FOR GROWTH

augustagroup

Investor Presentation

Building America's Next Critical Minerals Champion

December 2025 | NYSE-A: TII

TSX: TI





FORWARD LOOKING INFORMATION

This presentation contains "forward-looking information" within the meaning of Canadian securities laws. In some cases, forward-looking information can be identified by the use of forward-looking terminology such as "plans", "targets", "expects", "is expected", "is positioned" or "assumes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would" or "will" occur or be achieved. In addition, any statements that refer to expectations, predictions, indications, projections or other characterizations of future events or circumstances contain forward-looking information. Statements containing forward-looking information are not historical facts, but instead represent management's expectations, estimates and projections regarding future events.

Forward-looking information includes, among other things, statements relating to: estimated future payable production of zinc, costs, AISC, sustaining capital, exploration capital, and margins; all guidance; future financial or operating performance and condition of Titan Mining Corporation (the "Company"), including its ability to continue as a going concern, and its business, operations and properties; the Company's ability to implement its growth strategy to maximize the value of its property holdings; the Company's planned exploration and development activities at Empire State Mines, as well as results thereof; timing and results of project expansion, including for N2D and Turnpike; costs, timing and results of future exploration and drilling; Company goals; forecasted trends in the global zinc and graphite market, including in respect of the price of such commodities; capital and operating cost estimates; economic analyses (including cash flow projections); the adequacy of the Company's financial resources; the estimation of mineral resources; the realization of mineral resource estimates; the probability of inferred mineral resources being converted into measured or indicated mineral resources; the production schedule and production estimates for the Titan's Empire State Mines ("ESM") zinc and graphite operations; any updates to the mine plans and continuation of the drill program at the ESM; the Company's ability to make scheduled payments of the principal, or to pay interest on or refinance its indebtedness; potential and ability to add incremental production at low cost; the ability for Kilbourne to be fast-tracked into production; that Kilbourne ever goes into production at all; that ESM becomes the first commercial producer of US sourced and processed graphite, or a commercial producer of graphite at all; significant resource upside; potential ability to expand mineral resources; the future development of a Kilbourne facility; production and cost guidance; future exploration potential; when future LOM updates may be released; catalysts for Titan's business; timing of a Feasibility Study for Kilbourne; the graphite development plan and indicative timeline; the ability to add incremental resources and production; projected zinc and graphite recoveries; that the Company will have saleable product for its graphite production at Kilbourne and key product group applications with US domestic customer base therefor; operating parameters for the Facility; strategic introduction timelines; graphite product uses, customers and ability to add to revenues and margins; potential production of 40,000 tpa of graphite; zinc and graphite demand; assumed average graphite selling price and the potential for premium pricing; graphite product portfolio; the potential for a long life mine; target graphite product mix; potential to add to near term production and increase in mine life through drilling of exploration targets; multiple near-term catalysts to unlock significant valuation re-rating; potential future financing of US\$120 million from U.S. EXIM Bank for the Kilbourne Graphite Project, that this would fund a major share of Kilbourne's capital needs and enable capital efficient project development; strategic funding/policy incentive opportunities with DOE, DOW and White House; and all timelines for future plans and work.

Forward-looking information is based on opinions, assumptions and estimates made by the Company in light of its experience and perception of historical trends, current conditions and expected future developments, as well as other factors that the Company believes are appropriate and reasonable in the circumstances, as of the date of this presentation, including, without limitation, assumptions about: equity and debt capital markets; the ability to raise any necessary additional capital on reasonable terms; future prices of zinc, graphite and other metals; the timing and results of exploration and drilling programs; the likelihood of discovering new mineral resources in the Balmat-Edwards district; the accuracy in the Company's most recent technical report of the mine production schedule; the production estimates; the geology and geophysical data of ESM; metallurgical forecasts; the economic analysis, capital and operating cost estimates; the accuracy of any mineral resource estimates; the successful integration of ESM into the Company's business; availability of labour; the accuracy of drill sample results at ESM; future currency exchange rates and interest rates; operating conditions being favourable; political and regulatory stability; the receipt of governmental and third party approvals, licenses and permits on favourable terms; obtaining required renewals for existing approvals, licenses and permits and obtaining all other required approvals, licenses and permits on favourable terms; sustained labour stability; stability in financial and capital goods markets; availability of equipment and the condition of existing equipment being as described in the Company's most recent technical report; the absence of any long-term liabilities created by the mining activity in the Balmat region beyond those described in the Company's most recent technical report; the accuracy of the Company's accounting estimates and judgments; the impact of adoption of new accounting policies; the Company's ability to satisfy the terms and conditions of its indebtedness; and the timing of a revised mine plan for ESM. There can be no assurance that such estimates and assumptions will prove to be correct. In addition, if any of the assumptions or estimates made by management prove to be incorrect, actual results and developments are likely to differ, and may differ materially, from those expressed or implied by the forward-looking information contained in this presentation. Accordingly, readers of this presentation are cautioned not to place undue reliance on such information.

Forward-looking information is necessarily based on a number of the opinions, assumptions and estimates that, while considered reasonable by the Company as of the date such statements are made, are subject to known and unknown risks, uncertainties, assumptions and other factors that may cause the actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information, including but not limited to the following factors described in greater detail under the heading "Risks Factors" in the Company's most recent Annual Information Form available at www.sedarplus.com: limited operating history; dependence on ESM; limited supplies, supply chain disruptions, and inflation; requirements for additional capital in the future; financial leverage and restrictive covenants restricting our current and future operations; risks related to ramping up mining activities; inherent risks of mining; estimates of mineral resources; production decisions based on mineral resources; uncertainty in relation to inferred mineral resources; fluctuations in demand for, and prices of, zinc and graphite; production projections and cost estimates for ESM #4 mine may prove to be inaccurate; profitability of the Company; ability to attract and retain qualified management; title; competition; governmental regulations; market events and general economic conditions; environmental laws and regulations; threat of legal proceedings; rights, concessions and permits; social and environmental activism; land reclamation requirements; Tailings Management Facility and environmental reclamation; insurance; undisclosed liabilities; health and safety; dependence on information technology systems; fixed zinc pricing arrangements; conflicts of interest; risks inherent in the Company's indebtedness; risks inherent in acquisitions; integration of the mine assets; labour and employment retention/relations; anti-corruption and bribery regulation, including ESTMA reporting; infrastructure; enforceability of judgments; global outbreaks and coronavirus; absence of a market for the common shares; fluctuations in price of the common shares; loss of entire investment; significant ownership by Richard W. Warke; future sales of common shares by Richard W. Warke and other directors and officers of the Company; use of proceeds; payment of dividends; currency exchange rate risks; pro forma financial information; public company status; financial reporting and other public company requirements; dilution; and securities analysts' research or reports could impact the price of the common shares. These factors and assumptions are not intended to represent a complete list of the factors and assumptions that could affect the Company. These factors and assumptions, however, should be considered carefully. Currency is in US dollars and tonnage is in short tons unless otherwise indicated. Other than as required by securities laws, Titan assumes no responsibility for updating the forward-looking information in this presentation.

Investment Highlights

Dual-commodity Growth Platform

ESTABLISHED U.S. PRODUCTION BASE

- > **Cash flow positive zinc operations at Empire State Mines** in upstate New York, fully **aligned with federal critical-minerals policy** and EXIM-backed initiatives
- > **Built-out infrastructure:** 5,000 tpd mill, rail, port, and air access, with 150+ skilled workforce
- > **Germanium identified** in zinc circuit - adding **exposure to high-value defense and semi's markets**
- > **120,000+ acres of mineral rights** across a proven and expandable district with multi elemental potential (e.g. copper & gold)

TRANSFORMATIONAL GRAPHITE DISCOVERY

- > **The Kilbourne Project** is a significant near-surface **graphite discovery** <1 mile of the ESM mill
- > **Fully permitted** 1,200 mtpa graphite processing facility; **production to commence in December 2025**
- > **First end-to-end natural graphite production in the U.S.** since 1956
- > **Strong economics for commercial scale up:** \$513M NPV, 37% IRR, and 2.7-year payback
- > Targeted production of **40,000 mt pa**, positioning Titan to supply **~50% of the domestic natural graphite market**
- > **Long mine life;** 60% of strike length remains open for expansion

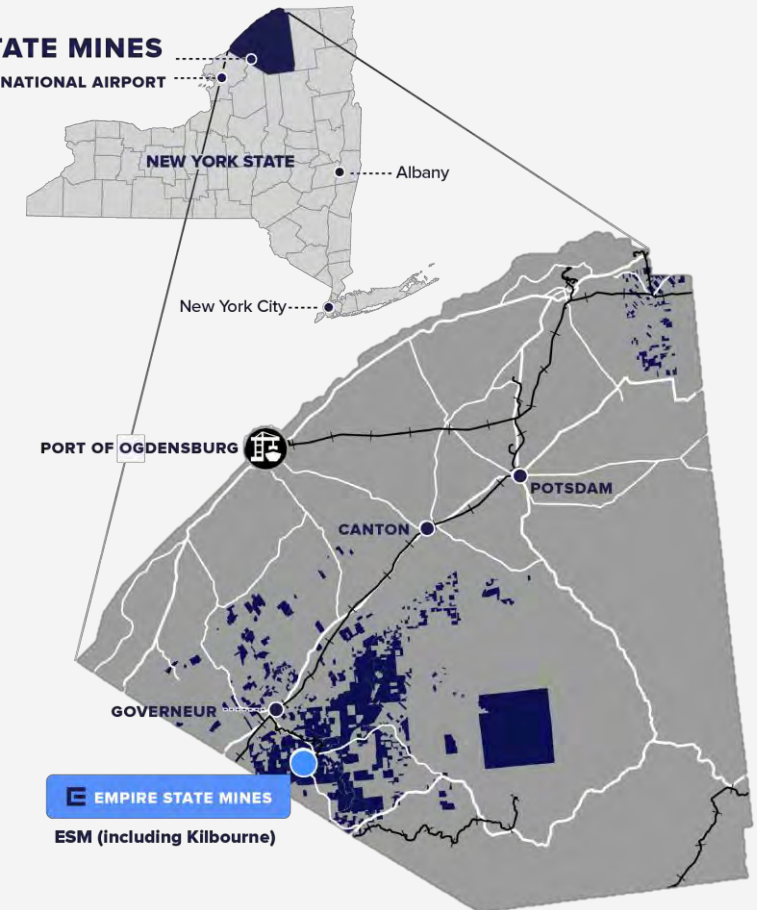
SOLID FOUNDATIONS AND BUILDING FOR GROWTH

>120,000

acres of mineral rights controlled throughout the district

EMPIRE STATE MINES

WATERTOWN INTERNATIONAL AIRPORT



Growth and Value Creation in Critical Minerals



Leveraging First-mover Advantage And Federal Support To Establish A Fully Integrated U.S. Natural Graphite Supply Chain

Strong Leadership & Strategic Support

- > Track Record of Value Creation
- > Federal Support & Shareholder Alignment

Transformative Growth

- > Macro & Policy Tailwinds
- > First mover advantage
- > Robust Economics & Upside

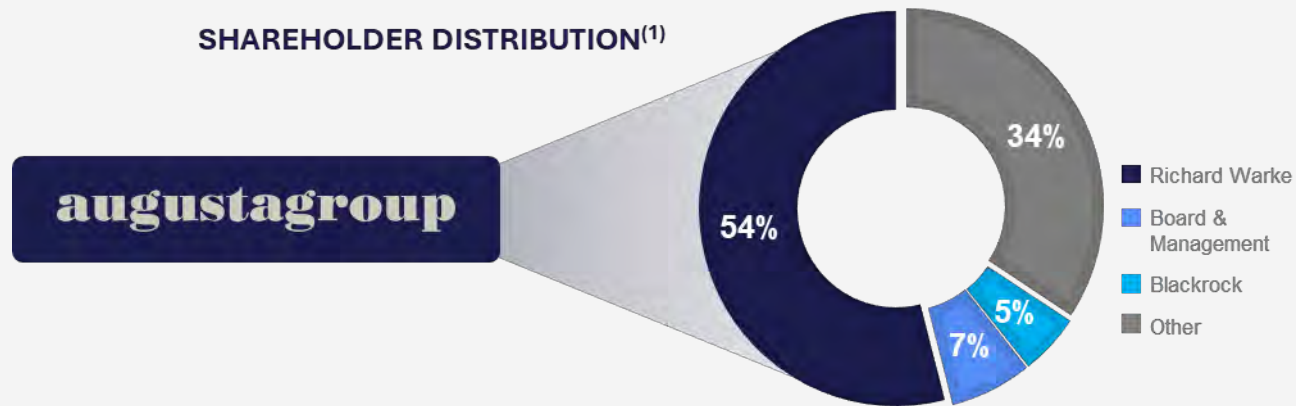
Strong Foundation

- > Stable cash flow from Zinc operations
- > District-scale multi-elemental exploration upside

Multiple Near-term Catalysts To Unlock Significant Valuation Re-rating

Track Record of Value Creation & Shareholder Alignment

Long Term Commitment Evidenced Through Management Participation



Past Augusta Group Company Returns



2025 Augusta Group Companies⁽²⁾



BUILT FOR GROWTH |NYSE-A: TII |TSX: TI

(1) As at November 28, 2025, Bloomberg; Management excludes Mr. Warke and includes other members of the Titan board and management team

(2) Information as of November 26, 2025

A Best-in-class Leadership Team



BOARD OF DIRECTORS



Richard Warke
EXECUTIVE CHAIRMAN

Consistent record of creating shareholder value at Augusta Group, with more than 35 years' experience in the international resource sector.



Governor George Pataki
DIRECTOR

Served three terms as the 53rd Governor of the State of NY, Co-Founder and Chairman of the Pataki-Cahill Group.



Donald Taylor
VICE CHAIR

30+ years of mineral exploration experience, Winner of 2018 Thayer Lindsley Award for Taylor discovery.



William Mulrow
DIRECTOR

Senior Advisor at the Blackstone Group, an alternative asset manager, various roles at companies like Citigroup, Paladin Capital, GAMCO, Rothschild Inc. and others.



Rita Adiani
PRESIDENT & CEO

Over 19 years of experience in the mining industry and global capital markets, including energy transition. Has been involved in raising over \$10 billion in public equities.



Lenard Boggio
DIRECTOR

Corporate Director and former partner of PwC where he served for more than 30 years, he was Leader of the B.C. Mining Group of PwC.



Speaker John Boehner
DIRECTOR

Served as the 53rd Speaker of the US House of Representatives from Ohio's 8th congressional district.

MANAGEMENT TEAM



Rita Adiani
PRESIDENT & CEO

Over 19 years of experience in the mining industry and global capital markets, including critical materials. Has been involved in raising over \$10 billion in public equities.



Kevin Hart
CFO

20+ years mining sector experience as CFO and Corporate Controller. CPA who has overseen gold processing operations and mine development across multiple jurisdictions.



Joel Rheault
VP, OPERATIONS

30+ years building and operating mines globally. Extensive start-up experience.



Purni Parikh
SVP, CORPORATE AFFAIRS & CORPORATE SECRETARY

25+ years mining sector experience. President of Augusta Group, overseeing \$4.5B+ in M&A transactions, including three world-class asset sales.



Jenny Hood
VP, COMMERCIAL & SALES

20 years leading supply chain and commercial strategies in mining. Former Chief Supply Chain Officer at Compass Minerals.



Tom Ladner
GENERAL COUNSEL

10+ years in mining law and corporate governance. General Counsel for Augusta Group of Companies. Former VP Legal at Solaris Resources.

OVER 200+ YEARS OF COLLECTIVE EXPERIENCE

Strong Strategic Federal Support

- **\$15.8M** for zinc expansion. **First direct mining loan** under Make More in America initiative
- Letter of Interest of **\$120 Million** from **U.S. EXIM Bank** for **build of Kilbourne Graphite Project**
- **\$5.5M** for the **Feasibility Study** financing
- **Validates ESM's strategic importance as a US critical materials producer and end to end support**
- **Non-dilutive, long-term funding on attractive terms** – preserves balance sheet strength while advancing critical path activities
- EXIM's indicated financing support would **fund a major share of Kilbourne's capital needs**, enabling capital efficient project development

MAKING MORE IN AMERICA



National Security

100% Graphite Import Dependent
>40% from Chinese Sources

Economic Impact

>\$140M Initial Federal Support
300+ Existing Jobs Supported and Number of New Jobs to be Created by Kilbourne

Strategic Advantage

Existing Operational Site

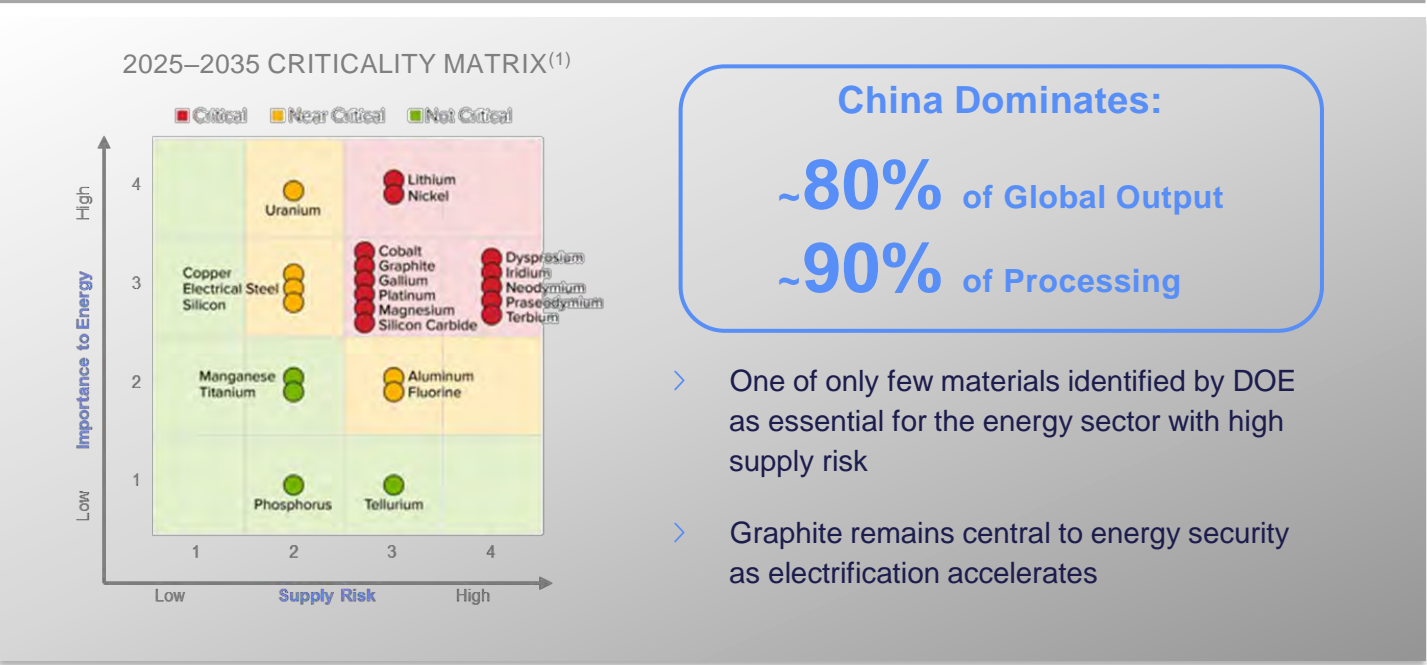
Accelerated Timeline



Empire State Mine Processing Facility

Graphite: A National Security Imperative

Without Domestic Graphite, U.S. Defense and Energy Systems Remain Vulnerable



GRAPHITE SUPPLY RISK INTENSIFIES UNDER CHINA’S 2025 EXPORT CONTROLS

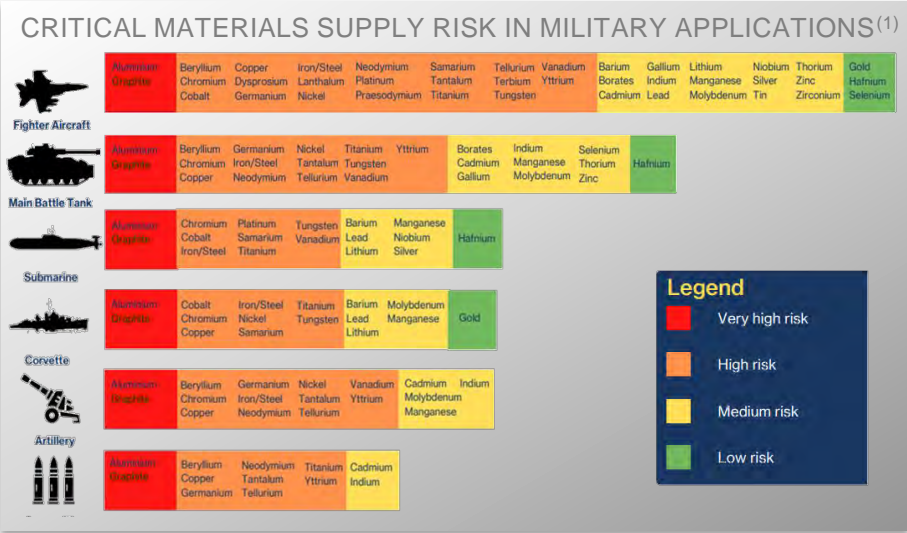
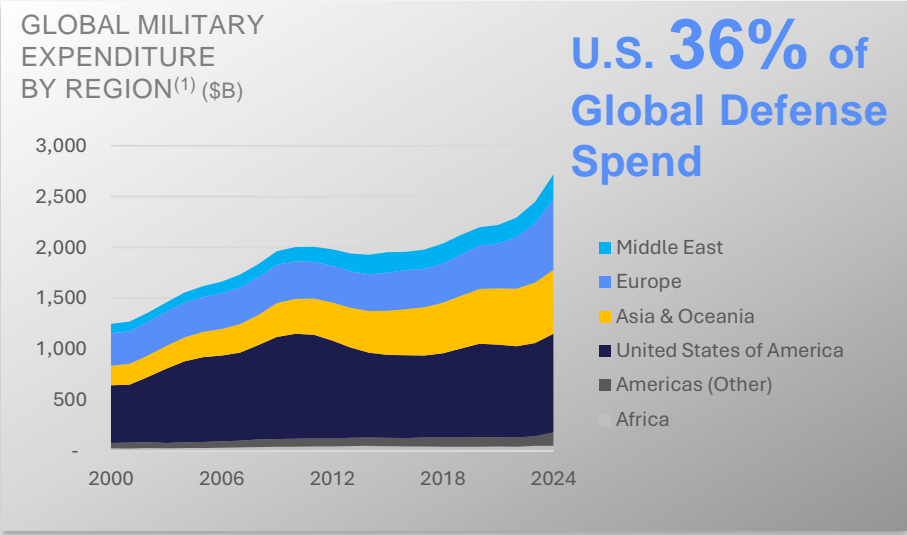
| PRODUCT | CHINESE CONTROL STATUS | SUPPLY RISK (EX-CHINA) | TITAN COMPETITIVE EDGE ⁽²⁾ |
|----------------------------------|------------------------------|------------------------|---------------------------------------|
| Natural flake concentrate | 2023 permits | High | Only U.S. primary source production |
| Purified spherical graphite | Implicit under 2025 controls | Very High | U.S. purification facility |
| Coated spherical graphite (CSPG) | Explicit under 2025 controls | Severe | U.S CSPG facility |

GRAPHITE: HIGH U.S. GOVERNMENT PRIORITY – AMONG TOP CRITICAL MATERIALS ACROSS DEFENSE/ENERGY APPLICATIONS, 100% IMPORT DEPENDENT, CHINA CONTROLS SUPPLY

BUILT FOR GROWTH |NYSE-A: TII |TSX: TI

(1) Source: U.S. Department of Energy, Critical Materials Assessment 2023; SIPRI; Hague Centre for Strategic Studies
(2) Reflects potential advantages contingent on future downstream development

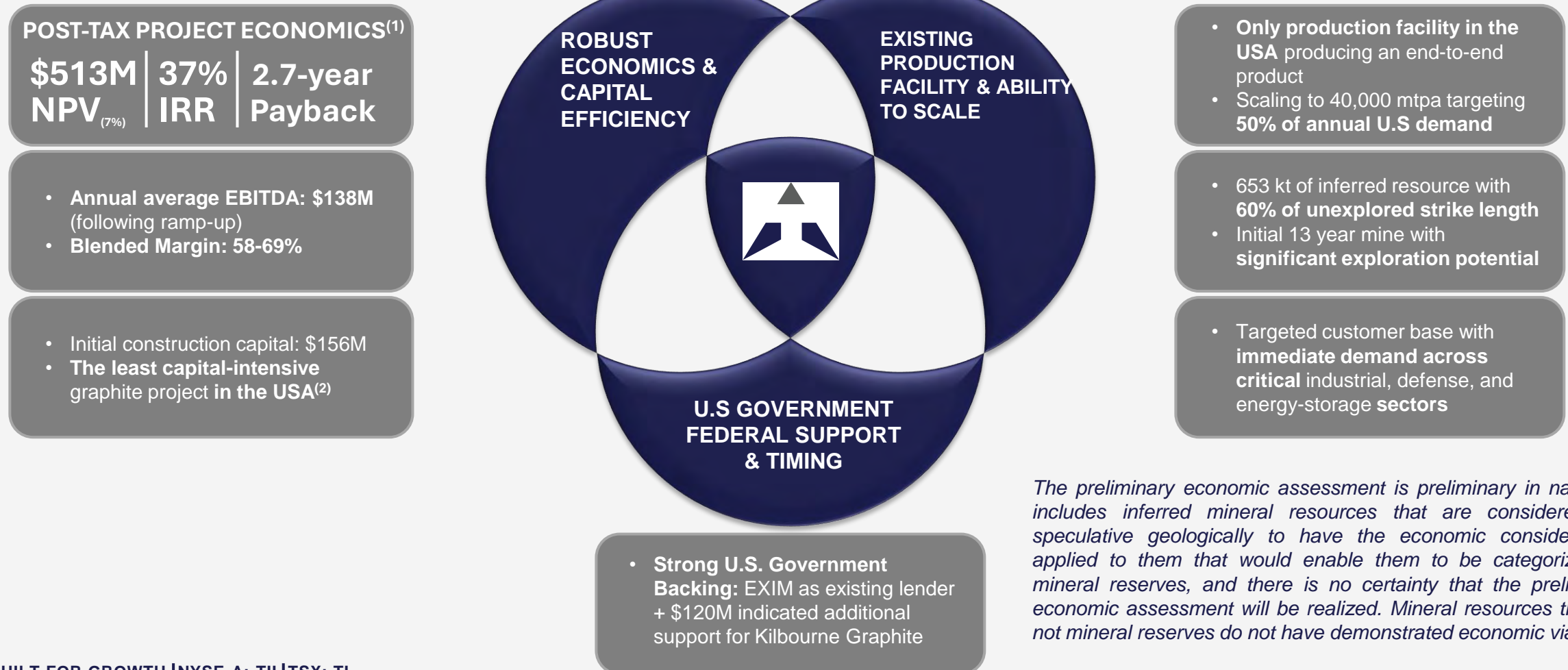
Global Military Spending Surges to \$2.7 Trillion



KILBOURNE – THE U.S. GRAPHITE SUPPLY CHAIN SOLUTION



TRANSFORMATIVE GROWTH PROJECT



BUILT FOR GROWTH | NYSE-A: TII | TSX: TI

(1) After-tax basis. (2) Titan Mining: 37% IRR, 2.7-yr payback, 2.6x PI, US\$156M capex. Peer 1: 27% IRR, 7.5-yr payback, 1.0x PI, US\$4,869M capex. Peer 2: 25% IRR, 5.1-yr payback, 1.5x PI, US\$423M capex. Based on publicly disclosed project data. After-tax basis.

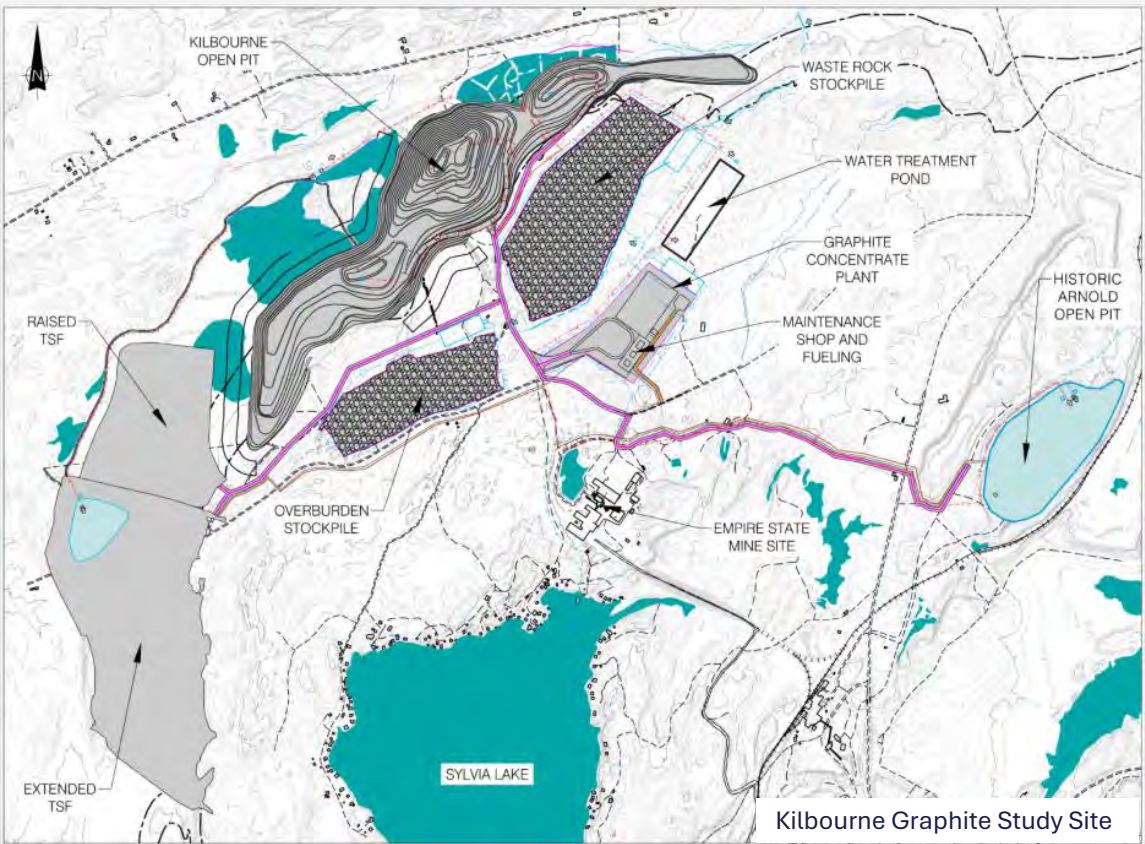
PEA Summary



| OPERATIONAL PARAMETERS ⁽¹⁾ | |
|--|------------|
| LOM (Life of Mine) | 13 years |
| Nominal annual processing rate | ~1.39 Mtpa |
| Stripping ratio (LOM) | 2.15:1 |
| Average processed grade (LOM) | 2.84% Cg |
| Average graphite recovery | ~90% |
| Average annual graphite production (LOM) | ~40,000 t |

| ECONOMIC HIGHLIGHTS ⁽¹⁾ | |
|------------------------------------|----------------------------|
| Estimated avg. EBITDA | \$138M (following ramp up) |
| After-tax NPV (7% discount rate) | \$513 M |
| After-tax IRR | 37% |
| After-tax payback | 2.7 years |
| Initial CAPEX | \$156 M |
| Sustaining & Expansionary CAPEX | \$276M |
| LOM OPEX | \$886 M |
| Annual OPEX | \$68 M (avg.) |
| OPEX / tonne | \$990/t concentrate |
| Blended Margin | 58%-69% |

| MINERAL RESOURCE SUMMARY ⁽¹⁾ | | | | |
|---|----------------------|--------------------|--------------|-------------------------------|
| Classification | Cut-off Grade (% Cg) | Tonnage ('000 Ton) | Grade (% Cg) | Contained Graphite ('000 Ton) |
| Inferred | 1.50 | 22,423 | 2.91 | 653 |



- > Open-pit, low-strip design mine
- > Long mine life, supported by a large, expandable resource with 60% of unexplored strike length
- > Integrated flowsheet: mining, processing, micronization and purification to downstream products
- > High recoveries & purity (Up to 99% purity and ~87% recovery achieved (90-91% expected in close circuit), supporting premium product mix
- > Located within Titan's Empire State Mine complex in upstate New York, with established infrastructure and a skilled workforce already in place
 - > Within 1 mile of the existing ESM mill and mine infrastructure

Titan's Diversified Graphite Product Platform

Unlocking Growth in Critical U.S. Markets

- > Titan set to become the **first U.S. natural graphite producer** in 70+ years
- > Positioned across **high-growth critical markets** — defense, aerospace, energy storage, and batteries — with **premium pricing potential**
- > Product portfolio evolves from concentrate to CSPG, enabling **high margins** and capturing both battery and non-battery demand



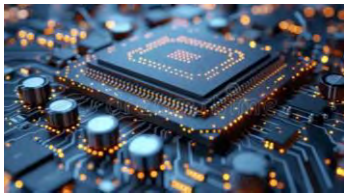
DEFENSE & AEROSPACE APPLICATIONS

- > Graphite is used in rocket nozzles, re-entry nose tips, and heat shields for its high-temperature resilience
- > It's used in composite materials for military aircraft/vehicles to boost strength, reduce weight, and improve thermal stability



ENERGY SECURITY & ELECTRIFICATION

- > Graphite is critical for anode and cathode use in primary and secondary batteries, including lithium-ion, lead-acid, and fuel cells, powering applications from drones and EVs to large-scale power systems
- > Secure graphite supply is vital for grid storage, backup systems, and resilient infrastructure, especially for defense bases and critical networks



HIGH TECH & ADVANCED MATERIALS

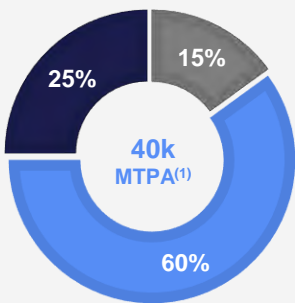
- > Graphite's exceptional conductivity and stability under extreme conditions make it indispensable in semiconductors, silicon carbide (SiC) substrates, heat spreaders, and thermal interface materials for advanced electronics
- > Enables coatings, optics, and composites in lasers, sensors, and defense-grade systems



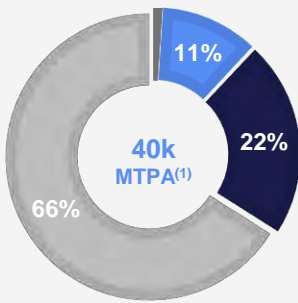
INDUSTRIAL & HIGH-TEMPERATURE USES

- > Refractories, foundries, and steelmaking use graphite for its heat resistance and conductive properties—critical in heavy industry and materials manufacturing
- > Lubricants, coatings, and specialty applications leverage graphite's unique chemical and thermal properties in harsh or high-wear environments

TARGETED PRODUCT MIX



YEARS 1-5



YEARS 5+



- Concentrate
- Micronized
- Purified
- CSPG

CONCENTRATE⁽²⁾

MICRONIZED⁽³⁾

PURIFIED⁽⁴⁾

CSPG⁽⁵⁾



INDUSTRIAL

SPECIALTY

HIGH TECH

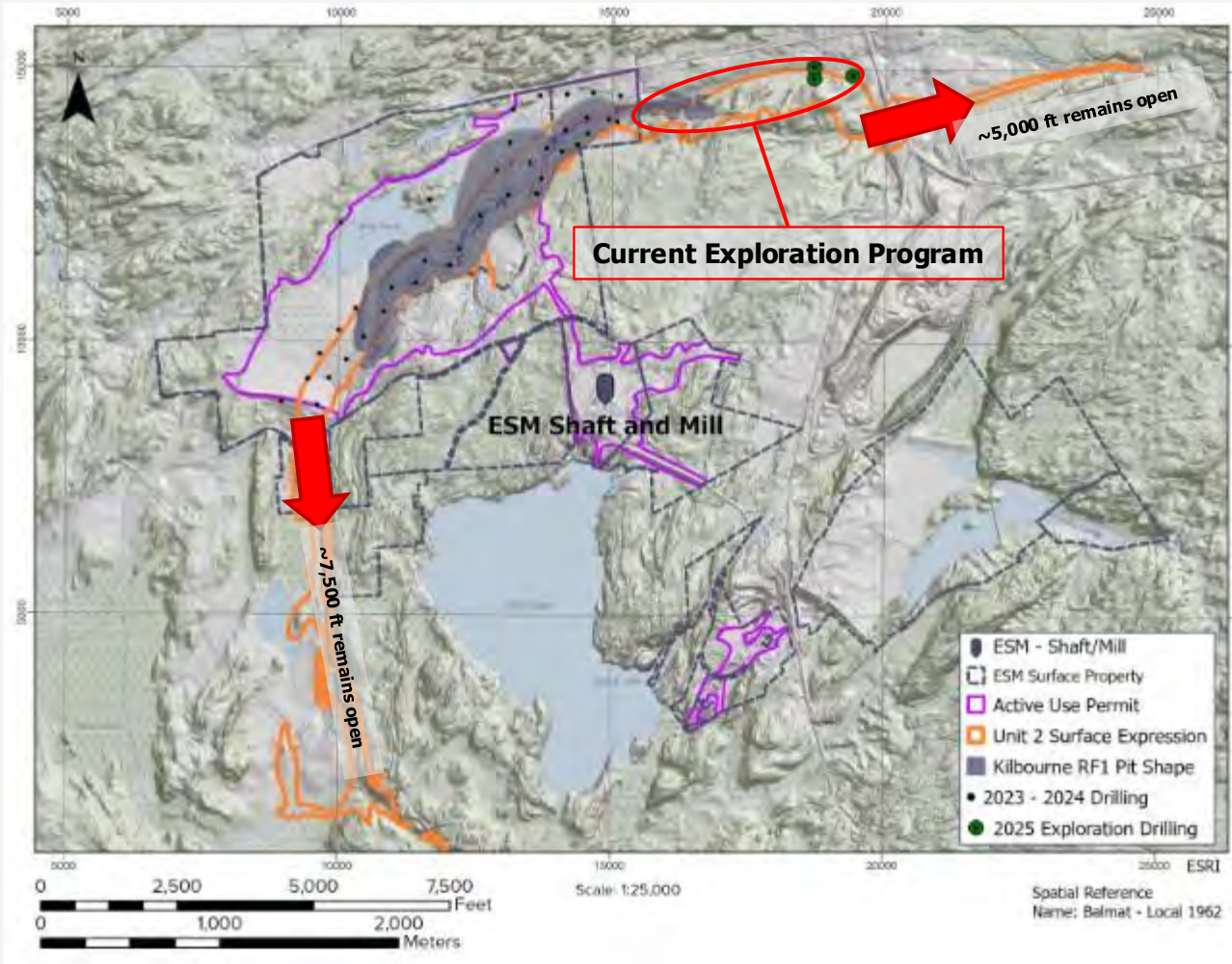
ENERGY STORAGE

(1) Subject to qualification sales
(2) ATSM Mesh Grade -95% LOI
(3) Micronized Flake Graphite Products STD Purity 95.0% LOI MIN

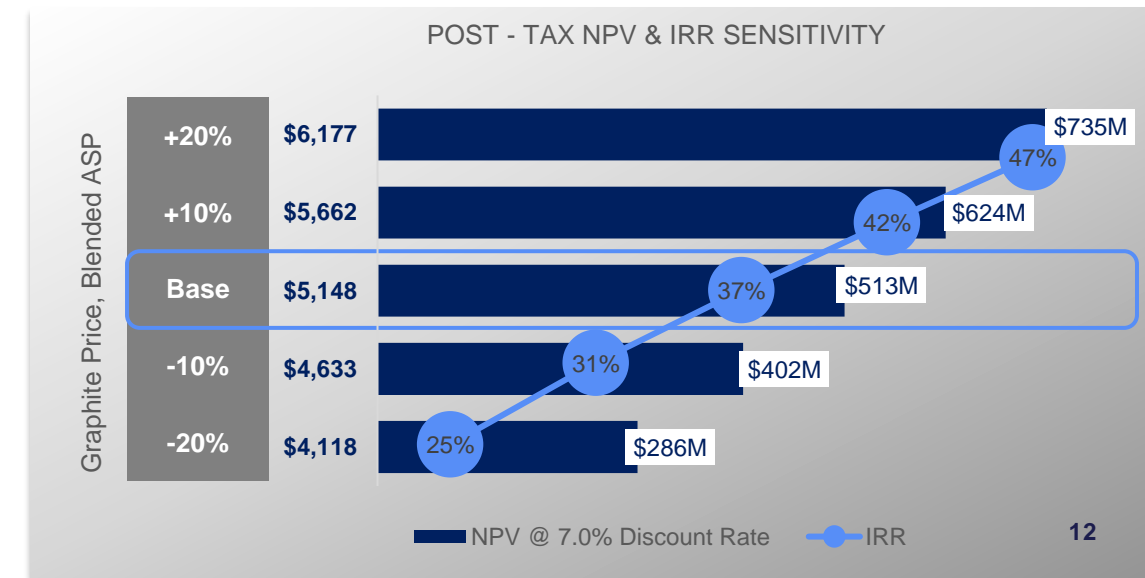
(4) Micronized Flake Graphite Products High Purity 99.9% LOI MIN
(5) Coated Spherical Purified Flake Graphite (CSPG) 99.95% LOI MIN



Kilbourn Growth Optionality: Large-Scale Resource Expansion + Strong Leverage to U.S Premium Pricing



- > Exploration drilling targeting eastern extension of Kilbourn began in Q3 2025
- > 4,500 ft of planned drilling, 1,738 ft completed to date
- > Graphite mineralization intercepted ~2,500 ft from current conceptual pit design
- > Mineralization remains open ~ 5,000 ft to the east and ~ 7,500 ft to the south
- > Regional graphite targets within land package; supported by historic geologic records and airborne geophysics
- > Base case pricing based on current landed U.S prices with no policy incentives taken into account



Zinc: Solid Foundation

60mlbs

Zn Production 2024

2.5x

Production growth since acquisition and restart

UNDERGROUND MINERAL RESOURCE ESTIMATE AS OF JUNE 9, 2025

| Category | Tons (000's tons) | Zn (%) | Contained (M Lbs) |
|------------------------|-------------------|--------|-------------------|
| Measured | 282 | 17.3 | 97 |
| Indicated | 1,133 | 16.0 | 362 |
| Measured and Indicated | 1,415 | 16.2 | 459 |
| Inferred | 4,512 | 12.1 | 1,088 |

OPEN PIT MINERAL RESOURCE ESTIMATE AS OF OCTOBER 17, 2024

| Category | Tons (000's tons) | Zn (%) | Contained (M Lbs) |
|------------------------|-------------------|--------|-------------------|
| Measured | 251 | 3.1 | 16 |
| Indicated | 950 | 3.2 | 61 |
| Measured and Indicated | 1,201 | 3.2 | 77 |
| Inferred | 461 | 3.5 | 32 |

BUILT FOR GROWTH | NYSE-A: TII | TSX: TI

Empire State Mine

Consistent Resource Replacement and Expansion

- Mineralized material processed in the latest Zinc LOM Plan: 565 mlbs (2026 onwards)
- Continued resource growth has more than offset annual depletion, enabling the Company to maintain a sustainable seven-year mine life
- Targeted 2025 annual production of 64-69mlbs at AISC of \$0.98-\$1.05/lb
- Incremental production increase targeted on an annual basis
- Evaluating the opportunity for 80 mlbs of production in the next 3-4 years based on existing resources

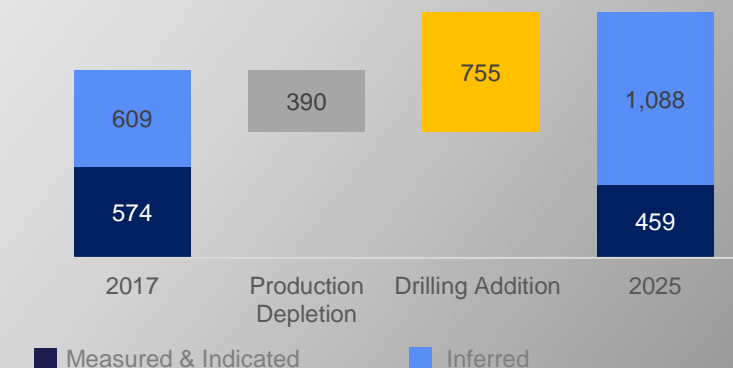


SOLID OPERATING PERFORMANCE

| YTD 2025 ACTUAL | |
|-----------------------------|-----------------------|
| Payable Production Zinc | 45.5 m lbs |
| C1 Cash Cost ⁽¹⁾ | \$0.93 per payable lb |
| AISC ⁽¹⁾ | \$0.99 per payable lb |
| Sustaining Capital | \$2.4 million |
| Exploration Capital | \$1.7 million |

STRONG REPLACEMENT RATIO THROUGH DRILLING

Total Contained Zn⁽²⁾ (mlbs)



(1) C1 Cash Cost and AISC are non-GAAP measures and presented in US dollars. Accordingly, these financial measures are not standardized financial measures under IFRS and might not be comparable to similar financial measures disclosed by other issuers. Information explaining these non-GAAP measures is set out in the Company's most recent MD&A under the section titled, "Non-GAAP Financial Measures" which disclosure is incorporated by reference herein. The Company's most recent MD&A can be found on SEDAR+ at www.sedarplus.com

(2) Underground mineral resource.



Expanding Resources & Unlocking Exploration Upside

Driving Near-mine Resource Expansion And District-scale Gold, Copper, Opportunities

ZINC RESOURCE EXPANSION & PRODUCTION GROWTH

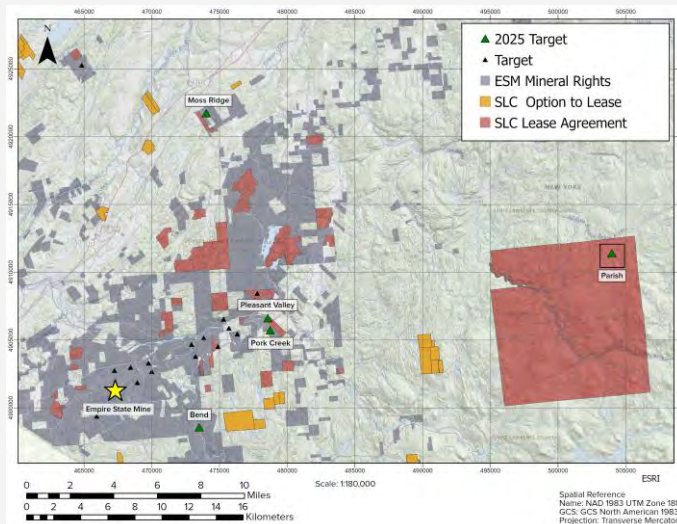
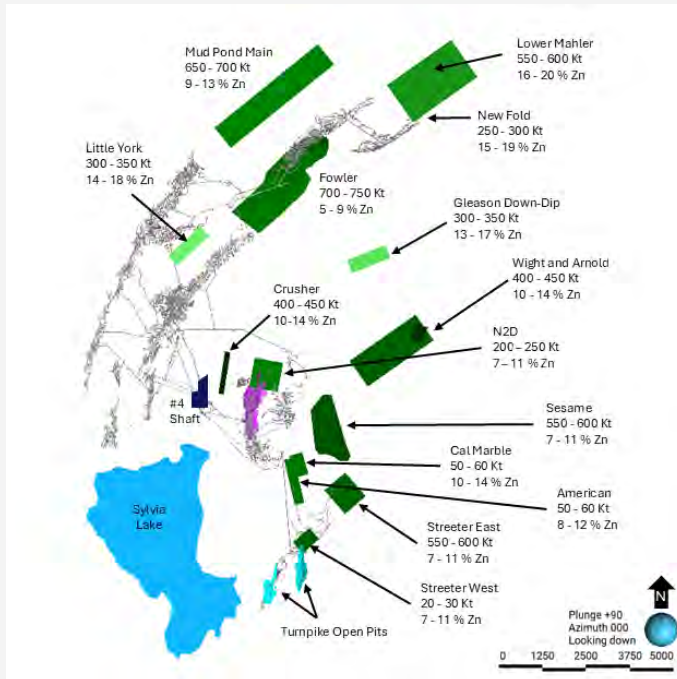
- > Underground drill programs advancing #4 and N2D
- > Significant near-term potential: 5.0–5.5 Mt of mineralized material at 10–14% Zn (963–1,525 Mlbs contained zinc)
- > Priority targets include Mud Pond Main, Mahler, Fowler, New Fold, and Little York

UNLOCKING DISTRICT WIDE POTENTIAL

- > Parish target added — historic Cu sulfides with anomalous gold, IOCG potential. 2,422 ft drilled to date, final assays pending
- > 120 water samples collected in Q3 2025 targeting areas with geologic cover
- > +2,000 soil samples planned for Q2 2026
- > Focus: underexplored marbles, geophysics, and historic data review

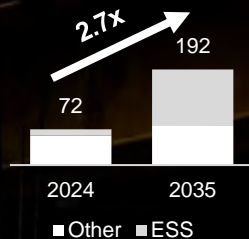
OVER 40,000 ACRES OF MINERAL RIGHTS ADDED THROUGH STRATEGIC AGREEMENT WITH ST. LAWRENCE COUNTY IN Q2 2025 FOR A TOTAL OF 120,000 ACRES

Note: The potential quantity and grade of these exploration targets are based on historic production figures from geologically similar horizons. The potential quantity and grade is conceptual in nature and there has been insufficient exploration to define a mineral resource at these targets. It is uncertain if further exploration will result in these targets being delineated as a mineral resource.



Significt Value Upside

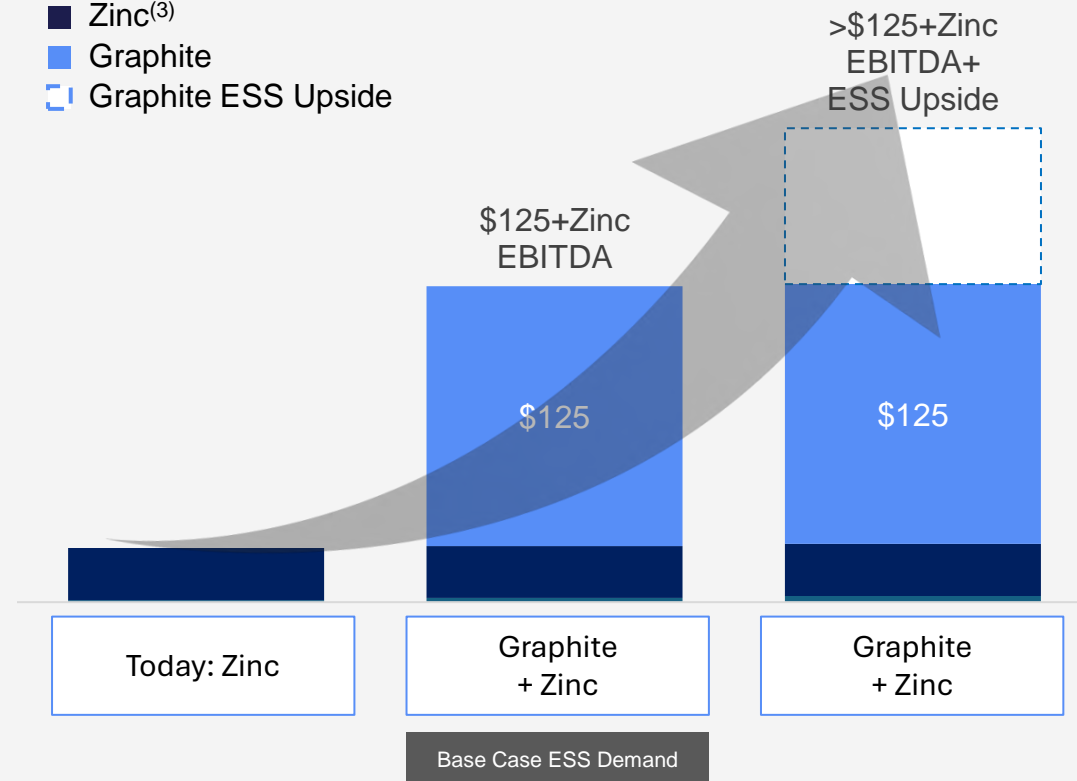
US DEMAND⁽¹⁾
(Natural Flake Graphite kt)



Titan's EBITDA Trajectory Reflects Significant Growth Potential

ILLUSTRATIVE ANNUAL EBITDA⁽²⁾ GROWTH (\$M)

■ Zinc⁽³⁾
■ Graphite
■ Graphite ESS Upside



Note: Figures are illustrative and based on internal development scenarios. Actual results may vary. See cautionary statements.

(1) Source: LSTM, Wood Mackenzie

(2) EBITDA is non-GAAP measure and presented in US dollars. Accordingly, these financial measures are not standardized financial measures under IFRS and might not be comparable to similar financial measures disclosed by other issuers.

(3) The 100+ year track record at ESM of converting near-mine exploration targets into production suggests the Company's exploration program has the potential to continue adding incremental production.

Path To Scaling Domestic Commercial Graphite Production



2022 - 2024

Technical

- > 2022: Discovery
- > 2023: Exploration program launch
- > 2024: Maiden resource declaration

2025

Technical

- > Lab testing to confirm product specs
- > 1,200 mt pa graphite concentrate facility commissioning in Q4 2025
- > Facility Start of Production
- > Infill drilling

2026

Technical

- > Targeted resource expansion
- > Geotechnical work
- > Further metallurgical test work (including value add product testing)
- > Feasibility Study

2027+(1)

Technical

- > Equipment orders
- > Construction/installation
- > Commissioning

Commercial

- > NA

Commercial

- > Technical work progress
- > Product qualification and offtakes

Commercial

- > Product qualification and offtakes

Commercial

- > Offtake/product placement

Production Begins

Funding and Permitting

Permitting

Funding/Construction



Appendix

Kilbourne Graphite Project

MINING PLAN

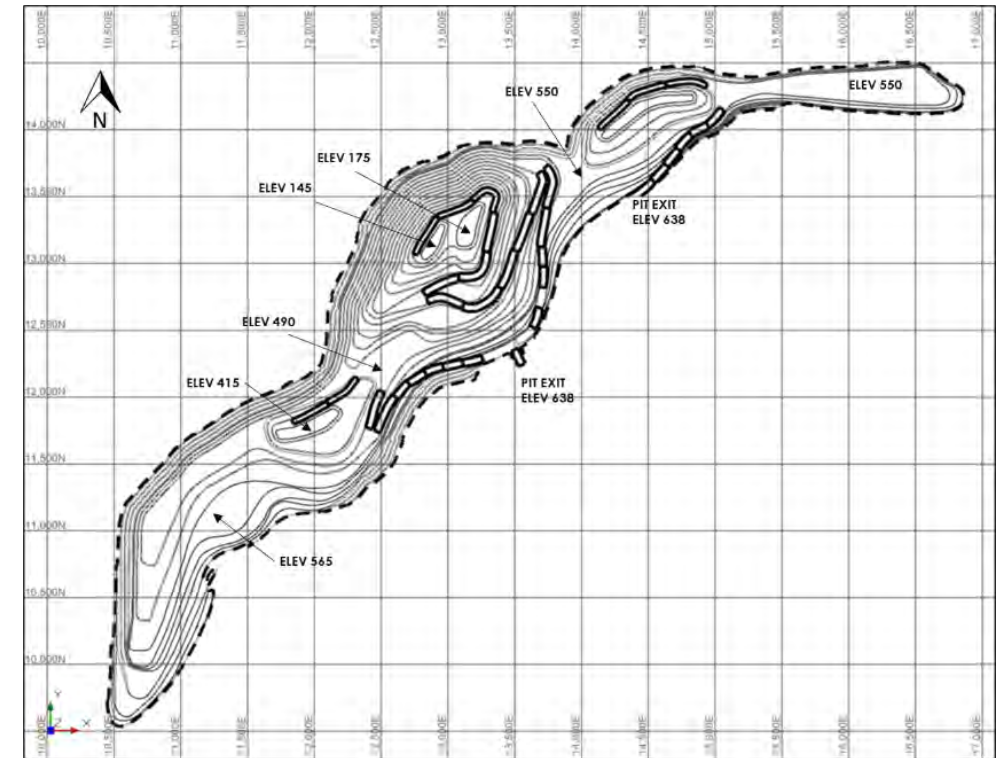
- Conventional open-pit design, aligned with industry practice
- Drill-and-blast with truck and loader fleet; waste to designated storage, progressive reclamation built in
- Benches developed in 15 ft intervals for selectivity and efficiency
- Mine plan based on Inferred Resources, block size 30x30x15 ft
- Assumptions: ~5% dilution, cut-off grade of 1.5% Cg, ~86% recovery
- Concentrator feed: 1.5 Mtpa → ~40,000 tpa graphite concentrate

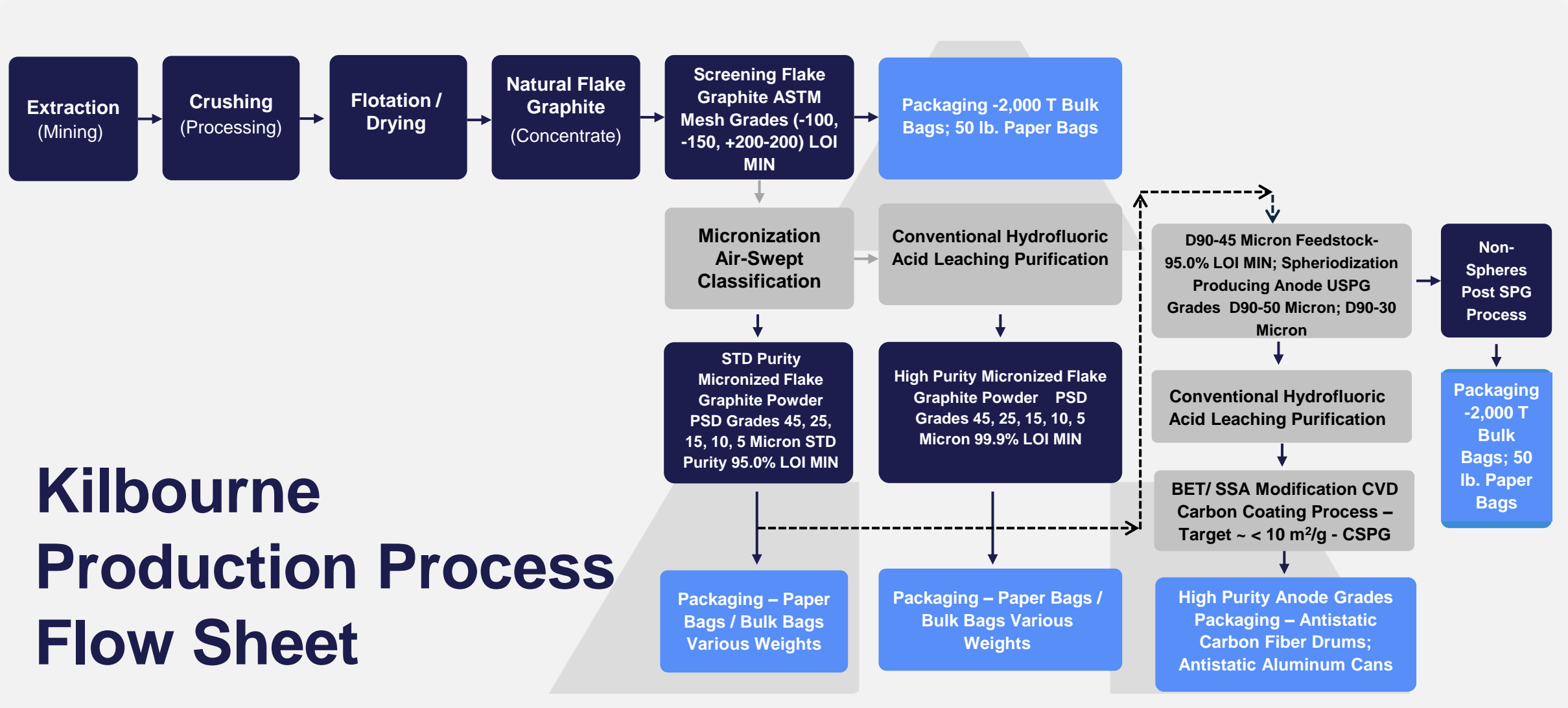
INFRASTRUCTURE & SITE LAYOUT

- Site Access & Roads: Direct highway access; new haul and plant roads integrated with ESM site.
- Power Supply: New 15 MVA substation; reliable grid connection and on-site distribution.
- Utilities: Fuel station, maintenance shop, wash bay, fire protection, truck scale.
- Water Systems: Closed-loop process water circuit; supplemental supply from Sylvia Lake.
- Tailings Facilities: Expanded TMF and backfilling of Historic Arnold Pit with integrated water management.



PROPOSED ULTIMATE PIT DESIGN





Testwork-SGS⁽¹⁾⁽²⁾

| Concentrate Size Fraction- Master Composite | Mass % | Assays % C(t) ⁽²⁾ |
|---|--------|------------------------------|
| +100 mesh | 8.2% | 98.1% |
| +150 mesh | 11.7% | 98.9% |
| +200 mesh | 26.0% | 99.1% |
| -200 mesh | 54.1% | 99.2% |
| Total Concentrate | 100% | 99.1% |



Equipment delivery at site for H2 2025 startup

(1) SFA analysis from Phase III metallurgy at SGS.

(2) SGS has reported concentrate assay results in total carbon (C(t)), the inference is that this represents graphitic carbon in a high-grade concentrate.

High Quality Graphite: From Lab Results to Domestic Production in 2025

- > Proven Quality: Up to 99% purity and ~87% recovery achieved (90-91% expected in close circuit)
- > Ready Market: Product segmentation supports U.S MIL-SPEC, lubricants, industrials and battery customers (over 50% of product in -200 mesh)
- > Execution on Path: 1,200 mt pa graphite processing facility starting in Q4 2025 as a first step towards targeted 40,000 mt pa in a larger commercial facility
- > Product qualification and sales expected to commence in early 2026

Macro & Policy Tailwinds

Titan Is Uniquely Positioned To Secure U.S. Critical Materials Independence While Capturing The Fastest-growing Markets

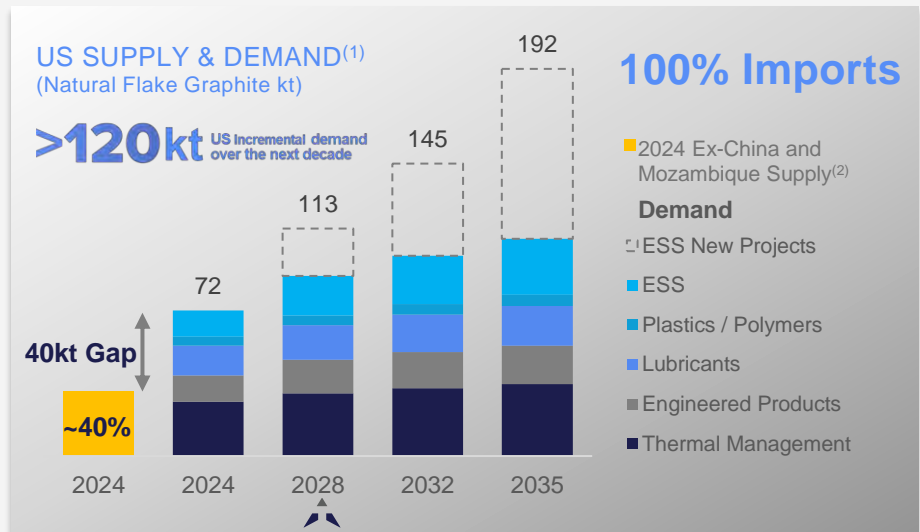
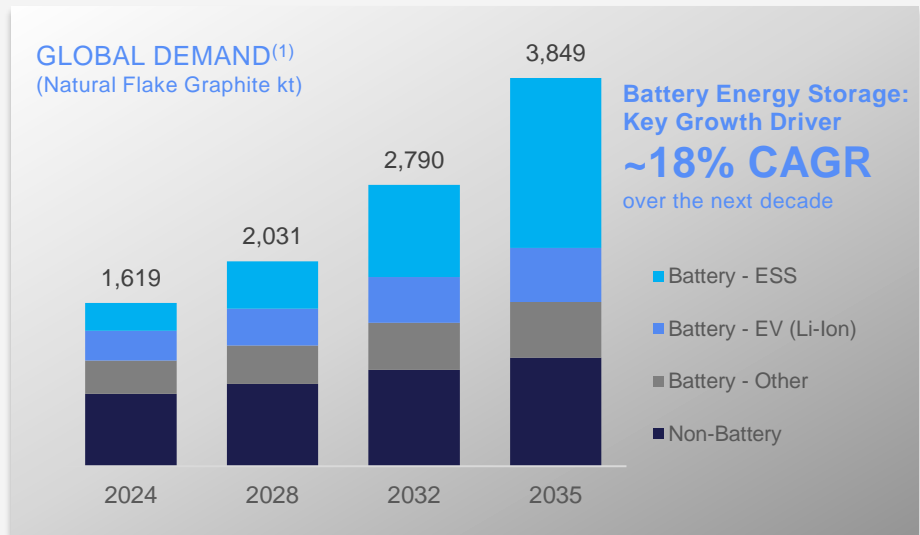
THE CRITICAL SUPPLY GAP

- > **Graphite demand is accelerating** across defense, high-tech, and energy storage, creating lasting growth tailwinds
- > With the **U.S. fully import-dependent** and **China controlling supply**, defense and industrial players are urgently seeking alternatives
- > Following China's initial **graphite export restrictions** introduced in late 2023, MOFCOM's October 2025 expansion to artificial and mixed anode materials highlights the **accelerating need to establish secure North American production capacity**

TITAN'S TARGETED 40K MTPA FACILITY WOULD SUPPLY ~50% OF PROJECTED U.S. NATURAL GRAPHITE DEMAND, DIRECTLY ADDRESSING AMERICA'S 100% IMPORT RELIANCE

US GOVERNMENT SUPPORTING LOCAL PRODUCTION

- > **DoW and DPA:** Direct funding to build critical-mineral capacity
- > **National Defense Stockpile:** Government offtake to de-risk demand
- > **DOE financing & grants:** LPO, MESC/BIL funding for processing and anode material
- > **Tax incentives:** 45X production credits, 48C investment credits
- > **Tariffs & trade measures:** Targeted tariffs and procurement preferences that favor domestic supply



(1) Source: LSTM, Wood Mackenzie
(2) USGS and Management Estimates

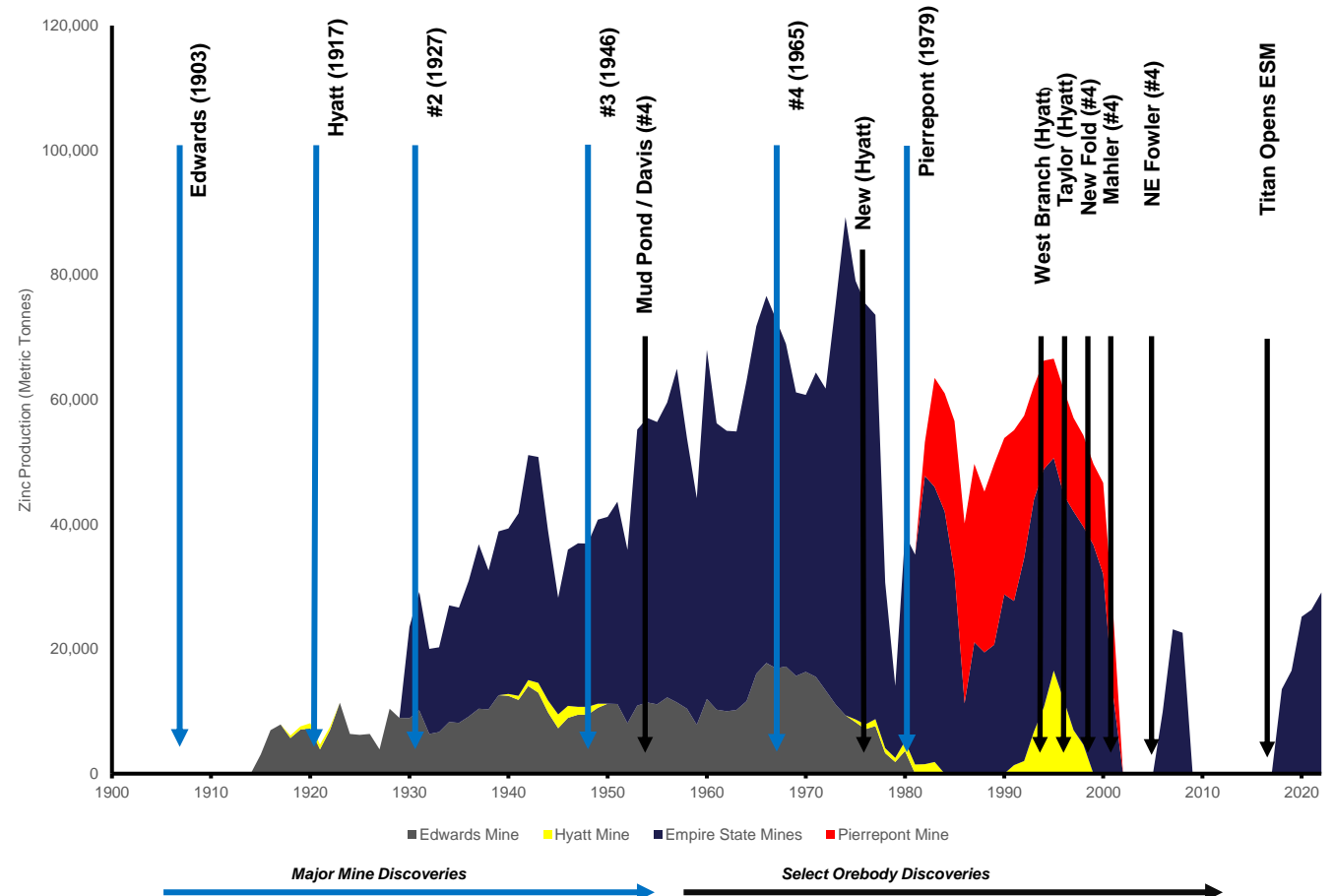
History of exploration success

Potential for additional discoveries

Many discoveries made during a century of mining operations

- > Minimal exploration during 2000-2010 period
- > District remains highly prospective – refocus on exploration concurrent with production
- > Kilbourne discovered in 2023

Long production history with numerous discoveries



Our Approach to Sustainability

- **Employees uphold integrity, trust, and commitment to community as well as environmental and social stewardship**
- **Projects deliver long-term mutual economic value to employees, communities, governments, and shareholders**
- **We minimize environmental, social, and safety impacts through innovative technology**
- **A key measure of a success is defined by direct engagement and transparent discussions with the surrounding communities**

Committed to localization and building partnerships that deliver long-term mutual benefits

1 Community Involvement

- Promote the economy by hiring and buying locally
- We partner and invest in workforce training
- We use our projects as a catalyst to expand economic development and community investment for the benefit of local residents, community organizations and local governments

2 Environmental and Social Stewardship

- Mitigate the impacts of our actions to ensure the safety and environmental, well-being of the areas in which we operate
- Work jointly with communities to create positive, long-term legacies that benefit future generations
- Minimize environmental footprint through sound management

3 Integrity and Trust

- Open, timely communication with stakeholders
- Build and reinforce relationships through transparency
- We back up our commitments with action
- Fully comply with laws, regulations and permits

SCIENTIFIC AND TECHNICAL INFORMATION



Graphite

The scientific and technical information contained in this presentation relating to the Kilbourne Graphite Project was based upon the news release titled "Titan Mining Announces Strong Kilbourne Graphite Project Economics and Expanded U.S EXIM Support to Accelerate U.S. Graphite Independence" dated December 1, 2025, which was approved by the following qualified persons: Donald R. Taylor, MSc, PG; Todd McCracken, P. Geo.; Bahareh Asi, P. Eng., David Willock, P. Eng.; Deepak Malhotra, SME Registered Member; Oliver Peters, MSc, P.Eng.; Derick de Wit, FAusIMM; and Steven M. Trader, PG, CPG, each of whom is a "Qualified Person" as defined by NI 43-101. All are independent of Titan, other than Mr. Donald Taylor, who is on Titan's board of directors.

Zinc

The scientific and technical information contained in this presentation relating to the Empire State Mines Zinc operations was based upon the technical report titled "Empire State Mines 2024 NI 43-101 Technical Report Update Gouverneur, New York, USA" which has an effective date of December 3, 2024, and was approved by the following qualified persons: Donald R. Taylor, MSc., PG, Todd McCracken, P. Geo., Deepak Malhotra, P. Eng., and Oliver Peters, MSc, P. Eng., MBA.



NYSE-A:TII | BUILT FOR GROWTH
TSX: TI

NEW YORK

408 Sylvia Lake Rd
Gouverneur, New York
NY 13642
info@titanminingcorp.com
315-287-2500

VANCOUVER

Suite 555 - 999 Canada Place
Vancouver, BC Canada,
V6C 3E1
info@titanminingcorp.com
604-687-1717

VISIT US AT TITANMININGCORP.COM