

## **Investor Presentation**

July 2025 | 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, C1 cash costs, AISC, sustaining capital, and exploration capital; 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; timing and results of project expansion, including for N2D and Turnpike; costs, timing and results of future exploration and development activities at Empire State Mines; timing and results of project expansion, including for N2D and Turnpike; costs, timing and results of future exploration and development activities at Empire State Mines; timing and results of future exploration and development activities at Empire State Mines; timing and results of future exploration and development activities at Empire State Mines; timing and results of future exploration and development activities at Empire State Mines; timing and results of future exploration and results of future exploration of file includes a going concern, and its business, operations and project expansion, including for N2D and Turnpike; costs, timing and results of future exploration projected zinc and graphite at all; significant resources being converted into measured or indicated mineral resources; the production at all; that ESM becomes the first commercial producer of US sourced and processed graphite, or a commercial producer of the drill producer of time future exploration potential; when future LOM updates may be released; catalysts for Titan's business; timing of a PEA for Kilbourne; the graphite development plan and indicative timeline; potential catalysts; t

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 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 estimates time of completion of drift rehabilitation and refurbishment of ESM #4 mine; 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 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 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 o

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 expresses 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 operations, 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; Taillings 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;

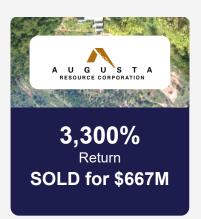


#### augustagroup

## **Track Record of Value Creation**

#### **Past Augusta Group Company Returns**











2014

·--O

2017

**-O** 

2018

Notes (1) Co-Founded in 2017 (2) Information as of July 22, 2025

2025 Augusta Group Companies<sup>(2)</sup>



C\$190M

Market Cap

TSX: TI



C\$144M

Market Cap

TSX: G

OTCQB: AUGG

C\$300M

**₩**IGHLANDER SILVER Market Cap

**CSE:HSLV** 



#### **PROVEN SUCCESS**

- Mine development,
  operational excellence & innovation
- Capital markets & Mergers & Acquisitions
- Corporate social responsibility

## A Best-in-class Leadership Team



Richard Warke
EXECUTIVE CHAIRMAN
Consistent record of creati

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



Donald Taylor

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



Rita Adiani

**PRESIDENT** 

18 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.



Speaker John Boehner

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



**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.



William Mulrow

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



Len Boggio

and others.

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.

#### SHAREHOLDER DISTRIBUTION(5)(6)



## **Capital Structure**

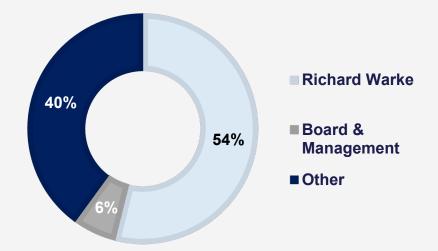
- > High insider ownership
- Unique positioning: junior with steady-state cash flow, significant exploration upside and critical metals strategic positioning
- Strong support from US EXIM as first mining partner with US\$15.8m loan closed in July 2025

#### CAPITAL STRUCTURE

Toronto Stock Exchange Symbol	TI
Cash Position	US\$12.2 M
Third party short term debt <sup>(1)</sup>	US\$10.2 M
Available Facility (EXIM)(2)	US\$15.8 M
Shares Outstanding <sup>(3)</sup>	136.3 M
Fully Diluted Shares Outstanding <sup>(3)</sup>	153 M
Market Capitalization <sup>(4)</sup>	C\$190 M

All figures as at March 31, 2025 unless stated otherwise.

- . Third party debt does not include US\$22m owing to related parties repayable from 2025-2028.
- 2. Available facility from US EXIM of \$15.8m
- 3. 6M Warrants, 10.6M Options
- . Market capitalization as of July 22, 2025
- 5. As of July 22, 2025, Bloomberg
- Management excludes Mr. Warke and includes other members of the Titan board and management team







## **Investment Highlights**

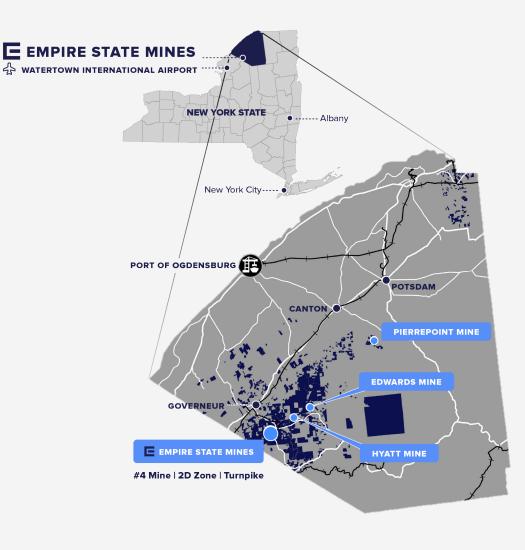
- U.S production base in upstate New York
  - Existing infrastructure includes 5,000 tpd mill, skilled workforce of 148 employees, rail, port and air access
  - > Cash flow positive zinc mine
- Existing permitted operations with state level permitting only
- +120,000 acres of mineral rights controlled throughout the district,
- Regional district scale and near mine exploration potential and ability to add incremental production at low cost

- Significant graphite discovery at Empire State Mine's (ESM)'s property
  - The Kilbourne Graphite Project is a near surface discovery within 1 mile of the ESM mill
- Unique advantage of existing operating base creating pathway for co-production
- 1,200 tpa fully permitted processing facility commissioning in H2 2025
- First end-to-end natural flake graphite production in the USA since 1956
- Target to be the first commercial producer of US sourced and processed graphite

#### Solid foundations and building for growth

>120,000

acres of mineral rights controlled throughout the district





#### 2025 ZINC GUIDANCE AND FY 24 - PRODUCTION AND COST

	2025 GUIDANCE	FY 2024
Payable Production Zinc	64-69 m lbs	59.5 m lbs
C1 Cash Cost (1)	\$0.89-\$0.96 per payable lb	\$0.72 per payable lb
AISC <sup>(1)</sup>	\$0.98-\$1.05 per payable lb	\$0.94 per payable lb
Sustaining Capital	US\$5.5-US\$5.7 million	US\$1.9 million
Exploration Capital	US\$2- US\$2.5 million	US\$1.9 million

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

## **Zinc**

- Achieved top end of production guidance with 59.5 mlbs payable zinc produced in 2024
- 2024 AISC achieved was 10% less than lower end of cost guidance, despite interruptions from Storm Debby
- 2025 Guidance of up to 15% increased production above 2024 Guidance with lower unit costs
- Execution of N2D growth project with H2 2025 benefiting from increased production





## Zinc

## Near term resource expansion and opportunities to increase production

#4 Mine – mineralized zones plunge to northeast; potential to extend zones up and down-plunge - Underground exploration drilling following up on intercepted mineralization between Mahler and New Fold and expanding Mud Pond Main

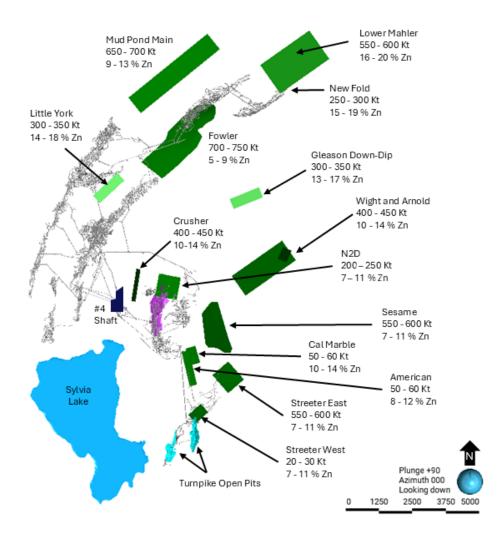
N2D – further down dip potential

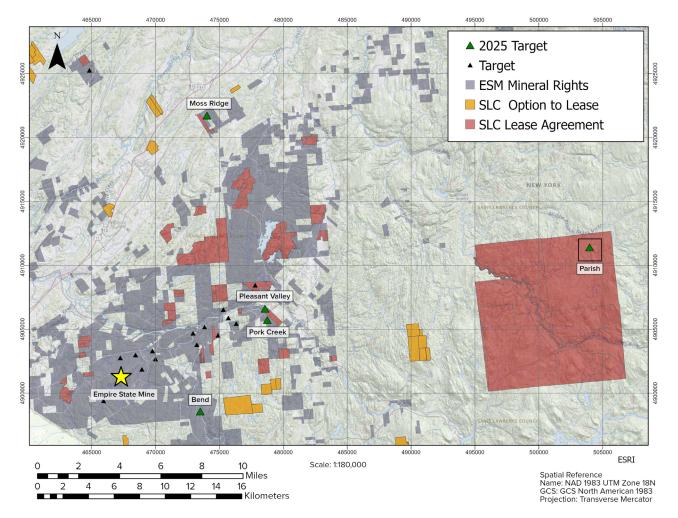
Turnpike – commencing open pit production has the potential to increase project NPV over the life of the zone

Total near mine targets for further exploration target range are estimated to contain between 5.0-5.5 mt of mineralized material at average zinc grades of 10-14%, containing 963 mlbs to 1,525 mlbs of contained zinc

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.

#### **ESM #4 Mine, N2D and Turnpike**





Over 40,000 Acres of Mineral Rights added through Strategic Agreement with St. Lawrence County in Q2 2025

BUILT FOR GROWTH

# Regional Surface Exploration - Planning

- Drilling Targeting undertested historic Zn mineralization, productive geologic units, and untested Zn anomalies in soil and rock
  - Prioritization of targets within proximity to existing ESM infrastructure
  - Q1 Drilling targeted Pleasant Valley
  - Parish added to target list
    - Historically documented copper sulfides with anomalous gold in recent grab samples
- Surface Geochemical Sampling
  - Goal of +2,000 soil samples in 2025, program planned for Q2/Q3 targeting undertested marbles
  - Water sampling targeting Parish, and areas geologic cover (Pierpont – Colton)
- Continued review of historic data, airborne geophysics, and geology for target generation and land acquisition









#### **UNDERGROUND AS OF JULY 16, 2024**

Category	Tons (000's US short tons)	Zn (%)	Contained Pounds (M Lbs)
Measured	295	17.1	101
Indicated	1,158	15.7	364
Measured and Indicated	1,453	16.0	465
Inferred	4,327	12.1	1,049

Notes: Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that any part of the Mineral Resources estimated will be converted into a Mineral Reserves estimate. Mineral Resources stated as in-situ grade at a Zinc price of \$1.30/lb, with an assumed zinc recovery of 96.4% Resources are reported using a 5.3% Zinc cut-off grade, based on actual break-even mining, processing, and G&A costs from the ESM operation. Numbers in the table have been rounded to reflect the accuracy or the estimate and may not sum due to rounding.

## Zinc

#### **Consistent Resource Replacement and Expansion**

## **Continued Growth by the Drill Bit**

Titan expects to expand its mineral resources and production through infill drilling at Mahler, New Fold and Mud Pond

#### **Increased Mine Life**

Contained zinc in 2024 MRE (M&I): 465 Mlbs and Inferred: 1,049 Mlbs
Mineralized material, Processed in latest Zinc LOM Plan: 663Mlbs

Potential to add to near term production and increase in mine life through drilling of exploration targets

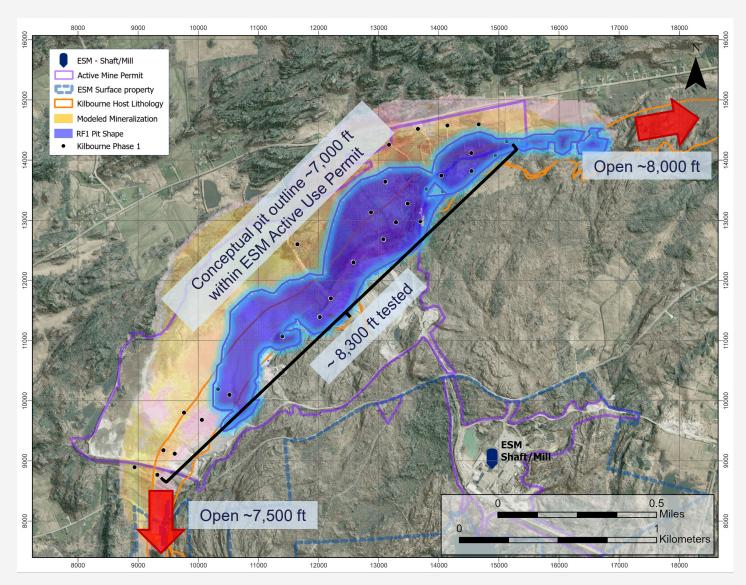


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### Kilbourne Graphite Maiden Resource

## Strengthening the domestic critical minerals supply chain

- Open-pit constrained 43-101 inferred resource of 22 million tons at an average grade of 2.91% Cg (based on a cut-off grade of 1.50%)
- > 653 kt of contained graphite within inferred resource estimate
- > 8,300 ft of strike length tested of a total strike length of 25,000 ft
- > 7,000 ft of conceptual pit is within ESM active use permit
- > Only 30% of the Kilbourne trend has been tested
- > Potential for expansion along strike and down dip
- Nearly all of the existing mineral resource is within active mine use permit – only permits required to bring to production are state level permits
- > Existing plant and infrastructure allows Kilbourne to be potentially fast-tracked into production
- > Targeting to be the first commercial producer of US sourced and processed graphite





#### **Price Sensitivities**

- Assumed selling price of \$1090/t of concentrate providing 22mt of mill feed @2.91% Cg
- Selling price based on conservative/low-case target market of industrial and lubricant use with no value-add products considered
- Significant mineral resource upside from minimal pricing increase from sales to engineered products, energy storage and battery products segments
- Further mineral resource expansion through drilling the remaining mineral resource area

#### PRICING SENSITIVITIES - KILBOURNE MINERAL RESOURCE

\$USD per Ton Concentrate	RF	Graphite [%]	Mill Feed [k Ton]	Contained Graphite [k Ton]	Waste [k Ton]	Overburden [k Ton]
872.00	0.80	3.30	7,198	238	4,810	3,532
926.50	0.85	3.19	10,627	339	9,247	5,763
981.00	0.90	3.05	14,987	457	13,578	9,261
1035.50	0.95	2.99	18,303	547	18,824	11,072
1090.00	1.00	2.91	22,423	653	25,278	13,425
1144.50	1.05	2.86	25,109	719	29,871	14,557
1199.00	1.10	2.81	28,790	808	36,399	16,528
1253.50	1.15	2.76	32,401	895	44,365	18,400
1308.00	1.20	2.73	36,959	1,009	56,969	21,433



#### Phase III-SGS(1)

	Ass	says (%)
Composite	C(t)	C(g)
Master	3.48	3.14
North Shallow	3.38	3.21
South Shallow	3.51	3.28
North Deep	2.87	2.68
South deep	3.57	3.25

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%

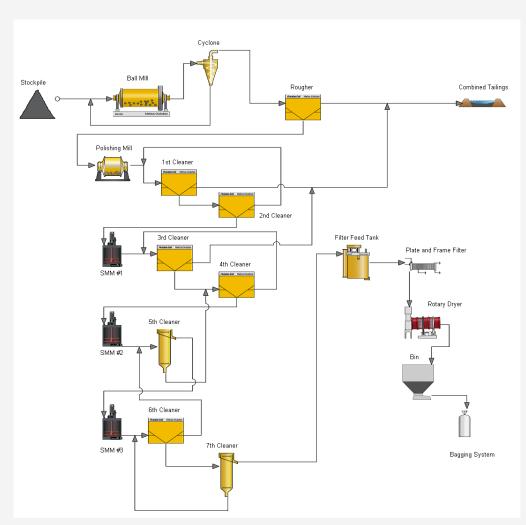
## **Metallurgy**

- Process Optimization completed at SGS Lakefield for Master Composites and Variability Composites
- > Master & Variability Composite Head Grades
  - 118 mineralized intervals from 4 drill holes- 4 variability samples
  - Sub-samples of all 118 drill core intervals were combined to produce a Master composite
  - > Final master composite test produced final concentrate of 98.8% C(t) and open circuit graphite recovery of 87.3%, 90-91% closed circuit recovery projected
- > Flow sheet and size fraction analysis
  - Simplified flow sheet developed based on process optimization. Concentrate grades range between 97.6% C(t) for the North Shallow and 99.3% C(t) for the South Deep Composite
  - Size fraction analysis demonstrates saleable product and key product group applications with US domestic customer base

<sup>1.</sup> SFA analysis from Phase III metallurgy at SGS.

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





Simplified Facility Flowsheet

#### **Natural Flake Graphite Processing Facility (the "Facility")**

- > Facility construction launched in May 2025 with commissioning in H2 2025. Permitting complete.
- > Key objectives
  - > Product Qualification
  - > Path to full scale commercialization

#### > Operating Parameters

- > 60,000 tons per annum throughput @ 2.91% Cg grade
- > 1,000-2000 tpa concentrate production with expansion capability to targeted 40,000tpa

#### > Key Customer Segments and Forward Planning

- > Strategic introduction timelines will be coordinated with the production ramp up and customer qualifications
- Micronized STD Purity (95.0% LOI MIN) and high purity (99.9% LOI MIN) micronized graphite products are anticipated to further enhance both revenues and margins to the company
- Targeted operating margins at 40,000 tpa of 40-45%. Assumed average selling price of US\$2,350/t (includes micronized and HP products)



## Kilbourne Product Mix & Sectors

Key end products		PRODUCT MIX (%)
ASTM Mesh Grades	<ul><li>Lubricants, Friction, Refractories, Drilling Fluids</li></ul>	15%
Micronized Flake Graphite Products STD Purity 95.0% LOI MIN	Carbon brush, Lubricants, Friction, Engine Seals, Plastics, Ceramics, MIL-SPEC	60%
Micronized Flake Graphite Products High Purity 99.9% LOI MIN & potentially CSPG	Alkaline Batteries, Powdered Metals, SiC Optics, Polymers, Primary Lithium Batteries, Sic Armor, MIL-SPEC, EV Anode	25%

#### **KEY PRODUCT GROUPS AND SECTORS**



#### Thermal Management

- Refractories
- Foundries
- Hot Metal Toppings



#### **Engineered** Products

- Aerospace
- Defense
- Ceramics Agriculture
- MĬL-SPEC
- Semis
- SiC Optics
- SiC Armor



#### **Lubricants & Dispersions**

- Drilling Fluids
- Automotive
- Agriculture
- Aerospace MIL-SPEC
- Dispersions



#### Plastics, Polymers, Rubber

- Automotive
- Aerospace
- MIL-SPEC
- Industrial
- PTFE PEEK
- Paint
- · Conductive Coatings



#### **Energy Storage**

- Consumer Electronics
- Solid Oxide Fuel Cells
- Secondary CathodePrimary Alkaline
- Coatings
- EV Anode



## **Graphite Development Plan and Indicative Timeline**

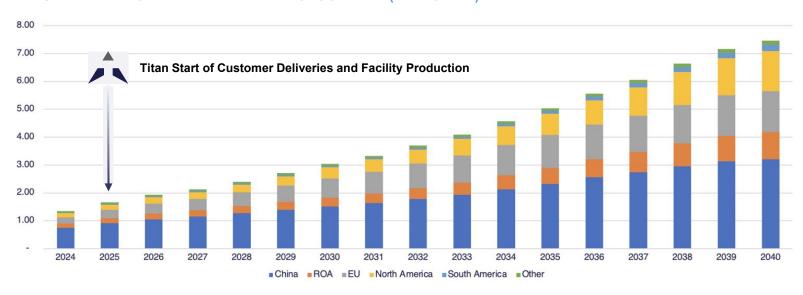
	Year 0	Year 1	● Year 2 & 3 (Scale Up) <sup>(1)</sup>	
Technical	<ul> <li>43-101 mineral resource estimate declaration (Q4 2024)</li> <li>Metallurgy Phase III</li> <li>Facility Design &amp; Engineering/Equipment Orders</li> </ul>	<ul> <li>Infill drilling of mineral resource to measured &amp; indicated status</li> <li>Commencement of mine permitting, only state level required, for Kilbourne Graphite</li> </ul> Facility Start of Production-Customer deliveries	<ul> <li>FEED/Detailed engineering</li> <li>Equipment orders</li> <li>Construction/installation</li> <li>Permits issued</li> </ul>	Production
Commercial	> Preliminary product segmentation	<ul> <li>Preliminary Economic Assessment for 2 phase commercial facility – Phase I – 20,000t and Phase II - 40,000t</li> <li>Product qualification and offtakes</li> </ul>	> Offtake/product placement	Expansion
Financial	> Financed from internal resources	<ul> <li>Drilling cost</li> <li>Metallurgical Test-work</li> <li>Facility capex (including working capital)</li> <li>Study costs</li> <li>Permitting</li> </ul>	<ul> <li>Construction and Phase I start up cost</li> <li>Debt Financing process</li> </ul>	

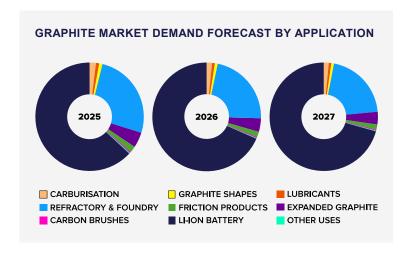
<sup>(1)</sup> Note: Commercial production decision to be based on positive results through the Company's development plan, board approval, and financing



## **Graphite - Demand by Type and Region**

#### NATURAL FLAKE GRAPHITE DEMAND BY GEOGRAPHY (MILLION MT)





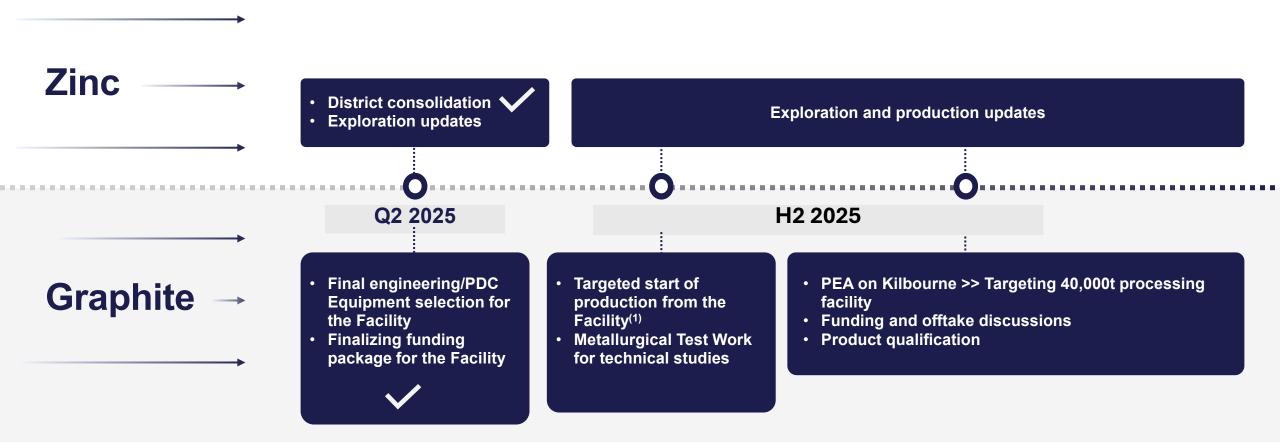
- No domestic commercial producers of natural flake graphite in the U.S
- North American demand projected to grow at CAGR of 15% p.a. Li-On batteries are key driver of demand growth driven by EV growth
- China is expected to control 82% of total supply of graphite by 2030 with other key suppliers being Mozambique and Madagascar
- Graphite forms part of the critical minerals agenda for the US DoD, DOE and USGS

The US imports 100% of the current graphite requirement creating a unique opportunity for Titan to play a key role in delivering to US domestic needs

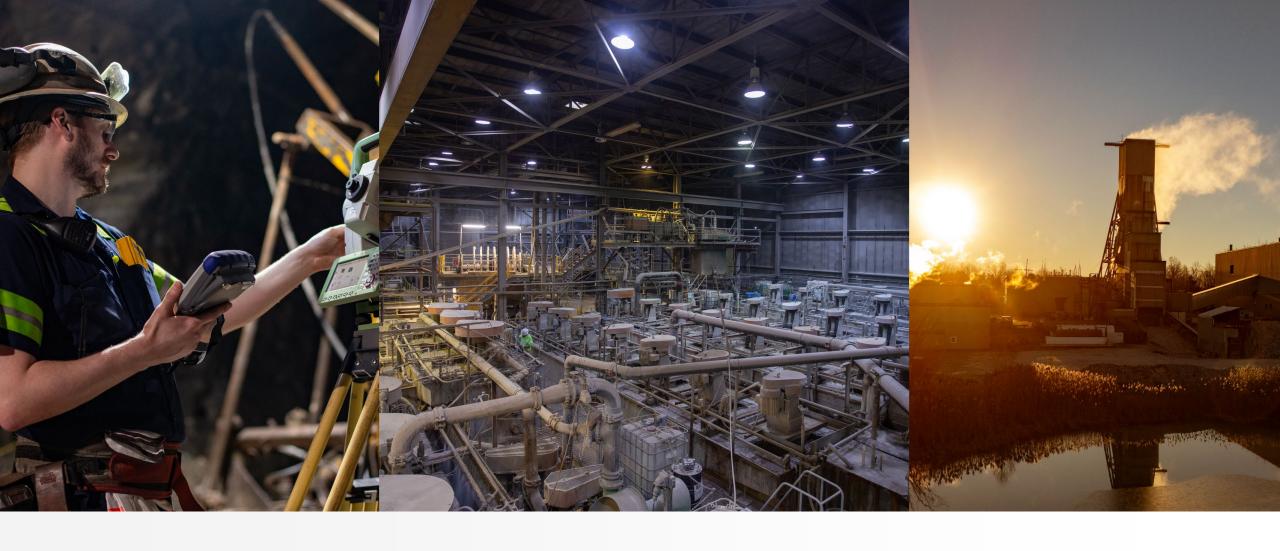
Sources: Benchmark Minerals, Silverado Policy Accelerator, USGS, DOE and Department of Defense (DLA)



## **Near Term Catalysts**

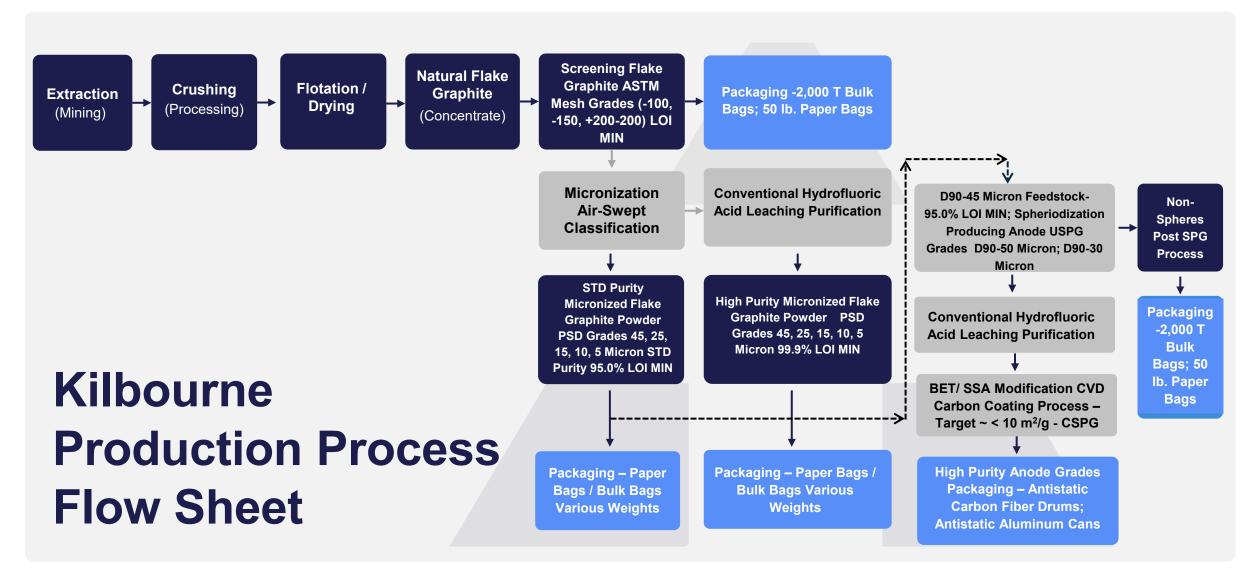


(1) Note: Subject to funding



# **Appendix**







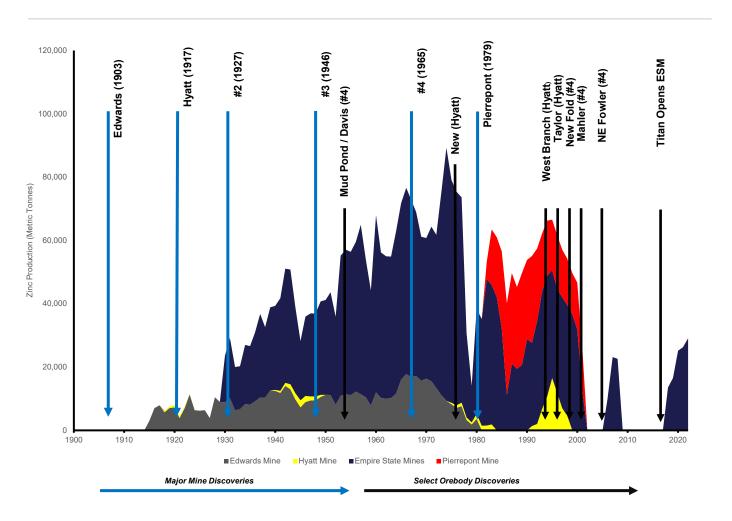
# History of exploration success

## 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

#### 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

## 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

## Environmental and Social Stewardship

- Mitigate the impacts of our actions to ensure the safety and environmental, wellbeing 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

## 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

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" (the "ESM Technical Report") 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. Mr. Taylor is the Chief Executive Officer of the Company. Messrs McCracken, Malhotra, and Peters are independent of the Company.

The scientific and technical information contained in this presentation relating to the Empire State Mines Kilbourne Project was based upon: 1. the ESM Technical Report; and 2. the Company's press release titled "Titan Mining Announces Phase III Metallurgy Results and Outlines Plans for Natural Flake Graphite Processing Facility in New York State", dated January 16, 2025, which was approved by Oliver Peters of Metpro Management Inc. Mr. Peters is a Qualified Person as defined by National Instrument 43-101 and is independent of Titan.



TSX: TI | BUILT FOR GROWTH

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