


NIOCORP: CRITICAL MINERALS FOR U.S. SUPPLY CHAIN SECURITY

OUR MISSION:

To accelerate the transition to a lower carbon economy by serving as a reliable U.S. supplier of sustainably produced critical minerals.



NioCorp
Critical Mineral Security

Disclaimers & Technical Disclosures

Forward-Looking Statements

This Presentation contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 and forward-looking information within the meaning of applicable Canadian securities laws. Forward-looking statements may include, but are not limited to, the anticipated benefits of NioCorp's business combination (the "Business Combination") with GX Acquisition Corp. II ("GXII") and NioCorp's previously announced standby equity purchase facility (the "Yorkville Equity Facility Financing" and, together with the Business Combination, the "Transactions") with YA II PN, Ltd., an investment fund managed by Yorkville Advisors Global, LP (together with YA II PN, Ltd., "Yorkville"), including the ability to access the full amount of the expected net proceeds of the Yorkville Equity Facility Financing over the next three years; NioCorp's ability to receive a final commitment of financing from the Export-Import Bank of the United States ("EXIM"); anticipated benefits of the listing of NioCorp's common shares on Nasdaq; the financial and business performance of NioCorp; NioCorp's anticipated results and developments in the operations of NioCorp in future periods; NioCorp's planned exploration activities; the adequacy of NioCorp's financial resources; NioCorp's ability to secure sufficient project financing to complete construction and commence operation of the Elk Creek Project; NioCorp's expectation and ability to produce niobium, scandium, and titanium at the Elk Creek Project; NioCorp's plans to produce and supply specific products and market demand for those products; the outcome of current recovery process improvement testing, and NioCorp's expectation that such process improvements could lead to greater efficiencies and cost savings in the Elk Creek Project; the Elk Creek Project's ability to produce multiple critical metals; the Elk Creek Project's projected ore production and mining operations over its expected mine life; the completion of the demonstration plant and technical and economic analyses on the potential addition of magnetic rare earth oxides to NioCorp's planned product suite; the exercise of options to purchase additional land parcels; the execution of contracts with engineering, procurement and construction companies; NioCorp's ongoing evaluation of the impact of inflation, supply chain issues and geopolitical unrest on the Elk Creek Project's economic model; and the creation of full time and contract construction jobs over the construction period of the Elk Creek Project. In addition, any statements that refer to projections (including Averaged EBITDA, Averaged EBITDA Margin, and After-Tax Cumulative Net Free Cash Flow), forecasts or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. Forward-looking statements are typically identified by words such as "plan," "believe," "expect," "anticipate," "intend," "outlook," "estimate," "forecast," "project," "continue," "could," "may," "might," "possible," "potential," "predict," "should," "would" and other similar words and expressions, but the absence of these words does not mean that a statement is not forward-looking.

The forward-looking statements are based on the current expectations of the management of NioCorp and are inherently subject to uncertainties and changes in circumstances and their potential effects and speak only as of the date of such statement. There can be no assurance that future developments will be those that have been anticipated. Forward-looking statements reflect material expectations and assumptions, including, without limitation, expectations, and assumptions relating to the future price of metals, the stability of the financial and capital markets and other current estimates and assumptions regarding the Transactions and their benefits. Such expectations and assumptions are inherently subject to uncertainties and contingencies regarding future events and, as such, are subject to change. Forward-looking statements involve a number of risks, uncertainties or other factors that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, those discussed and identified in public filings made by NioCorp with the Securities and Exchange Commission (the "SEC") and with the applicable Canadian securities regulatory authorities and the following: NioCorp's ability to recognize the anticipated benefits of the Transactions, including NioCorp's ability to access the full amount of the expected net proceeds under the Yorkville Equity Facility Financing Agreement over the next three years; unexpected costs related to the Transactions; the outcome of any legal proceedings that may be instituted against NioCorp following closing of the Transactions; NioCorp's ability to receive a final commitment of financing from EXIM on the anticipated timeline, on acceptable terms, or at all; NioCorp's ability to continue to meet Nasdaq and TSX listing standards; NioCorp's ability to operate as a going concern; risks relating to the Common Shares, including price volatility, lack of dividend payments and dilution or the perception of the likelihood any of the foregoing; NioCorp's requirement of significant additional capital; the extent to which NioCorp's level of indebtedness and/or the terms contained in agreements governing NioCorp's indebtedness or the Yorkville Equity Facility Financing Agreement may impair NioCorp's ability to obtain additional financing; covenants contained in agreements with NioCorp's secured creditors that may affect its assets; NioCorp's limited operating history; NioCorp's history of losses; the restatement of NioCorp's consolidated financial statements as of and for the fiscal years ended June 30, 2022 and 2021 and the interim periods ended September 30, 2021, December 31, 2021, March 31, 2022, September 30, 2022 and December 31, 2022 and the impact of such restatement on NioCorp's future financial statements and other financial measures; the material weaknesses in NioCorp's internal control over financial reporting, NioCorp's efforts to remediate such material weaknesses and the timing of remediation; the possibility that NioCorp may qualify as a PFIC under the Code; the potential that the Transactions could result in NioCorp becoming subject to materially adverse U.S. federal income tax consequences as a result of the application of Section 7874 and related sections of the Code; cost increases for NioCorp's exploration and, if warranted, development projects; a disruption in, or failure of, NioCorp's information technology systems, including those related to cybersecurity; equipment and supply shortages; variations in the market demand for, and prices of, niobium, scandium, titanium and rare earth products; current and future offtake agreements, joint ventures, and partnerships; NioCorp's ability to attract qualified management; the effects of the COVID-19 pandemic or other global health crises on NioCorp's business plans, financial condition and liquidity; estimates of mineral resources and reserves; mineral exploration and production activities; feasibility study results; the results of metallurgical testing; changes in demand for and price of commodities (such as fuel and electricity) and currencies; competition in the mining industry; changes or disruptions in the securities markets; legislative, political or economic developments, including changes in federal and/or state laws that may significantly affect the mining industry; the impacts of climate change, as well as actions taken or required by governments related to strengthening resilience in the face of potential impacts from climate change; the need to obtain permits and comply with laws and regulations and other regulatory requirements; the timing and reliability of sampling and assay data; the possibility that actual results of work may differ from projections/expectations or may not realize the perceived potential of NioCorp's projects; risks of accidents, equipment breakdowns, and labor disputes or other unanticipated difficulties or interruptions; the possibility of cost overruns or unanticipated expenses in development programs; operating or technical difficulties in connection with exploration, mining, or development activities; the management of the water balance at the Elk Creek Project site; land reclamation requirements related to the Elk Creek Project; the speculative nature of mineral exploration and development, including the risks of diminishing quantities of grades of reserves and resources; claims on the title to NioCorp's properties; potential future litigation; and NioCorp's lack of insurance covering all of NioCorp's operations.

Should one or more of these risks or uncertainties materialize or should any of the assumptions made by the management of NioCorp prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements.

All subsequent written and oral forward-looking statements concerning the Transactions or other matters addressed in this communication and attributable to NioCorp or any person acting on its behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this communication. Except to the extent required by applicable law or regulation, NioCorp undertakes no obligation to update these forward-looking statements to reflect events or circumstances after the date of this communication to reflect the occurrence of unanticipated events.

Qualified Persons

All technical and scientific information included in this Presentation derived from NioCorp's 2022 NI 43-101 Elk Creek Technical Report with respect to mineral resources has been reviewed and approved by Matthew Batty, P.Geo., Owner, Understood Mineral Resources Ltd., and all such information respecting NioCorp's mineral reserves has been reviewed and approved by Gavin Clow, P. Eng., Mining Manager, Optimize Group. Each of Messrs. Batty and Clow is a "Qualified Person" as such term is defined in NI 43-101. Each of Mr. Batty and Mr. Clow and their respective firms are independent consultants who provide consulting services to NioCorp. All technical and scientific information included in this Presentation derived from NioCorp's S-K 1300 Elk Creek Technical Report Summary with respect to mineral resources has been reviewed and approved by Understood Mineral Resources Ltd., and all such information respecting NioCorp's mineral reserves has been reviewed and approved by Optimize Group. Understood Mineral Resources Ltd. and Optimize Group are "Qualified Persons" as such term is defined in S-K 1300. All other technical and scientific information included in this Presentation has been reviewed and approved by Scott Honan, M.Sc., SME-RM, NioCorp's Chief Operating Officer. Mr. Honan is a "Qualified Person" as such term is defined in both NI 43-101 and S-K 1300.

Disclaimers & Technical Disclosures

Financial Information; Non-GAAP Measures

Certain financial information and data included in this Presentation is unaudited and may not conform to Regulation S-X. This Presentation also includes certain financial measures not presented in accordance with generally accepted accounting principles (“GAAP”), including, but not limited to, “Averaged EBITDA,” “Averaged EBITDA Margin,” and “After-Tax Cumulative Net Free Cash Flow.” These performance measures do not have a standard meaning within GAAP and, therefore, amounts presented may not be comparable to similar data presented by other companies. These non-GAAP financial measures, and other measures that are calculated using these non-GAAP measures, are not measures of financial performance in accordance with GAAP and may exclude items that are significant in understanding and assessing NioCorp’s financial results. Therefore, these measures should not be considered in isolation or as an alternative to net income, cash flows from operations or other measures of profitability, liquidity or performance under GAAP. These non-GAAP financial measures are included in this Presentation because they are key performance measures used in the June 2022 Feasibility Study for purposes of projecting the economic results of the Elk Creek Project, and NioCorp believes that these non-GAAP measures provide useful information to management and investors regarding certain financial and business trends relating to NioCorp’s financial condition and results of operations. NioCorp believes that the use of these non-GAAP financial measures provides an additional tool for investors to use in evaluating ongoing operating results and trends and in comparing NioCorp’s financial measures with other similar companies, many of which present similar non-GAAP financial measures to investors. These non-GAAP financial measures are subject to inherent limitations as they reflect the exercise of judgments by management about which expense and income are excluded or included in determining these non-GAAP financial measures.

The non-GAAP financial measures included in this Presentation are projections. Reconciliations of these forward-looking non-GAAP financial measures to the most directly comparable GAAP financial measures are not provided because NioCorp is unable to provide such reconciliations without unreasonable effort, due to the uncertainty and inherent difficulty of predicting the occurrence and the financial impact of such items impacting comparability and the periods in which such items may be recognized. For the same reasons, the Company is unable to address the probable significance of the unavailable information, which could be material to future results. See “Forward-Looking Statements.”

In addition to the non-GAAP financial measures, this Presentation may contain financial forecasts and projections (collectively, “prospective financial information”) of NioCorp. Neither the independent registered public accounting firm of NioCorp audited, reviewed, compiled or performed any procedures with respect to the prospective financial information for the purpose of their inclusion in this Presentation, and accordingly, neither of them expressed an opinion or provided any other form of assurance with respect thereto for the purpose of this Presentation. This prospective financial information constitutes forward-looking statements and should not be relied upon as being guarantees or necessarily indicative of future results. The assumptions and estimates underlying such prospective financial information are inherently uncertain and are subject to a wide variety of significant business, economic, competitive and other risks and uncertainties that could cause actual results to differ materially from those contained in the prospective financial information. See “Forward-Looking Statements.” Accordingly, there can be no assurance that the prospective financial information is indicative of future performance of NioCorp or that actual results will not differ materially from the results presented in the prospective financial information included in this Presentation. Actual results may differ materially from the results contemplated by the prospective financial information included in this Presentation. The inclusion of such prospective financial information herein should not be regarded as a representation by any person that the results reflected in such projections will be achieved.

The purpose of the prospective financial information is to assist investors, shareholders and others in evaluating the performance of NioCorp’s business. The prospective financial information may not be appropriate for other purposes. Information about NioCorp’s guidance, including the various assumptions underlying it, is forward-looking and should be read in conjunction with “Forward-Looking Statements” in this Presentation, and the related disclosure and information about various economic, competitive, and regulatory assumptions, factors, and risks that may cause NioCorp’s actual future financial and operating results to differ from what NioCorp currently expects.

All amounts in this Presentation are expressed in U.S. dollars unless otherwise indicated.

Mineral Reserves and Resources

Unless otherwise indicated, information concerning NioCorp’s mining property included in this Presentation, including mineral resource and reserve estimates, has been prepared in accordance with the requirements of National Instrument 43-101– Standards of Disclosure for Mineral Projects (“NI 43-101”) and the Canadian Institute of Mining and Metallurgy (“CIM”) “Definition Standards – For Mineral Resources and Mineral Reserves, May 10, 2014” (the “CIM Definition Standards”). Beginning with NioCorp’s Annual Report on Form 10-K for the fiscal year ended June 30, 2022 (the “NioCorp Form 10-K”), NioCorp’s mining property disclosures included or incorporated by reference in its SEC filings, including mineral resource and reserve estimates, are required to be prepared in accordance with the requirements of subpart 1300 of Regulation S-K (“S-K 1300”). Previously, NioCorp prepared its estimates of mineral resources and mineral reserves following only NI 43-101 and the CIM Definition Standards. On June 28, 2022, NioCorp issued a CIM-compliant NI 43-101 technical report (the “2022 NI 43-101 Elk Creek Technical Report”) for the Elk Creek Project, which is available through the website maintained by the Canadian Securities Administrators at www.sedar.com. On September 6, 2022, the Company filed a technical report summary for the Elk Creek Project that conforms to S-K 1300 reporting standards (the “S-K 1300 Elk Creek Technical Report Summary”) as Exhibit 96.1 to “the NioCorp Form 10-K, which is available through the website maintained by the SEC at www.sec.gov. The 2022 NI 43-101 Elk Creek Technical Report and S-K 1300 Elk Creek Technical Report Summary are based on a feasibility study (the “June 2022 Feasibility Study”) prepared by qualified persons (within the meaning of both NI 43-101 and S-K 1300, as applicable) and are substantively identical to one another except for internal references to the regulations under which the report is made, and certain organizational differences. The requirements and standards under Canadian securities laws, however, differ from those under S-K 1300. The terms “mineral resource,” “inferred mineral resource,” “indicated mineral resource,” “mineral reserve,” “probable mineral reserve,” and “proven mineral reserve” included herein are used as defined in accordance with NI 43-101 under the CIM Definition Standards. While the terms are substantially similar to the same terms defined under S-K 1300, there are differences in the definitions. Accordingly, there is no assurance any mineral resource or mineral reserve estimates that the Company may report under NI 43-101 will be the same as the mineral resource or mineral reserve estimates that the Company may report under S-K 1300.

NioCorp discloses estimates of both is mineral resources and mineral reserves. You are cautioned that mineral resources are subject to further exploration and development and are subject to additional risks and no assurance can be given that they will eventually convert to future reserves. Under both regimes, inferred resources, in particular, have a great amount of uncertainty as to their existence and their economic and legal feasibility. Investors are cautioned not to assume that any part or all of the inferred resource exists or is economically or legally mineable. See Item 1A, Risk Factors in the NioCorp Form 10-K. Reference should be made to the full text of the 2022 NI 43-101 Elk Creek Technical Report and the S-K 1300 Elk Creek Technical Report Summary for further information regarding the assumptions, qualifications and procedures relating to the estimates of mineral reserves and mineral resources as defined under NI 43-101 and S-K 1300, respectively.

Executive Summary: Elk Creek Critical Minerals Project

1

Pure-Play Critical Minerals Project

Underground mine + surface processing facility. Planned products are all US-designated critical minerals: niobium, titanium, scandium, and magnetic rare earth oxides (NdPr, Dy, Tb).¹



Niobium



Scandium



Titanium



Rare Earths

2

Diverse Product Mix

Multiple products from one orebody diversifies revenue streams and mitigates price volatility risk in any one mineral.

3

Products with 100% Foreign Dependence

U.S. is 100% dependent on imports for 5 of NioCorp's planned products: niobium, scandium, and separated oxides of neodymium/praseodymium, dysprosium, and terbium¹, and is ~81% dependent on imports of titanium mineral concentrates.²

4

Products Key to Global Energy Transition

All of NioCorp's planned products are essential to technologies that are driving the world's transition to cleaner energy sources and reduced greenhouse gas emissions.

5

Many Addressable High-Growth Markets

These include automotive (EV + ICE), aviation, aerospace, defense, mega-infrastructure, defense, renewable & conventional energy, automation, Li-Nb-Ti EV batteries.

6

Key Permits in Hand for Construction

NioCorp has secured key federal, state, and local government permits necessary to initiate construction.

7

Robust Financial Returns

\$2.8 billion pre-tax NPV and 29.2% pre-tax IRR; averaged annual EBITDA of \$397 million. Estimates don't include expected revenue gain from adding separated rare earths and aluminum-scandium master alloy products.¹

8

Major Project Finance Initiatives Underway

Currently in advanced discussions with Stellantis, world's 3rd largest automaker, for an offtake agreement and strategic investment, and with the U.S. Export-Import Bank on up to \$800 million in possible debt financing.³

¹ NioCorp is currently conducting technical and economic analyses on the potential addition of magnetic rare earth oxides to its planned product suite. Final determination of possible rare earth production can be made only after work related to a mineral reserve update, additional engineering, updated project capital and operating cost estimates, and other required information is produced for publication in a new Feasibility Study.

² 2023 Mineral Commodity Summary, US Geological Survey.

³ See risk statements and other disclaimers regarding project financing in the "Disclaimers and Technical Disclosures" slides at the beginning of this presentation.



Value Proposition: Transition to Net Zero Emissions is Driving Demand Growth for the Critical Minerals at the Focus of NioCorp¹

Niobium



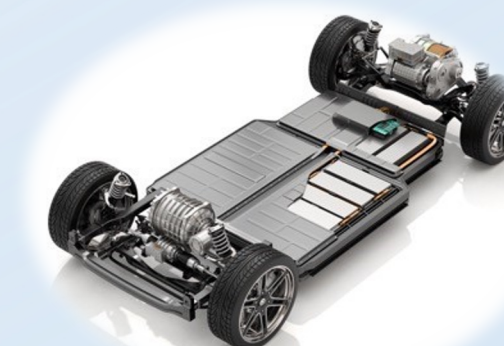
Shovel-ready¹ pure-play critical minerals project with the highest-grade Niobium resource in North America and the 2nd largest indicated rare earth resource in the U.S.²



Scandium



Positioned to become a major U.S. miner / producer of Niobium, forecast to see strong demand growth via rapid-charging solid-state Titanium Niobium Oxide Li-Ion batteries.³



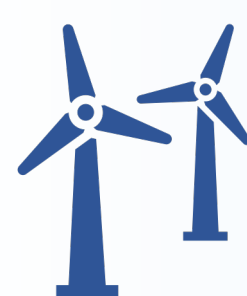
Titanium



Large prospective U.S. producer of Scandium with a Scandium Mineral Reserve supported by a feasibility study. Scandium has large latent demand in the commercial aviation and automotive sectors.⁴



Magnetic Rare Earths²



NioCorp is conducting technical and economic analyses⁵ on the potential addition to its planned product suite of several magnetic rare earth oxides, which are forecast to experience large supply shortages because of sharply rising demand.⁶



Elk Creek Project is strongly focused on environmental, social, and governance values and is already aligned with the Equator Principles ESG Framework.



¹ Subject to receipt of necessary project financing and commencement of operations at the Elk Creek Project.

² Indicated mineral resource, based on data from the "Critical Mineral Resources of the United States—Economic and Environmental Geology and Prospects for Future Supply," U.S. Geological Survey, 2017, and from company-issued reports.

³ Source: CBMM.

⁴ "Scandium: A Market Assessment," ONG Commodities, 2019.

⁵ As no economic analysis has been completed on the rare earth mineral resource comprising the Elk Creek Project, further studies are required before determining whether extraction of rare earth elements can be reasonably justified and economically viable after taking account all relevant factors.

⁶ "Rare Earth Magnet Market Outlook to 2035," Adamas Intelligence, 2022.

Stellantis and NioCorp Sign Non-Binding Rare Earth¹ Offtake Term Sheet

Term Sheet Also Envisions a Possible Strategic Investment by Stellantis in NioCorp's Elk Creek Critical Minerals Project



- Working toward a definitive agreement for a 10-year offtake contract for high-purity, separated rare earth oxides: NdPr, Dysprosium, and Terbium.^{1,2}
- Final volumes to be determined.
- NioCorp and Stellantis collaborating on the larger permanent RE magnet supply chain.

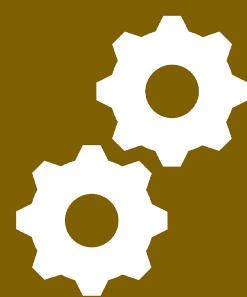
¹ NioCorp is currently conducting technical and economic analyses on the potential addition of magnetic rare earth oxides to its planned product suite. Final determination of possible rare earth production can be made only after work related to a mineral reserve update, additional engineering, updated project capital and operating cost estimates, and other required information is produced for publication in a new Feasibility Study.

² Subject to receipt of necessary project financing and commencement of operations at the Elk Creek Project.

US Export-Import Bank Considering up to \$800M in Debt Financing for NioCorp

- ✓ NioCorp's application has cleared EXIM's first formal review (TRC-1)
- ✓ Independent consultants chosen by EXIM now conducting due diligence reviews
- ✓ EXIM / NioCorp continue working to advance process

Recent Milestones Achieved



Metallurgical testing for updated project feasibility study at demonstration-scale plant now complete.



> 92% rare earth recovery rates achieved at demonstration scale^{1,2}



Higher niobium recovery rates achieved at demonstration scale^{1,2}



2x titanium recovery rates achieved at demonstration scale^{1,2}



NioCorp now producing higher-purity Niobium and TiCl₄ samples for prospective customers



Phased commercialization effort underway for Aluminum-Scandium master alloy



Working with auto OEMs toward design of specific Al-Sc alloy parts



Dual listed on Nasdaq and TSX; added to FTSE/Russell 3000 Index

¹ NioCorp is conducted technical and economic analyses on the potential addition of magnetic rare earth oxides to its planned product suite.

² Final determination of niobium and titanium production levels and possible rare earth production can be made only after work on a mineral reserve update, additional engineering, updated project capital and operating cost estimates, and other required information is produced for publication in a new Feasibility Study.

NioCorp's Expected Mining Operations Designed from the Start with Sustainability in Mind

Fully aligned with Equator Principles, an auditable ESG framework



Recycling of reagents

Zero process water discharge facility



Avoidance of permanent impacts to Federally Jurisdictional Waters

Additional protection of groundwater resources through artificial ground freezing and grouting



Utilizing tailings as underground mine backfill



Local employment and support local businesses

MARKETS

Wider Adoption of Critical Materials is Supply Constrained

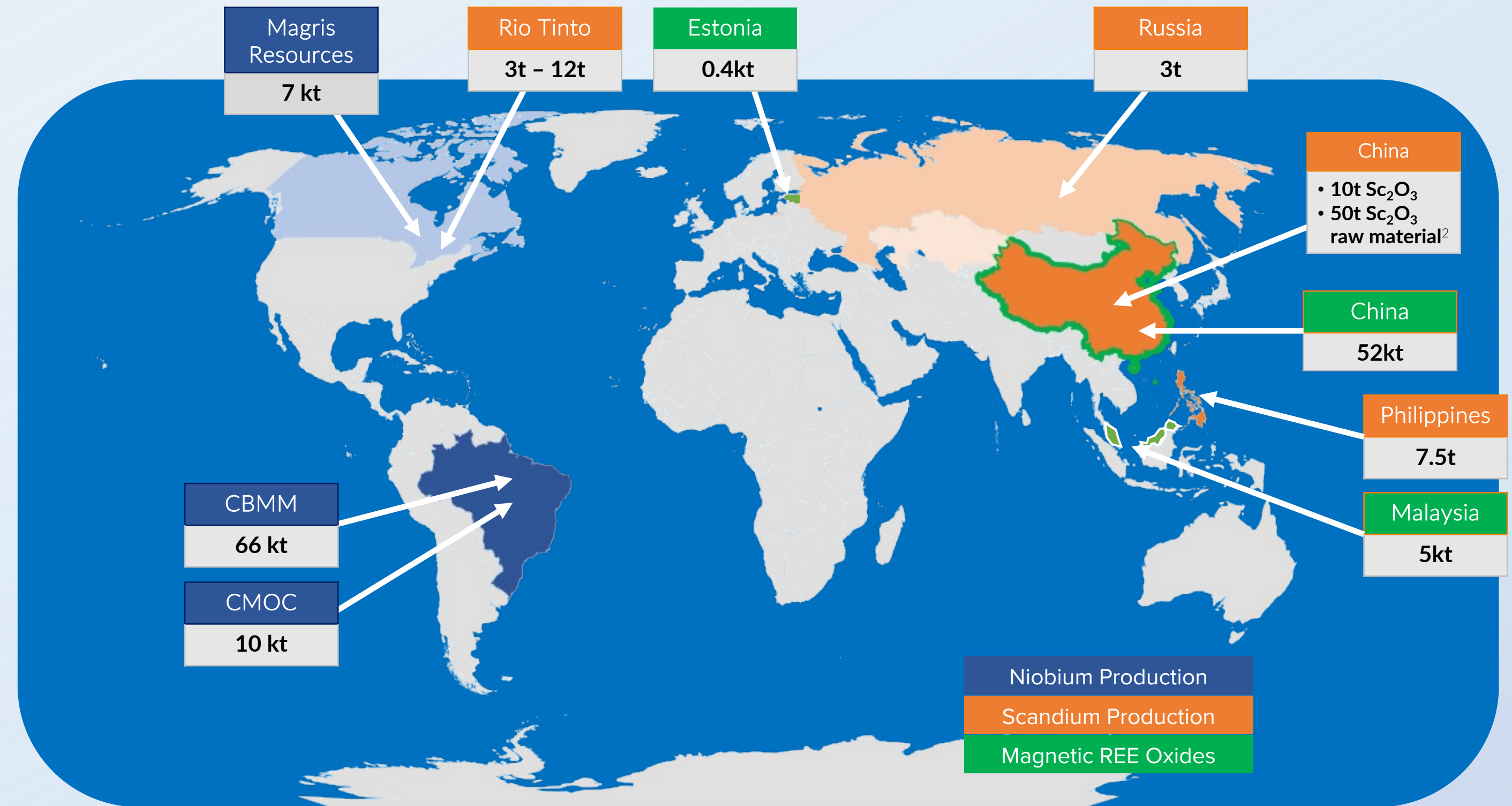
The Problem

Lack of secure and reliable long-term supply is preventing fulfilment of latent market demand and realization of environmental benefits resulting from existing applications and from significant new technologies.

This is due to:

- Concentrated sources of supply for Niobium, Scandium, and separated magnetic rare earth oxides.
- Extremely scarce and limited Scandium supply.
- Some supply chains have politically sensitive and unreliable supply locations, particularly rare earths.
- Environmental impacts from many of these sources are greater than in the U.S.

Current Annual Niobium, Scandium, and Magnetic REE Oxide Production¹



The U.S. is dependent on foreign suppliers for most of NioCorp's critical minerals.

¹ Corporate reports and company information, ONG Commodities, USGS, Adamas Intelligence
² Reported by USGS as production capacity, not necessarily production.

Reliable, Low-Risk U.S. Supply is Key to Securing Energy Transition

The Solution

The Elk Creek Project is anticipated to be able to supply some of the world's largest industries and sustainable technologies with Made-in-USA critical minerals produced in a low-impact, sustainable manner.



Illustration of NioCorp's planned Elk Creek Facility

- Significant production volumes planned for Niobium, Scandium, Titanium from a low-risk jurisdiction.¹ NioCorp is also conducting technical and economic analyses on the potential addition of magnetic rare earth oxides to its planned product suite:
 - Diversifies global supply
 - Creates reliable and meaningful Scandium supply volumes (≈100t per annum)
 - Potentially provides non-Chinese rare earths for expansion of renewables and electrified vehicles
- Underground mineral source and environmentally responsible processing creates sustainable production solution.¹



¹ Subject to receipt of necessary project financing and commencement of operations at the Elk Creek Project.

NIOBIUM: A Critical Supply Risk To The U.S.

Niobium

- 88% of the world’s Niobium is produced in only one country¹ – Brazil – which increases supply chain risk and **has forced the U.S. Government to stockpile Niobium.**
- Market growth is expected to rise sharply with the expected use of niobium in next-generation Lithium-Ion batteries, which enables faster battery charging.²
- Light-weighting** of transportation systems and strengthening of bridges and mega-infrastructure projects are expected to drive additional long-term growth.
- Highly liquid global market** with many users and a growing number of applications.

Global Niobium Demand Drivers



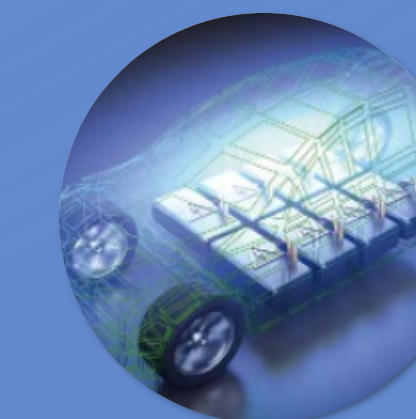
Stronger and lighter steels for buildings & infrastructure mega-projects

0.025% Niobium in the steel of the Millau Viaduct bridge reduced the weight of steel and concrete by 60% in the overall project.³



Growing demand for lighter weight and more fuel-efficient cars, trucks, and buses

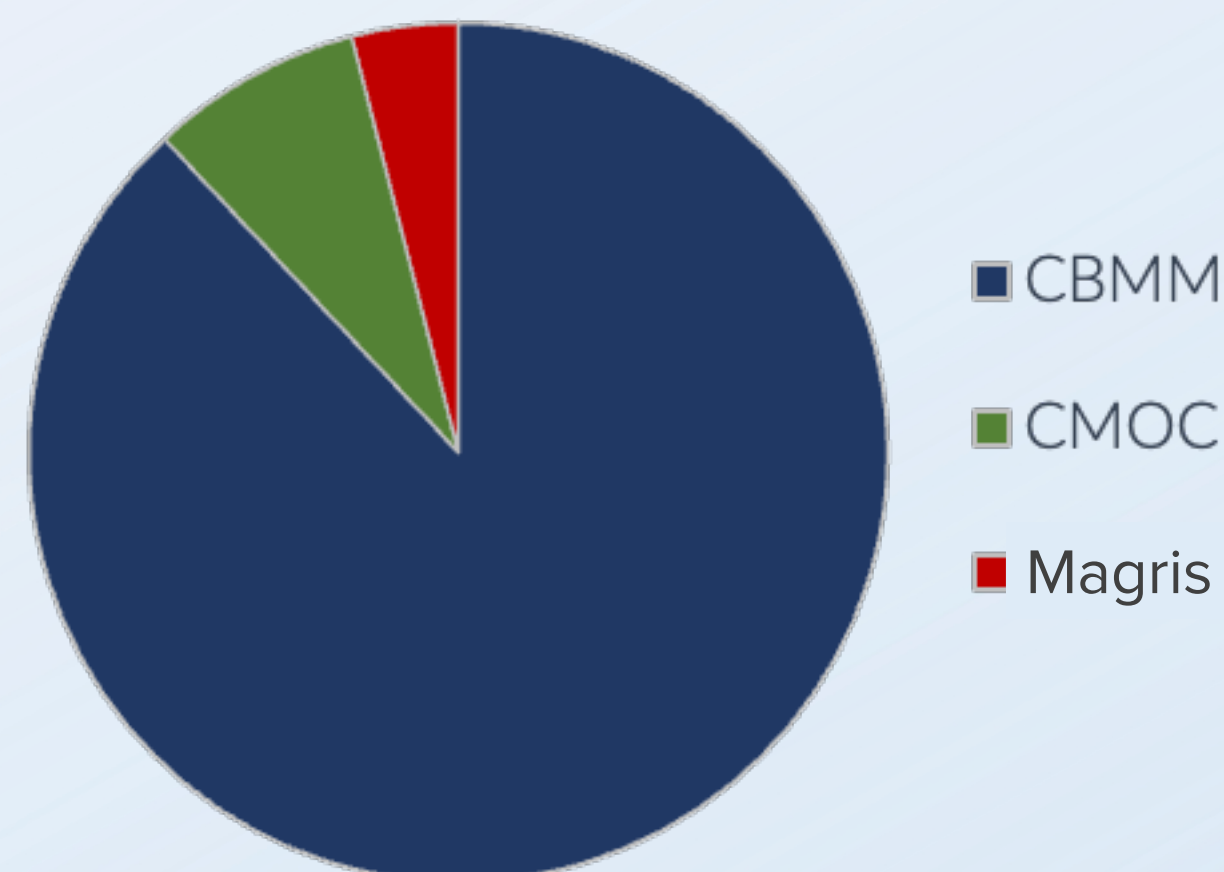
300 grams Nb reduces the weight of mid-size car by 200 kg and increases fuel efficiency by 5%.³



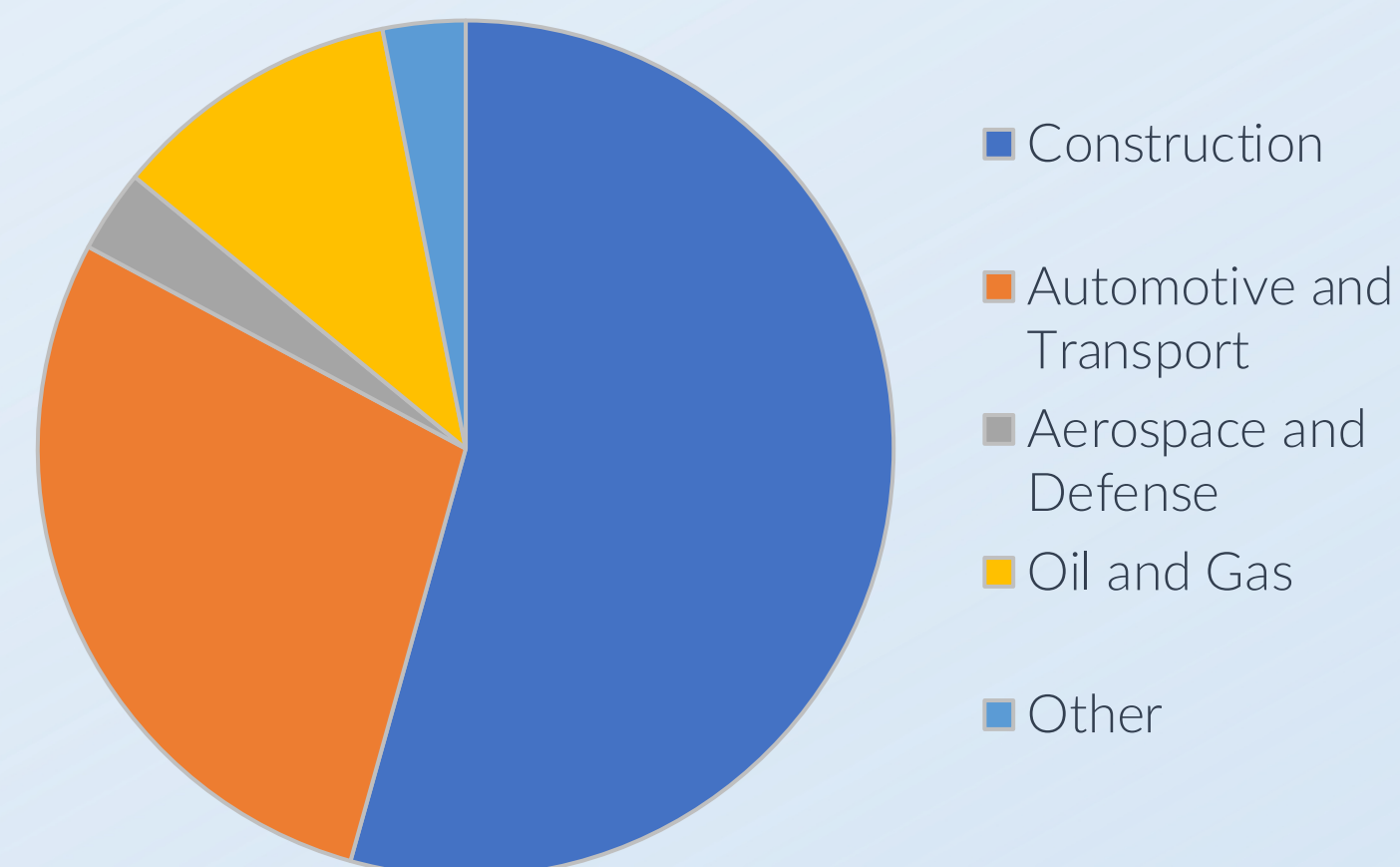
Next Generation Niobium-Lithium-Ion Batteries

Significant potential demand. CBMM expects nearly 50 ktpa Nb Oxide sales by 2030.³

Global Niobium Supply
≈75 kt per annum¹



Global Niobium Sales by Sector²
≈\$3.3bn per annum¹



¹ "Niobium Outlook to 2030," Roskill, 2020.

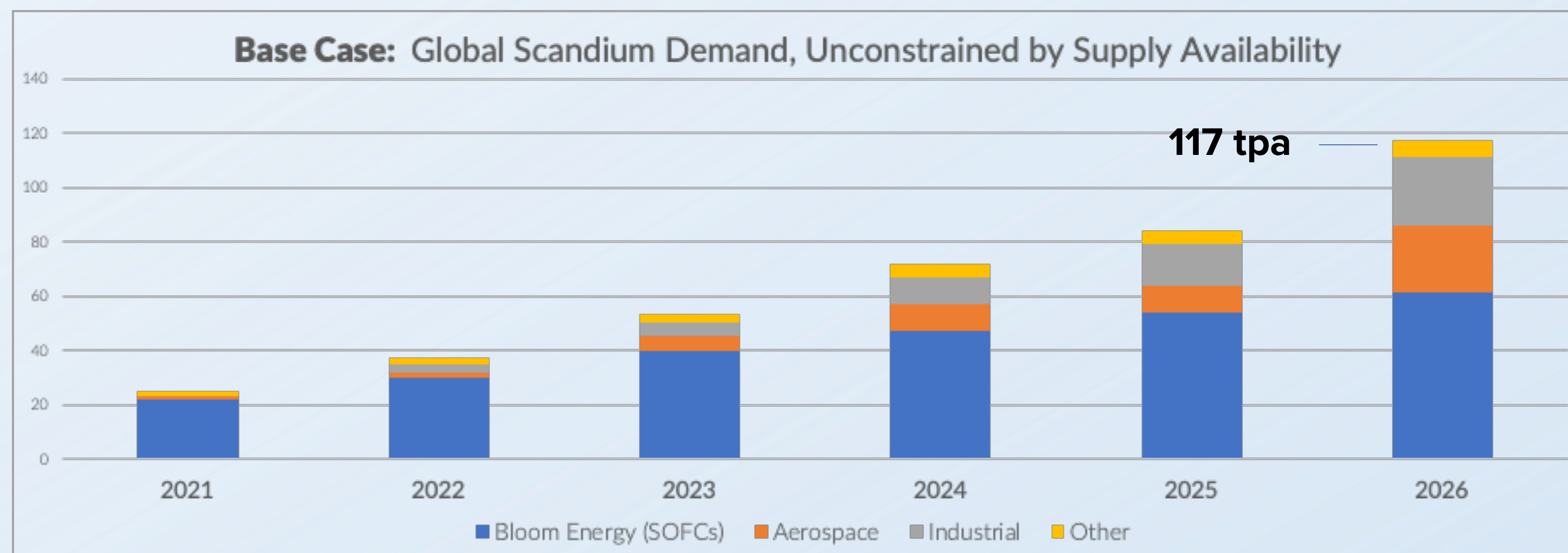
² Source: CBMM.

³ Source: Niobium.Tech (CBMM).

SCANDIUM: Limited Current Supply But Very Large Latent Demand

Scandium

- Forecast demand (117 tpy by 2026) greatly exceeds current supply (25 tonnes/year)¹ and exceeds NioCorp’s potential annual scandium production.
 - Solid oxide fuel cell use of Scandium (≈22 tpy) forecast to grow at 23% CAGR¹
 - Aerospace + industrial use in 2022 (≈5 tpy) forecast to reach 50tpy over next 5 years¹
- Momentum building in the market, with new pilot production from Rio Tinto² and planned production from others.
- Potential in EV/Automotive:** Net pounds of aluminum per light duty vehicle is forecast to increase from 459 lbs. in 2020 to 570 lbs. in 2030,³ representing a large potential for scandium use in aluminum-scandium alloys, even at low overall penetration; just 10% of this volume using 0.1% scandium would mean 700 tons/year scandium demand.¹



Source: ONG Commodities Ltd., 2021

Global Scandium Demand Drivers



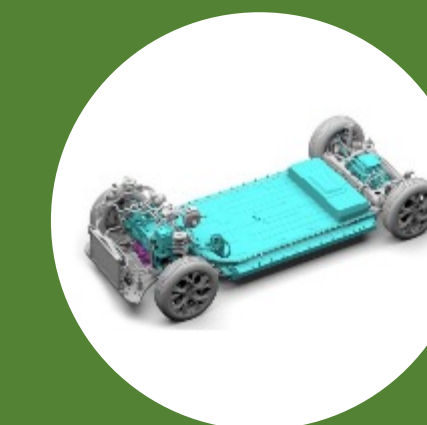
Increasing focus on lighter-weight and more fuel efficient commercial jets

Approximately \$2M of scandium in a single airliner offers an estimated \$27M million of net present value in fuel savings.⁴



Development of lighter-weight and more fuel efficient railway cars and large transport

One of the world’s largest aluminum companies has already produced Al-Sc alloy rail hopper cars.⁵



Weight reduction in EV components is a high priority for automakers.

IEA forecast 25% CAGR growth in demand for EVs to 2030.⁶

¹ ONG Commodities Ltd.

² Rio Tinto.

³ Advanced Casting Research Center.

⁴ Company estimate.

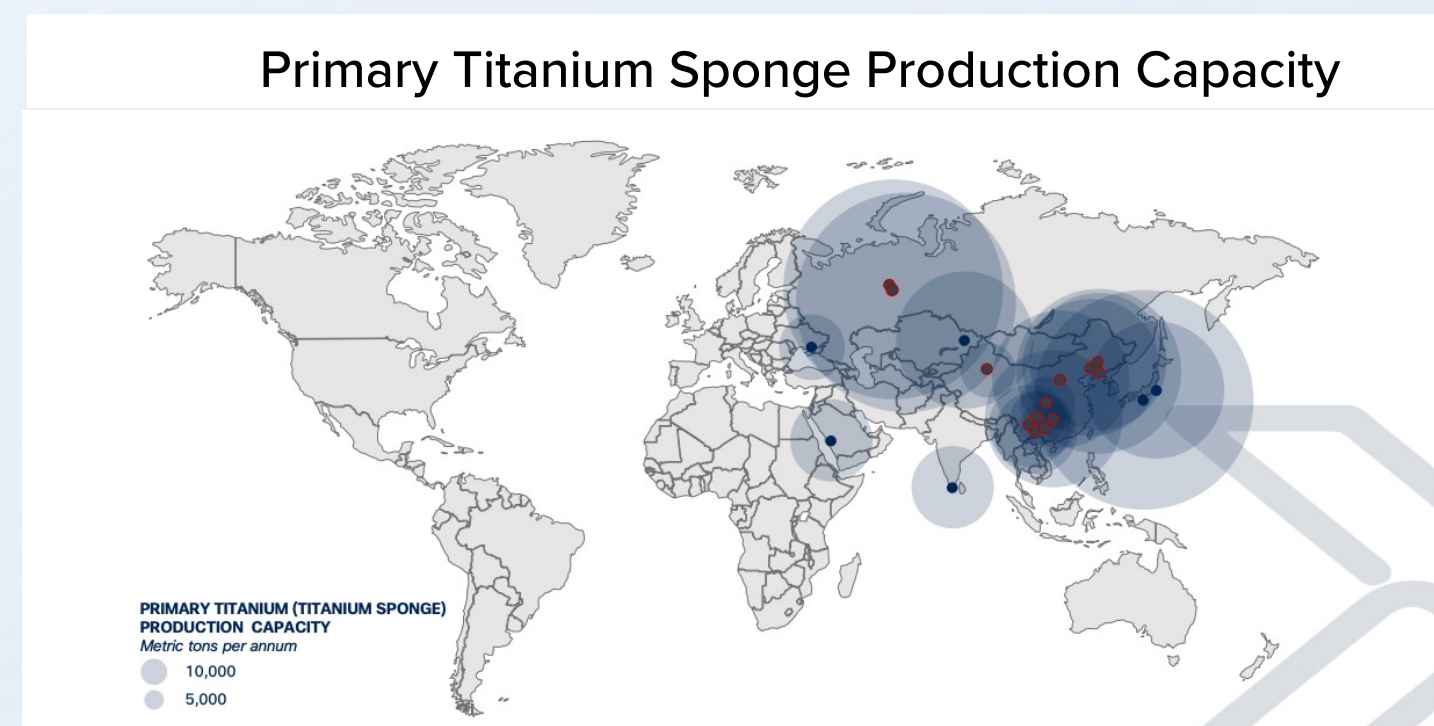
⁵ Aluminum International Today, Jan. 25, 2022.

⁶ EA Global EV Outlook 2022.

TITANIUM: Tight Global Supply With Rising Demand + War in Europe

Titanium

- Demand for titanium metal is forecast to grow by a 6.8% CAGR between 2022 and 2030, driven primarily by increasing demand in defense and industrial segments.¹
- Global markets for aerospace-grade titanium metal have tightened in recent years because of increased demand and supply chain pressures resulting from the Ukraine conflict with Russia, the world's largest supplier. The last titanium sponge plant in the US closed in 2020.
- NioCorp plans to make titanium dioxide and/or TiO₂, a high-purity product used in the two largest titanium market segments: titanium dioxide pigments and titanium metal.



Credit: IperionX, 2023, based on USGS Survey. Locations approximate.

Global Titanium Demand Drivers



Demand in commercial aviation

Production backlogs at Boeing underpin a significant portion of US demand for titanium metal and therefore titanium sponge.¹



Increased use in advanced military fighter jets

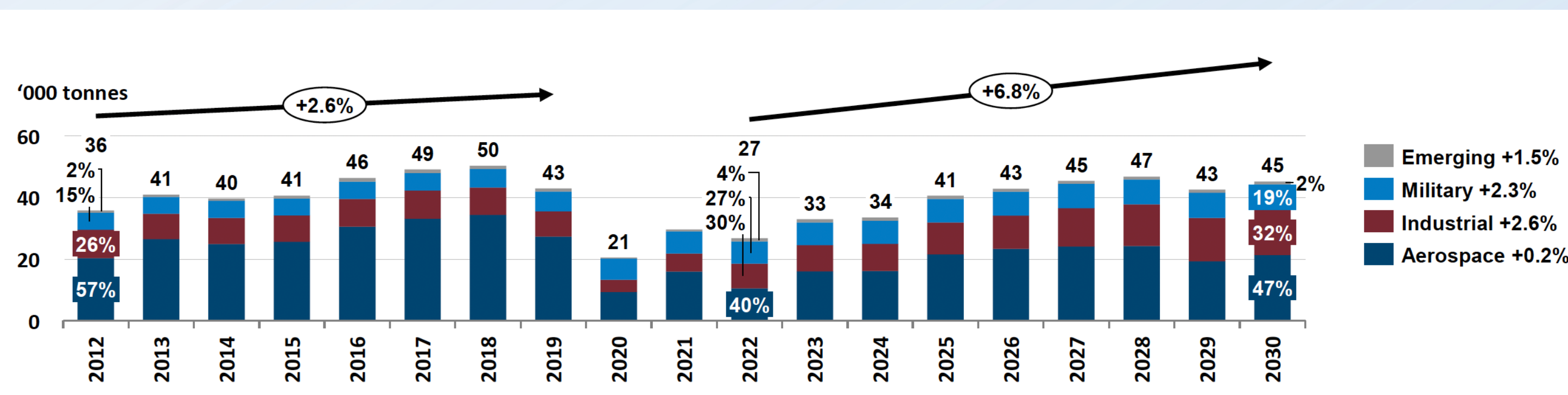
For example, the F-22 utilizes 9,000+ lbs. of titanium, comprising approximately 42% of the aircraft's weight.²



Extensive consumption of TiO₂ across multiple markets

Titanium dioxide demand is expected to grow at 6.3% CAGR from 2023 to 2030.³

Historic and Forecast Demand for Titanium Metal



Source: TiCl₄ Market Analysis, conducted for NioCorp by TZMI, 2023.

¹ TiO₂ Market Analysis for NioCorp, performance by TZMI, 2023.

² Cotton, James D., et al. "Titanium Alloys on the F-22 fighter airframe." Advanced Materials & Processes, vol. 160, no. 5, May 2002.

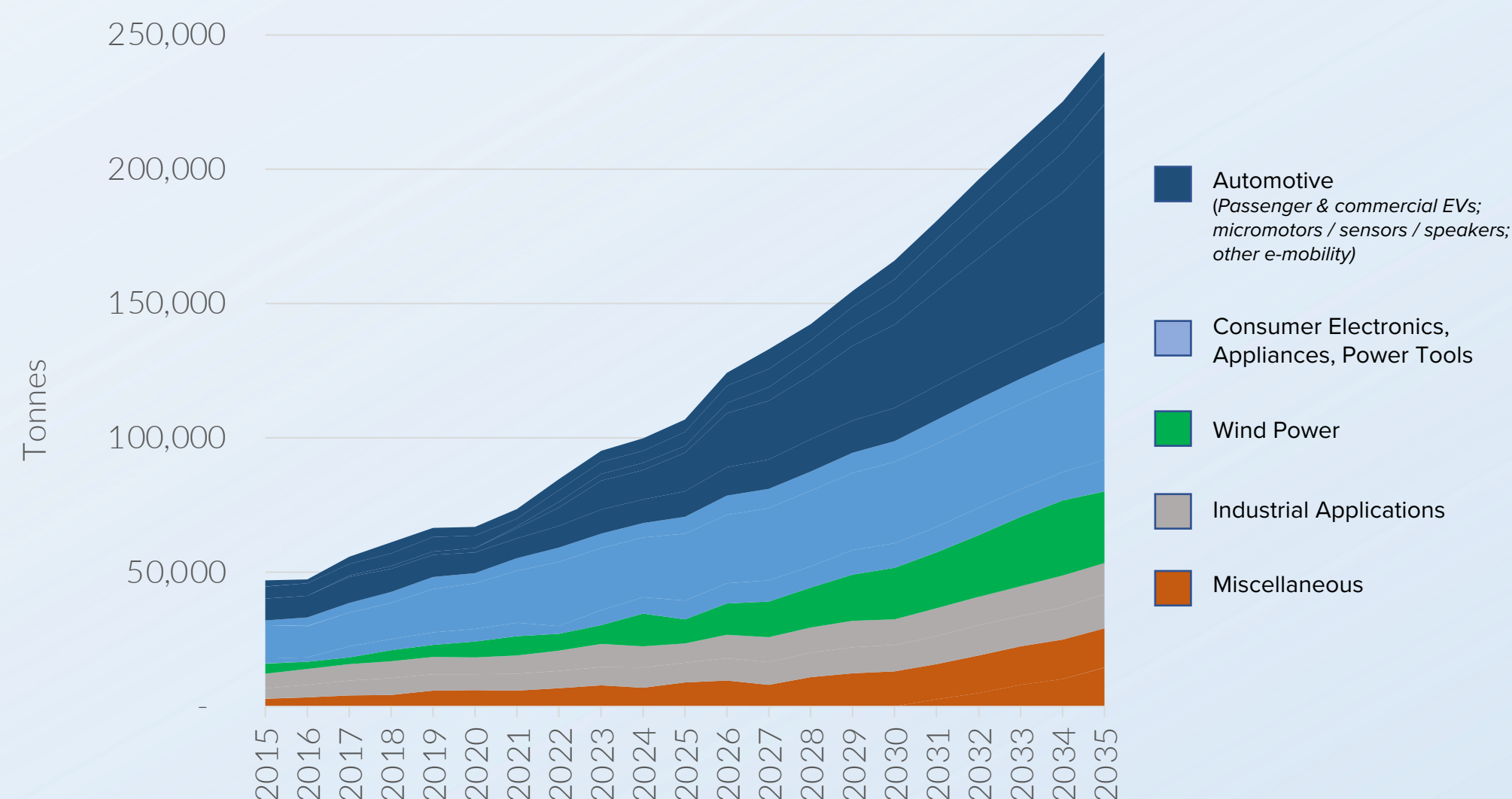
³ Research and Markets, 2023.

MAGNETIC RARE EARTHS: Global Demand to Grow 3X by 2035¹

Magnetic Rare Earth Elements

- NioCorp has signed a non-binding term sheet with Stellantis NV for possible sale of these magnetic rare earth oxides: NdPr, Dy, and Tb.²
- Global magnetic REE oxide consumption value is forecast to increase 3x by 2035, from US\$15.1 billion in 2022 to US\$46.2 billion by 2035.¹
- Global REE markets are forecast to under-produce NdPr, Dy, and Tb oxides from 2022 onward unless significant new supplies are brought online.¹

Historical global consumption and forecast demand for magnet rare earth oxides by end-use category



Growth Rates for Magnetic REE Consumption by Sector from 2022 → 2035¹

Sector	CAGR
Retail and Commercial EV Traction Motors	14.0%
Direct drive and hybrid drive wind power generators	13.0%
Automotive micromotors, sensors, and car speakers	4.9%
Industrial motors, pumps, generators, robotics	4.2%
Electronics, appliances, power tools	4.1%
All other uses	12.6%

Automotive market requires significant REEs with EV traction expected to drive a 14.1% CAGR¹

Global Magnetic REE Demand Drivers



GHG reductions driven by greater use of electric vehicles and other tech

Demand for magnetic rare earths is expected to grow by more than 150% from 2020 to 2030.¹



Demand for direct drive and hybrid drive wind turbines requires significant REE volumes

Demand expected to grow at 13.0% CAGR by 2035.¹



Acute global supply shortages of magnetic REEs are forecast

Shortages of rare earth alloys for magnets forecast to be equal to one-third of the total market by 2035.¹

¹"Rare Earth Magnet Market Outlook to 2035," Adamas Intelligence, 2022. All REE calculations carried on an elemental basis.

² NioCorp is currently conducting technical and economic analyses on the potential addition of magnetic rare earth oxides to its planned product suite. Final determination of possible rare earth production can be made only after work related to a mineral reserve update, additional engineering, updated project capital and operating cost estimates, and other required information is produced for publication in a new Feasibility Study.

U.S. Government: NioCorp’s Planned Products¹ Are Critical

- All of NioCorp’s planned products have been singled out as “critical minerals” by the U.S. Government.
- The products NioCorp intends to focus on – including potentially rare earths² – include the top 3 most critical minerals to U.S. national security, according to defense experts.³
- Billions of dollars now available for investments in critical minerals processing from U.S. gov’t agencies.
- New federal law provides a 10% production tax credit applicable to all of NioCorp’s planned critical minerals.⁴
- U.S. electric vehicle tax credit now contingent on increasing content of U.S.-produced critical minerals.⁴



NioCorp intends to focus on the TOP 3 MOST CRITICAL MINERALS^{1,2}



	Mineral	Criticality Score	U.S. Net Import Reliance
1	Rare Earths ²	10	100%
2	Scandium	10	100%
3	Niobium	9	100%
24	Titanium (sponge metal)	6	75%

¹ Subject to receipt of necessary project financing and commencement of operations at the Elk Creek Project.
² NioCorp is currently conducting technical and economic analyses on the potential addition of magnetic rare earth oxides to its planned product suite.
³ Business Executives for National Security, 2020.
⁴ Inflation Reduction Act of 2022, signed into law by President Biden on August 16, 2022.

The image shows a car chassis on an assembly line in a factory. Two large, orange robotic arms are positioned on either side of the chassis, actively welding it. Bright sparks are flying from the welding points, creating a dramatic, high-contrast scene. The background is a blurred industrial setting with overhead lights and structural elements.

Aluminum-Scandium Master Alloy

The Power of Aluminum-Scandium Master Alloy

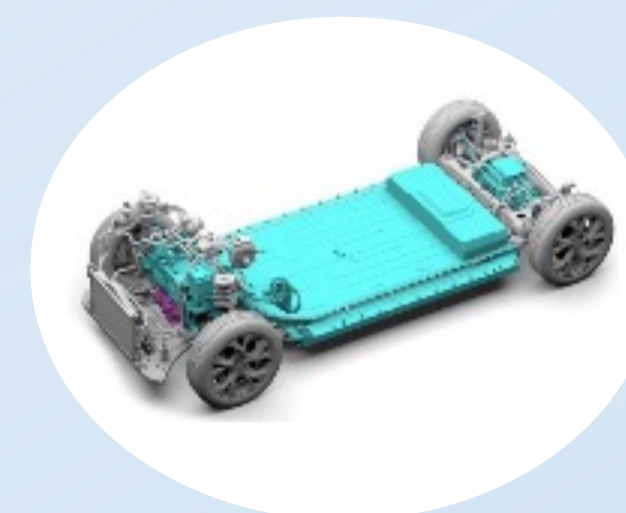
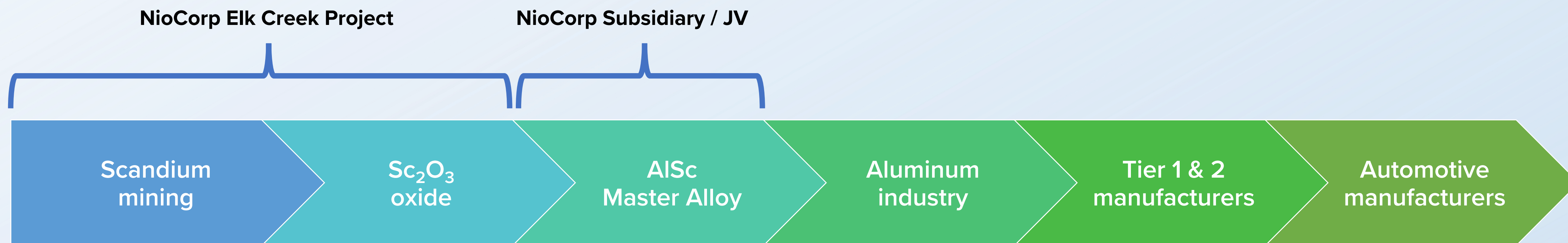
- No need to quench cast parts
- High specific strengthening effect
- Inhibition of recrystallization
- Grain size refinement
- Better fatigue life
- Improved resistance to hot cracking and improved corrosion resistance
- Enables better parts recycling and circular economics for manufacturers



Superior Grain Refinement:
Aluminum Alloy without scandium (left) and Al-Sc (right)¹

Downstream Integration: Aluminum-Scandium Master Alloy

NioCorp has launched a phased commercialization effort aimed at also producing value-added aluminum-scandium master alloy, which opens up new potential markets for NioCorp's planned scandium production at the Elk Creek Project.



↑
Higher margin capture

First Al-Sc Master Alloy Ingots Produced

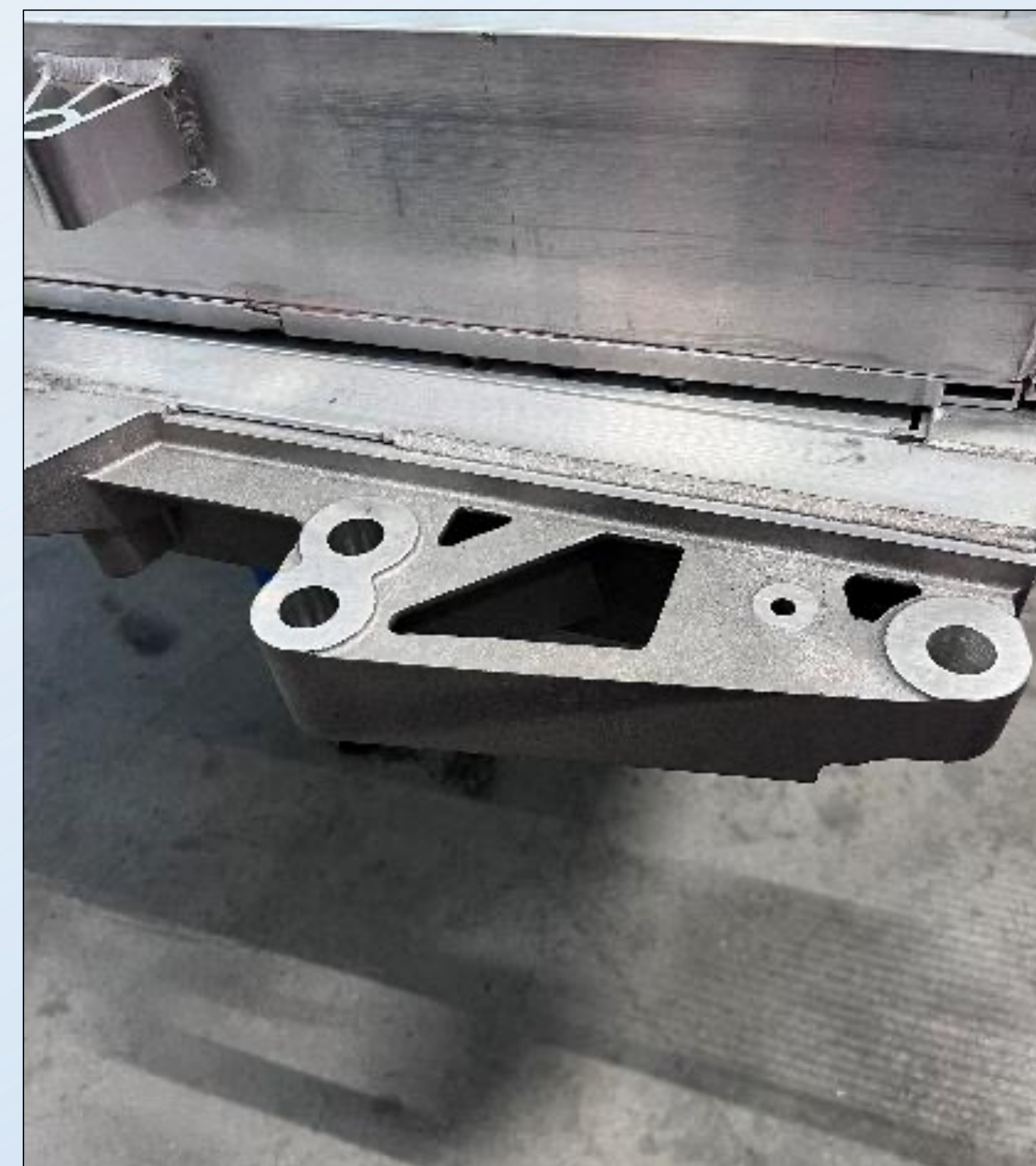
- Successful pilot-scale production of two 1-kg Al-Sc alloy ingots recently at testing facility in Pennsylvania.
- Ingots contain 2% scandium by weight, which is considered industry standard.
- Using metallothermic reduction of scandium chloride, which involves:
 - Less environmental impacts
 - Very high prospective yield
 - Separates Sc reduction and alloying with Al into 2 steps

NioCorp's Al-Sc Master Alloy pilot-scale testing at Creative Engineers in New Freedom, Penn.



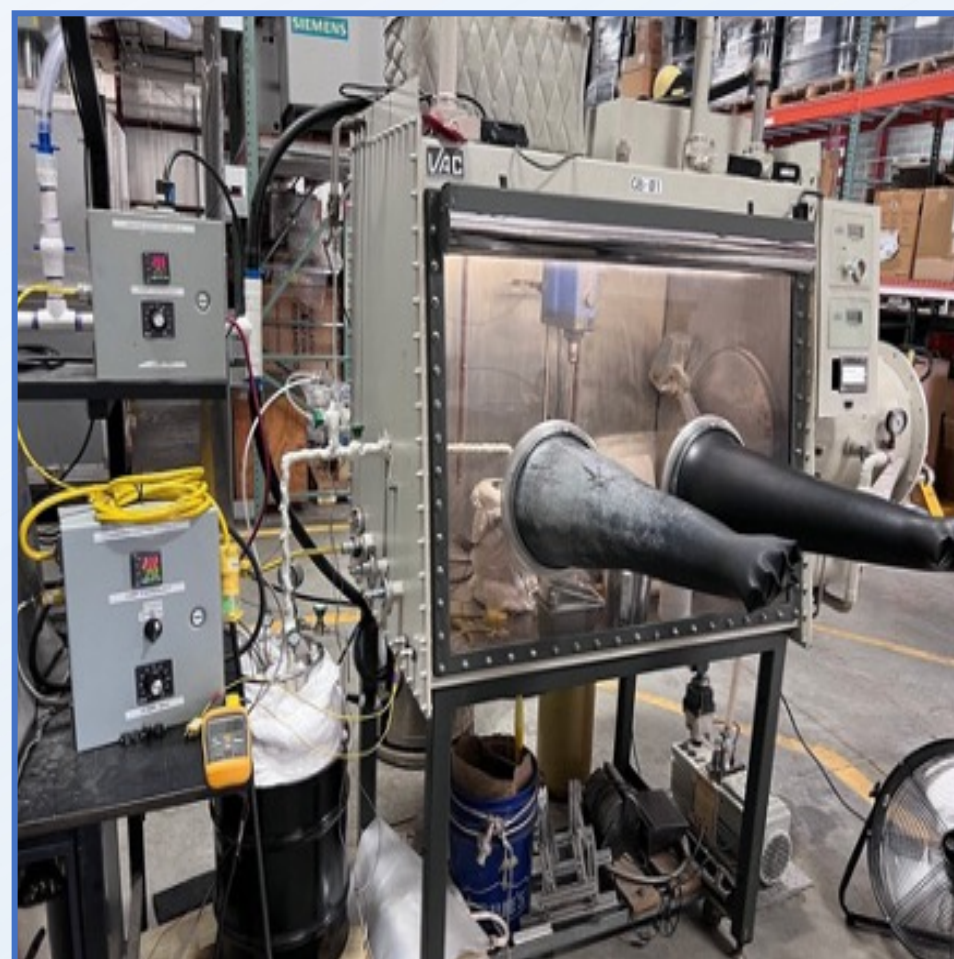
Scandium Market Development Initiative

- Recently established NioCorp Technologies Ltd in the UK
- Effort focused on developing Al-Sc mass market applications for light-weighting and recycling of automotive components
- Partnering with a leading UK university to undertake advanced Al-Sc research
- Working closely with leading automotive OEMs, Tier 1 suppliers and specialist manufactures
- Undertaking rapid prototyping to build early track record and accelerated market adoption



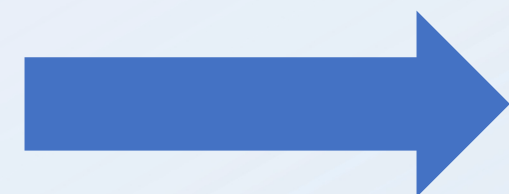
EXAMPLE: Cast Node on Battery Box requires strength, corrosion resistance, weldability

Phased Commercialization Deployment Progression



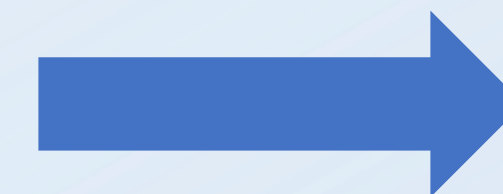
Pilot-Scale Manufacturing

Goal: production of three 1-kg ingots of 5% wt.% scandium. Work underway now in New Freedom, Penn. Scandium chloride obtained from various commercial sources.



Commercial Demonstration

Scale to production of 10-kg and then to 100-kg ingots. Work to be performed at 3rd party ingot casting facility in the US, which helps to provide a blueprint for commercial-scale master alloy plant with 100 tonnes (contained Sc) per year production capacity delivered at end of demonstration. Scandium chloride from various commercial sources.



Full-Scale Commercialization

Facility co-located with Elk Creek facility in Nebraska to take advantage of existing infrastructure. Scandium from Elk Creek Project in Nebraska.

Industrial Sectors Seeking Greater Access to Scandium Alloys

Automotive

NioCorp is now working with automotive manufacturers to explore different aluminum-scandium alloy chemistries to be used for prototype parts for EV and ICE vehicles.

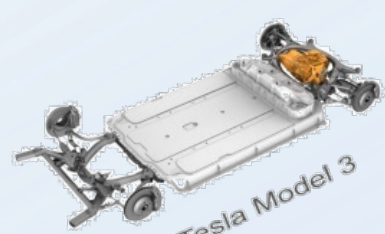
Application Examples



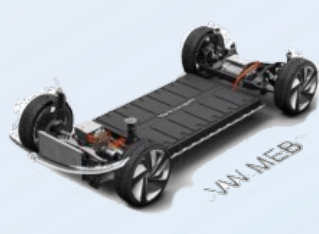
Cast Node on Battery Box



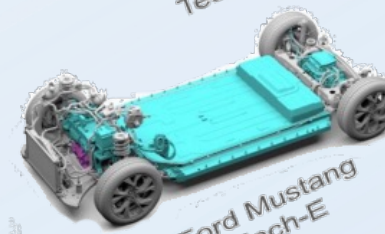
Extruded Bumpers



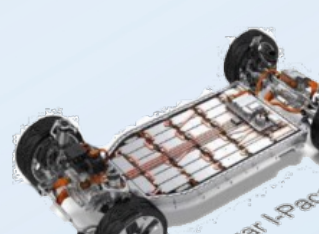
Tesla Model 3



VW MEB



Ford Mustang Mach-E



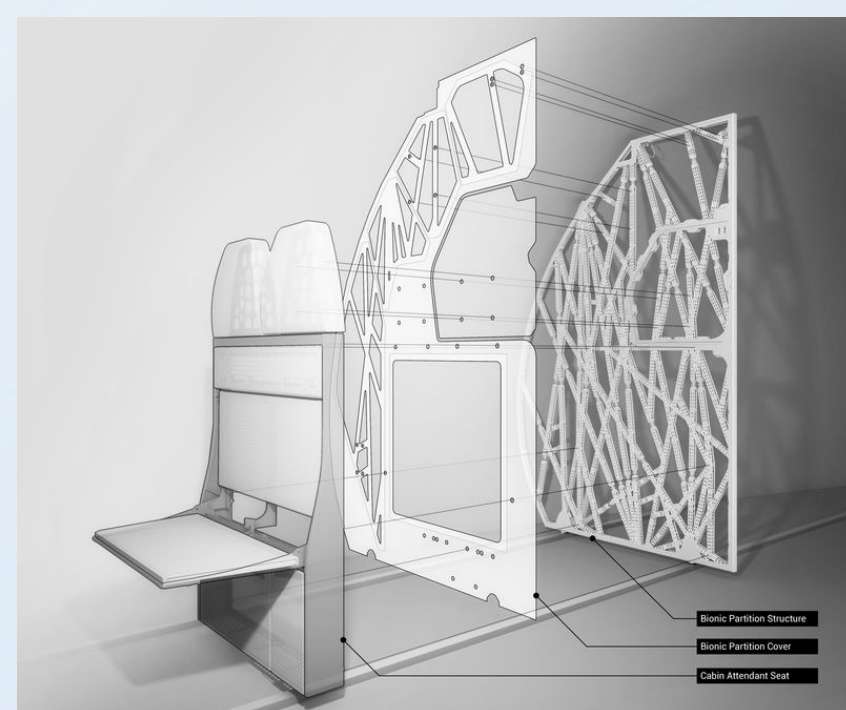
Jaguar I-Pace

Battery Enclosures

Commercial Aviation

Commercial airlines intensely interested in light-weighting jets to reduce emissions. Al-Sc alloy parts have already been developed that can be swapped out with current alloy parts to reduce weight.

Application Examples



APWorks, and Airbus subsidiary, developed a lightweight aircraft bulkhead partition using Scalmalloy®, an aluminum-magnesium-scandium alloy.

Defense/Space

DoD interested in aluminum-scandium alloys in land-, air-, sea-, and space systems. NioCorp, DoD, and Congress working to potentially accelerate our current Al-Sc master alloy commercialization effort.

Application Examples



5G / Communications

5G networks require improved RF filtering. Designs incorporating scandium-aluminum-nitride are much more efficient. This requires high-purity scandium metal for production.

Application Examples



Scandium Sputtering Target

THE ASSET

Critical Minerals in the Elk Creek Resource¹

Critical Minerals

Magnetic Rare Earths



Ferroniobium

Resource:
970,300 tonnes

No production
in the U.S.

Highest grade
Niobium project
under development
in N.A.¹



**Scandium
Oxide**

Resource:
11,337 tonnes

No production
in the U.S.

Largest
planned producer
in N.A.



**Titanium Dioxide
(or TiCl₄)²**

Resource:
4,221,000 tonnes

High import reliance
for U.S.

Is expected to be
produced by
NioCorp as a
co-product.



**Neodymium-
Praseodymium
Oxide³**

Resource:
125,800 tonnes

No production
in the U.S.

Elk Creek Project
contains the 2nd
largest indicated
NdPr Mineral
Resource in the
U.S.⁴



**Dysprosium
Oxide³**

Resource:
9,100 tonnes

No production
in the U.S.

Elk Creek Project
contains the 2nd
largest indicated
Dysprosium Mineral
Resource in the U.S.⁴



**Terbium
Oxide³**

Resource:
2,300 tonnes

No production
in the U.S.

Elk Creek Project
contains the largest
indicated Terbium
Mineral Resource in
the U.S.⁴

¹ Based on the 2022 Elk Creek Technical Report. See “Mineral Reserves and Resources” in the Disclaimers & Technical Disclosures at the beginning of this presentation.

² NioCorp is currently assessing the feasibility of producing Titanium Tetrachloride in addition to, or in lieu of, Titanium Dioxide. Final determination of possible rare earth production can be made only after work related to a mineral reserve update, additional engineering, updated project capital and operating cost estimates, and other required information is produced for publication in a new Feasibility Study.

³ NioCorp is currently conducting technical and economic analyses on the potential addition of magnetic rare earth oxides to its planned product suite.

⁴ Indicated mineral resource, based on data from the “Critical Mineral Resources of the United States—Economic and Environmental Geology and Prospects for Future Supply,” U.S. Geological Survey, 2017, and from company-issued reports.

Offtake Agreements for Products NioCorp Intends to Produce¹

Niobium



75%

of NioCorp's planned Ferroniobium production already contracted for the first 10 years of operation

ThyssenKrupp Metallurgical Products²

50% of NioCorp's planned ferroniobium production for first 10 yrs.¹

Pricing set at 3.75% discount to Argus Metals index pricing for ferroniobium

CMC Cometals³

25% of NioCorp's planned ferroniobium production for first 10 yrs.¹

Pricing set at 3.75% discount to Argus Metals index pricing for ferroniobium

Scandium



~12%

of NioCorp's planned production already contracted for the first 10 years of operation

Traxys North America LLC⁴

Up to 12 tonnes per year of NioCorp's planned scandium production over 10 yrs.¹

Largest commercial sales agreement for Scandium known to have been executed.

Rare Earths⁵



Stellantis, 3rd largest global automaker, and NioCorp executed a non-binding term sheet in July 2023 on the prospective sale of NioCorp's magnetic rare earth oxides.

¹ Subject to receipt of necessary project financing and commencement of operations at the Elk Creek Project.

² Contract with Thyssen Metallurgical Products GmbH, dated November 10, 2014.

³ Contract with CMC Cometals, dated June 13, 2016, which was subsequently assigned to Traxys Cometals USA, LLC.

⁴ Contract with Traxys North America LLC, dated October 3, 2018.

⁵ NioCorp is currently conducting technical and economic analyses on the potential addition of magnetic rare earth oxides to its planned product suite. Final determination of possible rare earth production can be made only after work related to a mineral reserve update, additional engineering, updated project capital and operating cost estimates, and other required information is produced for publication in a new Feasibility Study.

World Class Development Partners



Surface Processing Facilities EPC



Mine Development EPC



Geology



Mineral Resource



Process Development



Project Permitting



Mineral Reserve

NioCorp's global team includes some of the world's best in their fields.



THE ELK CREEK
PROJECT

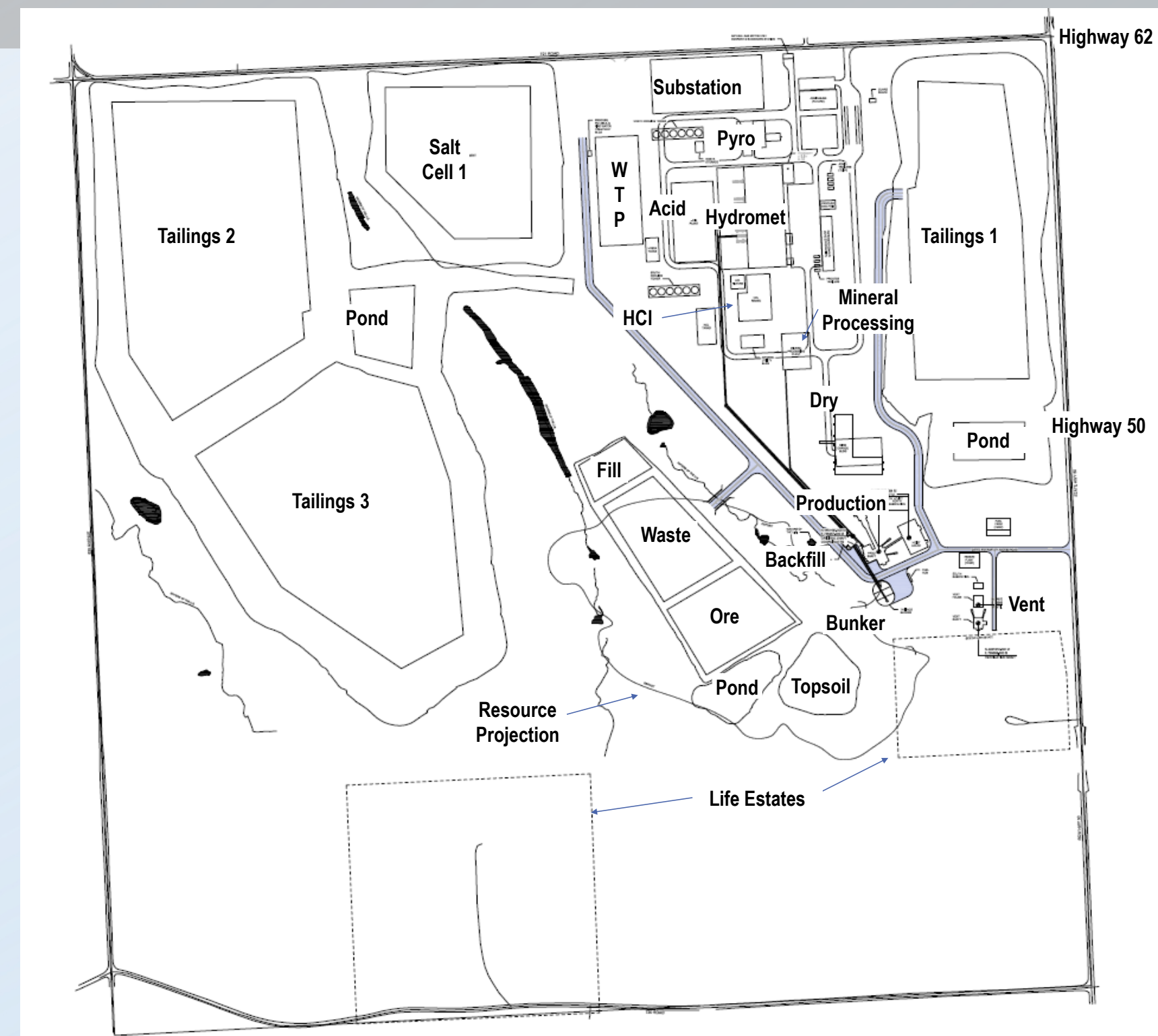
Elk Creek Project Location & Layout¹

The Elk Creek Project is centered within one 640-acre section of all private land.



Elk Creek Project Location

- 105 km (65 miles) southeast of Lincoln, Nebraska (the state capital)
- 129 km (80 miles) south of Omaha, Nebraska.
- 3 miles west of Elk Creek, Nebraska and 6 miles south of Tecumseh, Nebraska.



Excellent location near highways, utilities, and supporting infrastructure.

¹ Based on the 2022 Elk Creek Technical Report. See “Mineral Reserves and Resources” in the Disclaimers & Technical Disclosures at the beginning of this presentation.

Mineral Reserves and Mineral Resources¹

Initial Operational Footprint (640 acres)

Carbonatite Boundary (~7,800 acres)

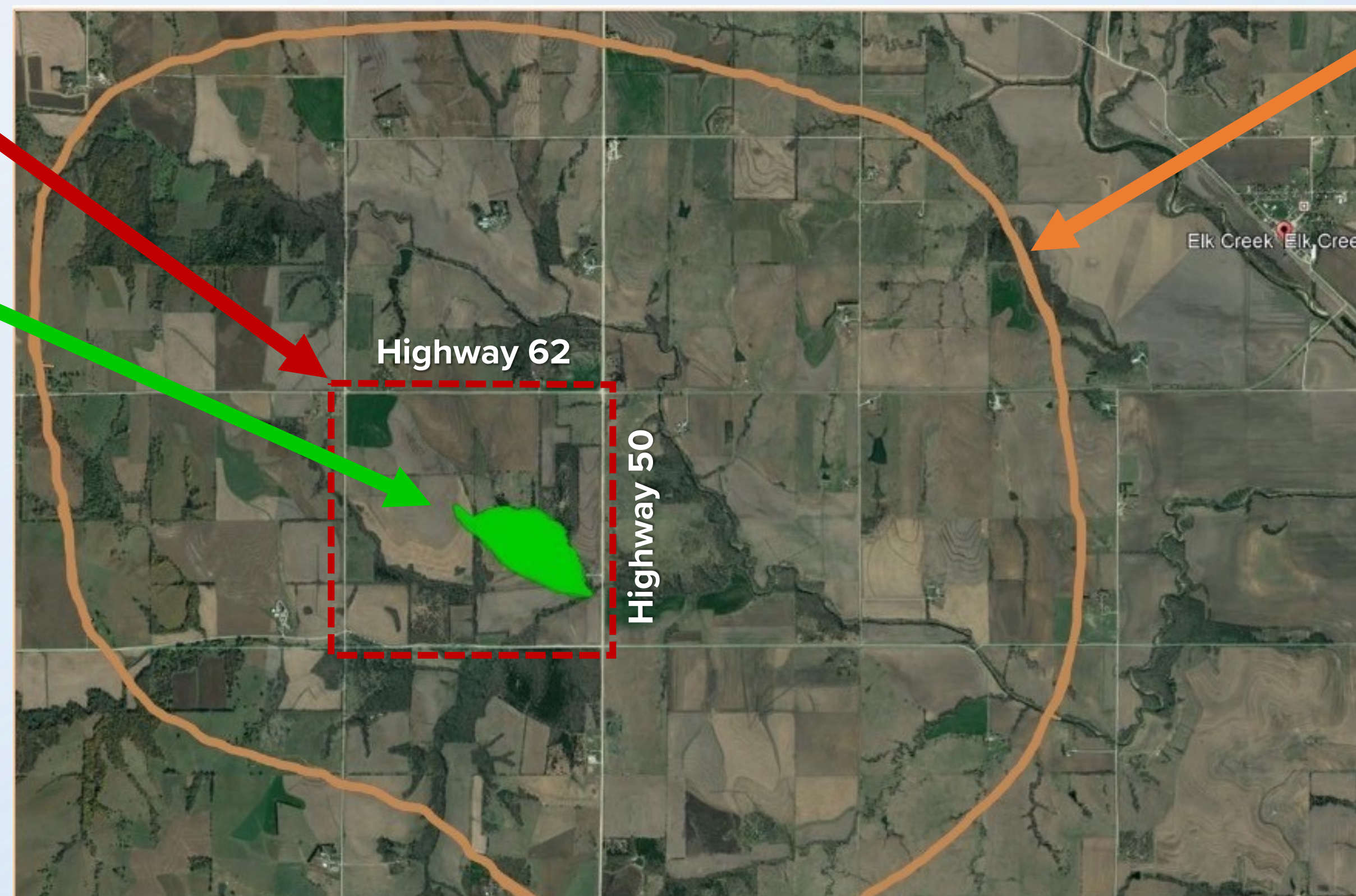
Mineral Resource and Reserves¹

Mineral Resource Classification	Cut-off NSR (US\$/t)	Tonnage (000's Mt)	Grade (Nb ₂ O ₅ %)	Grade (TiO ₂ %)	Grade (Sc g/t)	Grade (TREO%)
Indicated	180	188.8	0.51	2.24	60.06	0.34
Inferred	180	108.3	0.39	1.92	52.28	0.38

NOTE: Mineral Resources shown above are reported inclusive of the Mineral Reserve.

Mineral Reserve Classification	Tonnage (000's t)	Grade (Nb ₂ O ₅ %)	Grade (TiO ₂ %)	Grade (Sc g/t)
Probable	36,656	0.811	2.92	70.2

NOTE: For a complete description of the Elk Creek Project's Mineral Resources and Mineral Reserves, please refer to the Mineral Reserve and Mineral Resource slides in the Appendix of this presentation.



NioCorp's mineral reserve lies within a much larger carbonatite footprint.

¹ Based on the 2022 Elk Creek Technical Report. See "Mineral Reserves and Resources" in the Disclaimers & Technical Disclosures at the beginning of this presentation.

Key Permits Obtained

The Elk Creek Project has secured key federal, state, and local permits required to proceed to the start of construction once project financing is obtained.

- Construction Air Permit secured from the State of Nebraska.
- A Special Use Permit secured from Johnson County, Nebraska, the key local land use permit for the Elk Creek Project.
- The Elk Creek Project is designed to avoid impacts to federal jurisdictional waters and other features and does not require a federal permit under NEPA.



Strong State & Local Support

- 1 The Elk Creek Project is located exclusively on private land with extensive nearby infrastructure (roads, rail, water, and utilities).
- 2 The Elk Creek Project enjoys strong community support as well as state and local government support.
- 3 Nebraska Governor Pete Ricketts nominated the Elk Creek Project as a “National High-Priority Infrastructure” Project to the White House.¹
- 4 Elk Creek Project is slated to receive approximately \$200 million in tax benefits from the State of Nebraska over its first 10 years of operation.²
- 5 Nebraska is reducing its state corporate income tax over time from 7.5% in 2022 to 3.99% in 2027³

Estimated Economic Benefits and New Tax Revenue Generated by the Elk Creek Project ⁴

Direct full-time, permanent jobs created ⁵	~450
Indirect jobs created or supported ⁶	~2,117
Peak construction-related jobs ⁵	1,232
Cumulative operating expenses over project life ⁵	\$6.59 billion
Employee payroll over project life (included in cumulative operating expenses above) ⁵	\$1.1 billion
New tax revenue to state and local government over project life ⁵	\$608 million
Royalties paid to Nebraska landowners over project life ⁵	\$300 million

The Elk Creek Project enjoys strong and broad-based state and local support.

¹ <https://www.mining.com/nebraska-governor-says-niocorps-elk-creek-high-priority-project/>

² Contract signed July 23, 2021 with the State of Nebraska under the Nebraska Advantage Act.

³ <https://governor.nebraska.gov/press/governor-pillen-signs-historic-tax-cuts-package#:~:text=Reduces%20the%20top%20individual%20and,care%2C%20for%20families%20and%20providers>

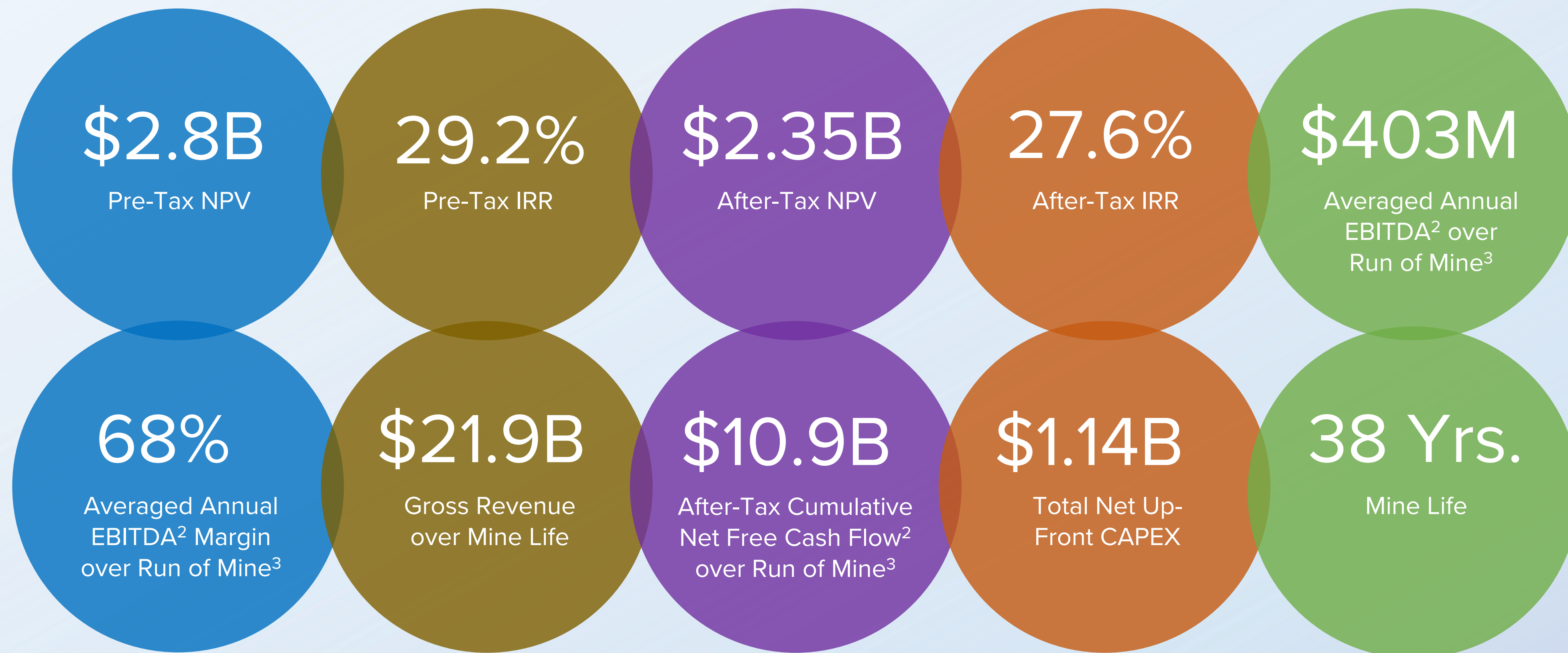
⁴ 2022 NI 43-101 Elk Creek Technical Report. See “Mineral Reserves and Resources” in the Disclaimers & Technical Disclosures at the beginning of this presentation.

⁵ 2022 Elk Creek Technical Report. Estimates account for tax benefits NioCorp expected to receive from the Nebraska Advantage program.

⁶ Additional jobs created or supported was estimated using the Economic Policy Institute’s Employment Multiplier for Metal Ore Mining, <https://www.epi.org/publication/updated-employment-multipliers-for-the-u-s-economy/>

Elk Creek Feasibility Study¹ Highlights

(not including REE production)



¹ Based on the 2022 NI 43-101 Elk Creek Technical Report. See “Mineral Reserves and Resources” in the Disclaimers & Technical Disclosures at the beginning of this presentation.

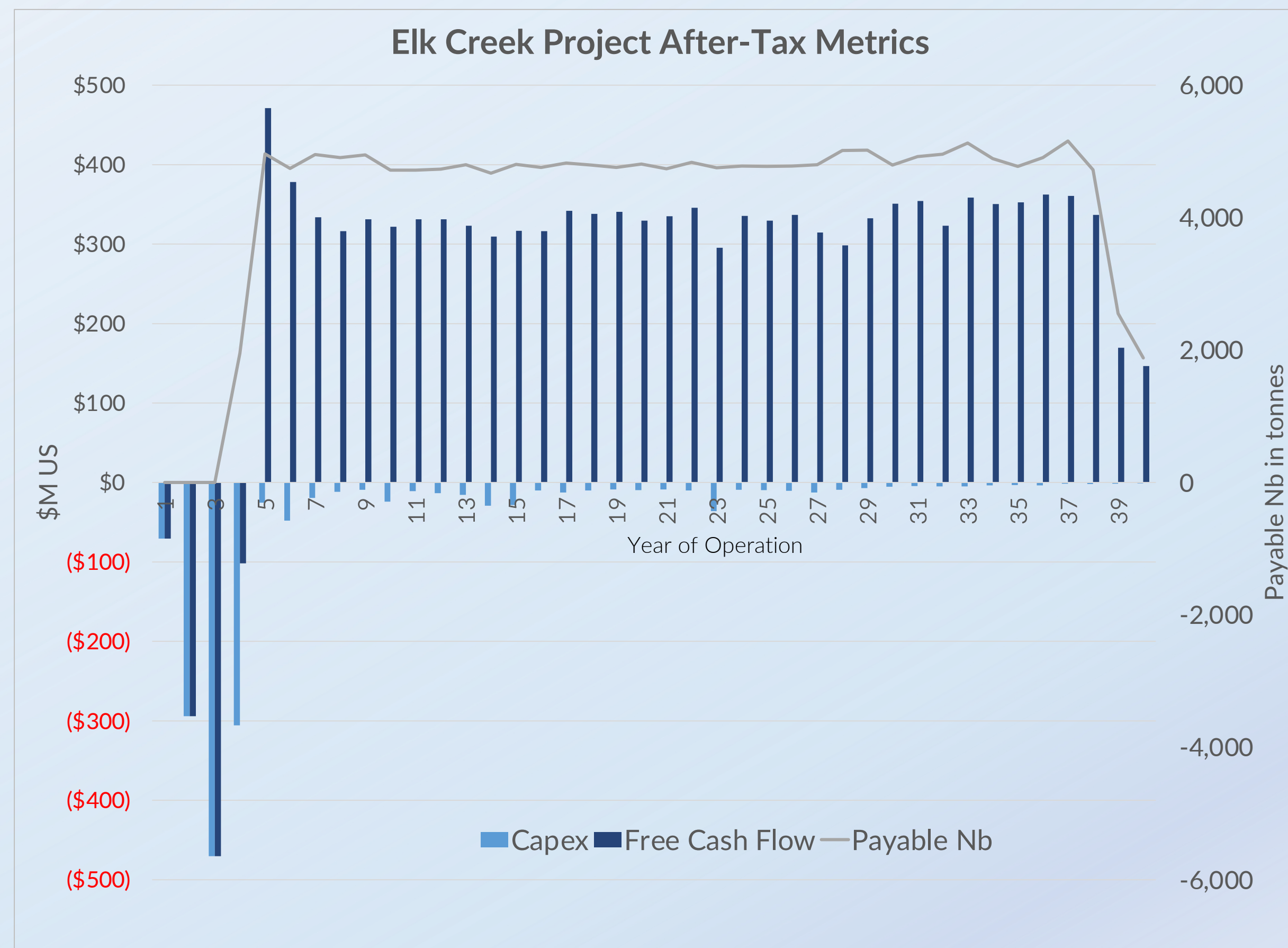
² See “Financial Information; Non-GAAP Measures” in the Disclaimers & Technical Disclosures at the beginning of this presentation.

³ “Run of Mine” is defined as the period of time during which the mine is fully operational and excludes the periods of time when the mine is conducting its initial production ramp or is ramping down to closure.

Elk Creek Project Expected to Deliver Significant Cash Flow Over 38-Year Life

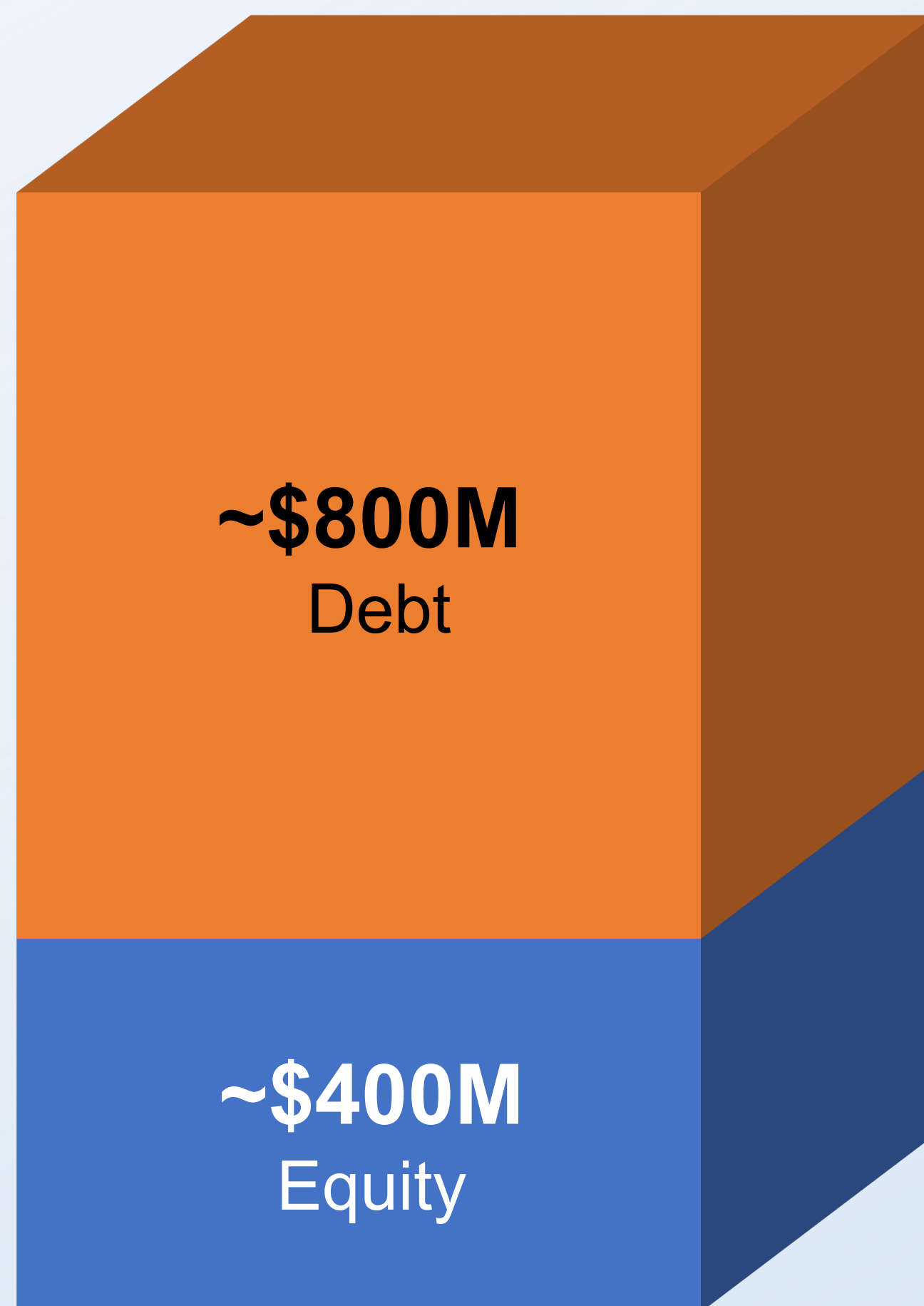
Elk Creek Project Metrics Summary¹

2022 Elk Creek Feasibility Study Economic Results	
<i>(not including REE production)</i>	
	<i>(US\$ Millions)</i>
Pre-Tax Net Present Value (NPV) (8% discount)	\$2,819
Pre-Tax Internal Rate of Return (IRR)	29.2%
After-Tax NPV	\$2,350
After-Tax IRR	27.6%
After-Tax Payback Period from Production Onset (years)	2.69
Total Upfront CAPEX	\$1,141
Mine Life (years)	38
Life of Mine ("LoM") Gross Revenue (\$M)	\$21,900
<i>Niobium</i>	\$7,968
<i>Scandium</i>	\$13,504
<i>Titanium</i>	\$427
Averaged Annual EBITDA over LoM ²	\$397.5
Averaged EBITDA Margin over LoM (EBITDA as % of total revenue) ²	69%
Averaged Annual Operating Cash Flow over LoM ²	\$337
Average Annual Operating Cost, LoM (OPEX) (US\$/t)	(\$195.9)
Averaged Annual EBITDA over Run of Mine ("RoM") ²	\$403
Averaged EBITDA Margin over RoM (EBITDA as % of total revenue) ²	68%
Averaged Annual Operating Cash Flow over RoM ²	\$340
Effective Tax Rate	16.4%



¹ Based on the 2022 Elk Creek Technical Report. See "Mineral Reserves and Resources" in the Disclaimers & Technical Disclosures at the beginning of this presentation.
² See "Financial Information; Non-GAAP Measures" in the Disclaimers & Technical Disclosures at the beginning of this presentation.

Preliminary Elk Creek Financing Plan



~\$1.2B upfront CAPEX



Debt (U.S. Export-Import Bank):

- EXIM expressed interest in up to \$800M
- Now working with EXIM toward term sheet while DD is underway
- Additional commercial bank interest potentially backed by German Gov't Untied Loan Guarantee.



Equity: ~\$400M.

Management Team



Mark A. Smith, P.E.

Executive Chairman, President and Chief Executive Officer

Mr. Smith joined NioCorp as CEO and Chairman in 2013. He has 40+ years of experience in the mining and mineral processing industries. Formerly, he was President, CEO & Director of MolyCorp; CEO and Director of Largo Resources; CEO and President of Chevron Mining; and Director of Companhia Brasileira de Metalurgia e Mineracao Ltd. ("CBMM"), the largest niobium producer in the world. Mr. Smith also serves as CEO and Chairman of IBC Advanced Alloys and US Vanadium LLC. He holds a B.Sc. degree in engineering from Colorado State University and a J.D. (cum laude) from Western State University, College of Law.



Scott Honan, MSc, SME-RM

Chief Operating Officer, NioCorp
President, Elk Creek Resources Corp.

Mr. Honan joined NioCorp in 2014. He has 30+ years of experience in the niobium, base metals, gold and rare earth industries. He served as General Manager and Environmental Manager and Vice President Health, Environment, Safety and Sustainability at MolyCorp. Scott is a graduate of Queen's University in Mining Engineering in both Mineral Processing (B.Sc. Honors) and Environmental Management (M.Sc.) disciplines. He is a registered member (No. 04231597) of the Society for Mining, Metallurgy & Exploration (SME).



Neal Shah, BSME, MBA

Chief Financial Officer & Corporate Secretary

Mr. Shah has been with NioCorp since 2014. With 25 years of experience in various industries as diverse as high-tech to rare earths, Neal's past experience includes finance, business development, and engineering positions with MolyCorp, Intel, IBM, Boeing, and Covidien. During his time at MolyCorp, he was instrumental in realizing the company's Mines-to-Magnets vertical integration strategy, and served as a Director on Intermetallics, Inc., which was the MolyCorp/Mitsubishi/Daido Steel joint venture formed to build magnets outside of China. He is a graduate of the University of Colorado's Mechanical Engineering program (BSME) and Purdue University's Krannert School of Management (MBA).



Jim Sims

Chief Communications Officer

Mr. Sims joined NioCorp in 2015 and has 30+ years of experience representing companies in mining, chemical, manufacturing, utility, and renewable energy sectors, including Dow Chemical, Calpine, FMC, MidAmerican Energy, Danaher, and others. He was VP of Corporate Communications for MolyCorp and is the former head of the U.S. Geothermal Energy Association, the Western Business Roundtable, and the Rare Earth Technology Alliance. A former White House staffer, Jim served for 11 years in the U.S. Senate, including as a Chief of Staff, and held a top-secret security clearance. He is an honors graduate of Georgetown University.

Board of Directors *(slide 1 of 2)*



Mark A. Smith, P.E.

*Executive Chairman,
President and CEO*

Mr. Smith has over 40 years of experience in operating, developing, and financing mining and strategic materials projects in the Americas and abroad. In September 2013, he was appointed CEO and a Director of NioCorp. From April 2015 to September 2019, Mr. Smith served as the President and Director, and later as CEO, for Largo Resources Ltd. Mr. Smith has also served on the board of directors of IBC Advanced Alloys Corp., a leading beryllium and copper advanced alloys company, since May 2016, and as CEO of IBC since July 2020. From October 2008 through December 2012, Mr. Smith served as President, CEO and Director of Molycorp, Inc., a rare earths producer, where he was instrumentally involved in taking it from a private company to a publicly traded company with a producing mine. Prior to Molycorp, Mr. Smith was the President and CEO of Chevron Mining Inc. He also served for over seven years as the shareholder representative of Companhia Brasileira Metalúrgica e Mineração, a private company that currently produces approximately 85% of the world supply of niobium. Mr. Smith is a Registered Professional Engineer and serves as an active member of the State Bars of California and Colorado. He received his Bachelor of Science degree in Agricultural Engineering from Colorado State University in 1981 and his Juris Doctor, cum laude, from Western State University, College of Law, in 1990.



Nilsa Guerrero-Mahon

Audit Committee Chair

A former CFO and Controller for global corporations in the technology, energy, and government sectors, Ms. Guerrero-Mahon provides consulting services to domestic and international corporations as the principal at NG Mahon Business Consulting, LLC. In addition, Ms. Guerrero-Mahon was appointed to the Board of FinGoal Inc. in April 2022, a finance technology company building artificial intelligence tools for the financial services industry and other financial technology developers. She also serves on the Board of the State of Colorado Division of Securities. From 2016 to August 2019, she served on the board of directors of Centura Health Mountains & North Denver Operating Group, the largest division in the Centura Health Care System. From 2014 to 2016, she served as the Vice Chair of the board of directors and Chaired the Strategy Committee at St. Anthony Hospital. From 2009 to 2017, Ms. Guerrero-Mahon served as a gubernatorial appointed Board Member of the State of Colorado Financial Services Commission. Among other prior positions, from 2004 to 2007, she was the Global Services Controller at Microsoft Corporation, overseeing internal controls and corporate finance activities.



Michael J. Morris

Lead Director

Mr. Morris was formerly the Chairman of the board of directors of Heritage Oaks Bankcorp, the holding company of Heritage Oaks Bank. When Heritage Oaks Bank merged with Pacific Premier Bancorp on April 1, 2017, Mr. Morris became a member of the Pacific Premier Bancorp's board of directors, a position he held until May 31, 2020. He joined Heritage Oaks' board of directors in January 2001 and assumed the board's chairmanship in 2007. In addition, Mr. Morris has worked since 1972 at Andre, Morris & Buttery, a professional law corporation, where he serves as Senior Principal and has served as Chairman of the board since 2005. From 2000 to late 2006, Mr. Morris served on the board of Molycorp, a rare earths producer, which at the time was a wholly owned subsidiary of Unocal and then Chevron Mining. Mr. Morris was the only independent director of Molycorp at that time. Mr. Morris is a graduate of Georgetown University and received his law degree from the University of San Francisco School of Law. He has practiced business and environmental law for over 40 years. Mr. Morris served as a member of the Board of Governors and Vice President of the State Bar of California. He served as a 1st Lieutenant in the U.S. Army from 1970 to 1972.



David C. Beling, P.E.

Mr. Beling is a Registered Professional Mining Engineer with 58 years of project and corporate experience. He has served as a director on the boards of 14 mining companies starting in 1981, including NioCorp since 2011. Mr. Beling is the owner of D.C. Beling & Assoc., LLC, which provides strategic advisory, project, and corporate development services to the mining industry. His previous employment and consulting included 14 years with five major mining companies and then 44 years with 30+ U.S. and Canadian junior mining companies. He was the President, CEO, and Director of Bullfrog Gold Corp. from 2011 until October 2020; and the Executive Vice President and COO of Geovic Mining Corp. from 2004 through 2010. Mr. Beling has examined, significantly reviewed, or been directly involved with 90 underground mines, 136 open pit mines, and 174 process plants in the global metal, energy, and industrial mineral sectors.

Board of Directors *(slide 2 of 2)*



Peter Oliver

With a background in chemistry, Mr. Oliver began working at Greenbushes, Western Australia, for Sons of Gwalia, a mining company, in May 2003. After Sons of Gwalia went into administration in 2004, Mr. Oliver was hired by Talison Lithium Limited, a mining company, where he served as General Manager of Talison's Greenbushes and Wodgina Mines and as Talison's Chief Operating Officer, until Mr. Oliver was appointed as the CEO/Managing director. As Talison's CEO/Managing director, Mr. Oliver led the listing of Talison on the Australian Stock Exchange in September 2010. Mr. Oliver guided Talison through its acquisition in 2013 by Tianqi Lithium Corporation. He then served as a corporate adviser to Tianqi, focusing on M&A opportunities and global expansion, including advising on the sale of 49% of Talison to Albemarle Corp. and the acquisition of 24% of Sociedad Quimica y Minera de Chile S.A., as well as significant expansions of Talison's Greenbushes lithium concentrate production. Mr. Oliver also was a founding member of Tianqi Lithium Energy Australia Pty Ltd, a wholly owned subsidiary of Tianqi, which was established to build a major Lithium Hydroxide manufacturing facility in Western Australia. Until June 2021, Mr. Oliver remained as a director of Talison, a joint venture between Tianqi and Albemarle Corp. In September 2022, Mr. Oliver was appointed to the Board of Latin Resources, a lithium exploration company in Australia.



Dean C. Kehler

Mr. Kehler is Managing Partner of Trimaran, which he co-founded in 1998, and serves as a Manager of Trimaran Fund II. Prior to Trimaran, Mr. Kehler was a Managing Director and Vice Chairman of CIBC, where he was responsible for CIBC's United States and European Merchant Banking activities, which were conducted through the CIBC Funds. In addition, Mr. Kehler was responsible for overseeing CIBC's United States and European Leveraged Finance businesses, which included financial sponsor coverage; acquisition finance; high yield origination, underwriting, sales and trading; private placements; and financial restructuring advisory services. Prior to CIBC, Mr. Kehler was a co-founder of The Argosy Group LP. Prior to Argosy, Mr. Kehler was a Managing Director of Drexel Burnham Lambert Inc., and before that he was an investment banker at Lehman Brothers. Mr. Kehler serves on the Boards of Directors of Celularity, Inc. (biotech; NASDAQ: CELU); and Portman Ridge Finance Corp., (fixed income investments/asset management; NASDAQ: PTMN). Mr. Kehler previously served as a Director, Treasurer and Chair of the Finance Committee of CARE USA, one of the world's largest private humanitarian organizations; and as Chair of the Board of Overseers of the University of Pennsylvania School of Nursing. Mr. Kehler graduated from the Wharton School of the University of Pennsylvania.



Michael G. Maselli

Mr. Maselli is a Managing Director of Trimaran Fund Management, L.L.C. since 2006. Most recently, he served as President of GXII (NASDAQ: GXII). Mr. Maselli has guided companies and their boards as a director or advisor for over 30 years. Before joining Trimaran, Mr. Maselli worked in the Corporate and Leverage Finance Groups of CIBC. Prior to joining CIBC in 1997, Mr. Maselli served as a Managing Director in Bear Stearns' corporate finance group and, prior to that, as a Vice President at Kidder Peabody & Co. Incorporated. Since 2011, Mr. Maselli has served as the Chairman of the Board of El Pollo Loco Holdings Inc. (NASDAQ: LOCO). From 2013 to 2015, he served on the board of directors of Norcraft Companies, Inc., and served on the board of managers of its predecessor company beginning in 2003. Additionally, Mr. Maselli served on the board of directors of ChanceLight, Inc. (f/k/a Educational Services of America, Inc.) and Standard Steel, LLC, and was director as well as Chairman of the Board of CB Holding Corp. Mr. Maselli received an MBA with distinction from The A.B. Freeman School at Tulane University and a bachelor's degree in economics from the University of Colorado.

Investment Highlights

Low Carbon Economy



Defense and Aerospace



Mega-Infrastructure



Potential pure play exposure to critical mineral mega trends¹



Significant, rapidly growing total available markets



Unique competitive position with large barriers to entry



Key customer relationships and offtake agreements



Government permits in hand for construction start



Attractive valuation

¹ Subject to receipt of necessary project financing and commencement of operations at the Elk Creek Project.

APPENDIX

Elk Creek Project Advancement: Next Steps¹

Various levels of funding can advance the project to create additional value and move the project closer to the commencement of mine and surface construction.²

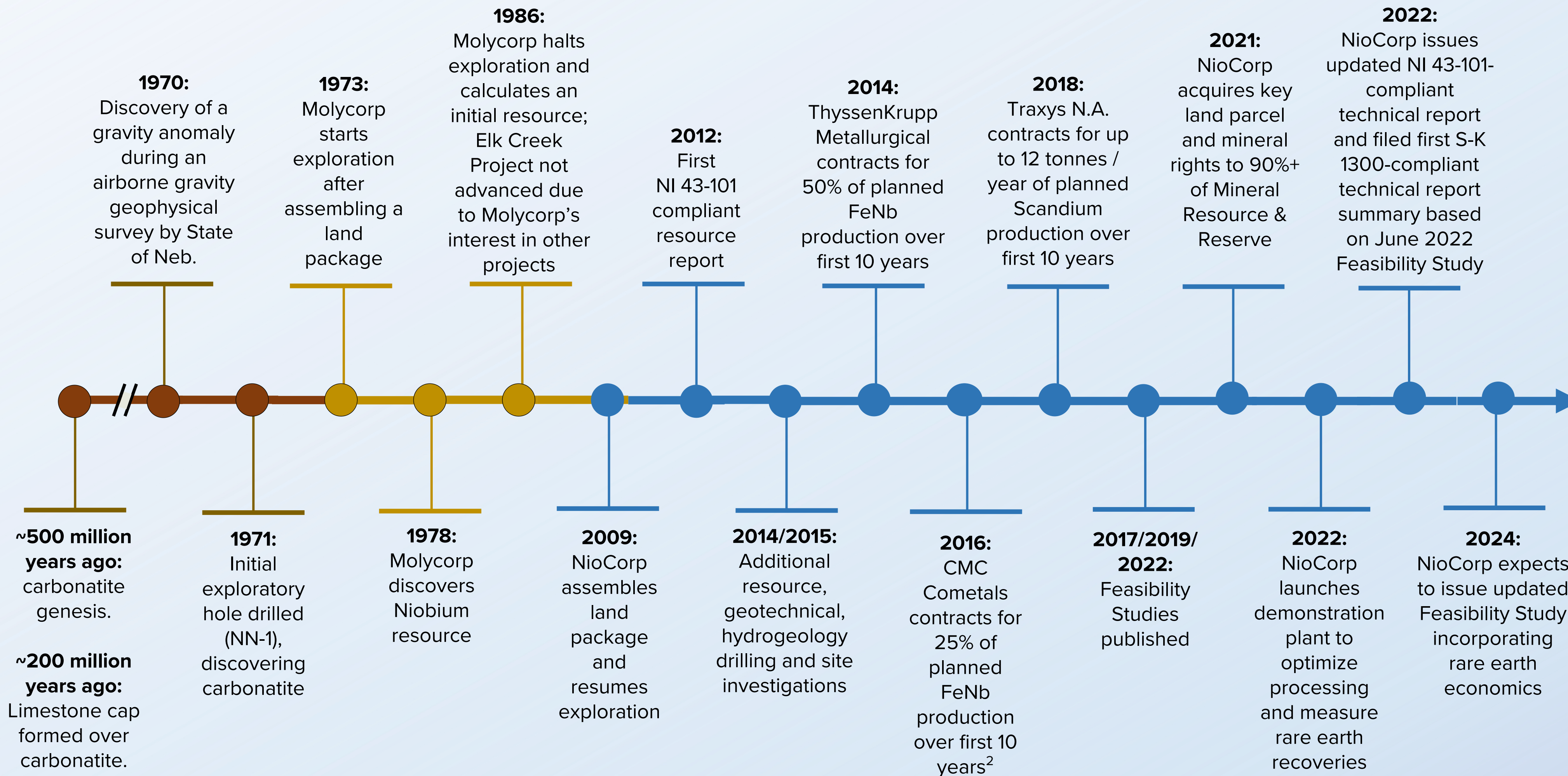
Examples of Uses of Funds at Various Levels (USD millions)

(for illustrative purposes only)

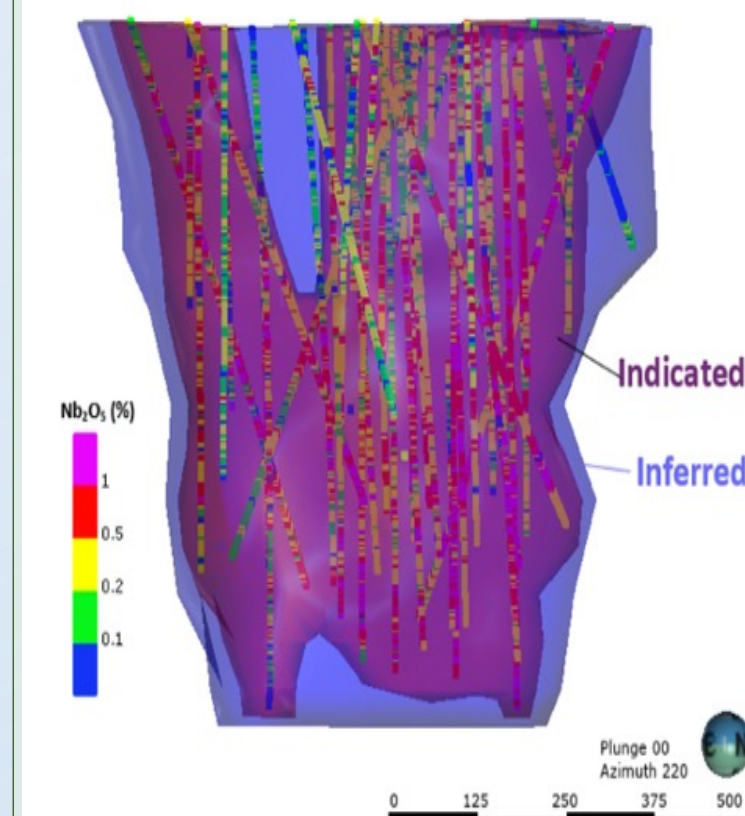
Cost Element	Uses of Funds at Various Levels (USD millions)			
	\$25	\$100	\$150	\$300
Final Subsurface Water and Subsoil Characterization	\$11	\$11	\$11	\$11
Exercise Additional Land Options	\$4	\$4	\$9	\$9
Final Engineering Before Construction Start	\$2	\$22	\$39	\$39
Site Preparation and Infrastructure	–	\$40	\$40	\$40
Initial Construction Works	–	–	\$15	\$15
Production and Ventilation Shafts	–	–	–	\$94
Overhead and Site Management Costs	\$3	\$14	\$19	\$49
Contingency	\$1	\$3	\$11	\$21
G&A / NioCorp Execution Team	\$3	\$5	\$7	\$22



Progression to a Highly De-Risked Critical Minerals Project



The Elk Creek Resource¹



- Total drilling: 68,334 meters (42 miles)
- Resource dimensions: 830 meters strike, 500 meters wide, 850 meters dip
- Majority (~90%) of resource is under NioCorp-owned property; the remainder is under optioned property to the West
- Potential expansion of the deposit to the NW, to the SE, at depth, and in the center.

¹ Based on the 2022 Elk Creek Technical Report. See "Mineral Reserves and Resources" in the Disclaimers & Technical Disclosures at the beginning of this presentation.

² Contract subsequently assigned by CMC Cometals to Traxys Cometals USA, LLC.

Elk Creek S-K 1300 Mineral Resource¹

(MINERAL RESOURCE AS OF June 30, 2022)

Elk Creek 2022 In Situ Mineral Resource Estimate (niobium, titanium, and scandium) excluding reserves				
Classification	NSR Cutoff (US\$/tonne)	Tonnage (Mt)	Grades	Tonnages
Indicated	180	151.7	Nb ₂ O ₅ (%)	Nb ₂ O ₅ (kt)
			0.43	649.8
			TiO ₂ (%)	TiO ₂ (kt)
			2.02	3,067
			Sc (ppm)	Sc (t)
			56.42	8,558
Inferred	180	108.3	Nb ₂ O ₅ (%)	Nb ₂ O ₅ (kt)
			0.39	426.6
			TiO ₂ (%)	TiO ₂ (kt)
			1.92	2,082
			Sc (ppm)	Sc (t)
			52.28	5,660

Notes:

- Classification of Mineral Resources in the above tables is in accordance with the S-K 1300 classification system. Mineral Resources in this table are reported exclusive of Mineral Reserves.
- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- The Mineral Resources are reported at a Diluted Net Smelter Return (NSR) Cut-off of US \$180/tonne.
- The diluted NSR is defined as:
 - Diluted NSR (U.S. \$) =
$$\frac{\text{Revenue per block Nb}_2\text{O}_5 \text{ (diluted)} + \text{Revenue per block TiO}_2 \text{ (diluted)} + \text{Revenue per block Sc (diluted)}}{\text{Diluted tonnes per block}}$$
 - The diluted revenue from Nb₂O₅, TiO₂, and Sc per block used the following factors:
 - Nb₂O₅ Revenue: a 94% grade recovery, a 0.696 factor to convert Nb₂O₅ to Nb, 82.36% assumption for plant recovery, and a US\$ 39.60 selling price per kg of ferroniobium as of June 30, 2022.
 - TiO₂ Revenue: a 94% grade recovery, a 40.31% assumption for plant recovery, and a US\$ 0.88 selling price per kg of titanium oxide as of June 30, 2022.
 - Sc Revenue: a 94% grade recovery, a 1.534 factor to convert Sc to Sc₂O₃, 93.14% assumption for plant recovery, and a US\$ 3,675 kg selling price per kg of scandium oxide as of June 30, 2022.
 - The diluted tonnes are a 6% increase in the total tonnes of the block.
- Price assumptions for FeNb, Sc₂O₃, and TiO₂ are based upon independent market analyses for each product.
- Numbers may not sum due to rounding. The rounding is not considered to be material.
- Rare Earth Oxides (REO) were evaluated as a potential by-product to the mining of niobium, titanium, and scandium; thus the estimated values of the REOs are reported using the previously determined diluted NSR as derived from the Nb₂O₅, TiO₂, and Sc Mineral Resources and are assigned a price of \$0.
- The stated Light Rare Earth Oxides (LREO) grade (%) is the summation of La₂O₃ (%), Ce₂O₃ (%), Pr₂O₃ (%), and Nd₂O₃ (%) estimates.
- The stated Heavy Rare Earth Oxides (HREO) grade (%) is the summation of Sm₂O₃ (%), Eu₂O₃ (%), Gd₂O₃ (%), Tb₂O₃ (%), Dy₂O₃ (%), Ho₂O₃ (%), Er₂O₃ (%), Tm₂O₃ (%), Yb₂O₃ (%), Lu₂O₃ (%), and Y₂O₃ (%) estimates.
- The stated Total Rare Earth Oxide (TREO) grade (%) is the summation of LREO (%) and HREO (%).

NOTE: The Qualified Person for the Mineral Resource estimate is Understood Mineral Resources Ltd. The estimate has an effective date of June 30, 2022.

Elk Creek S-K 1300 REE Mineral Resource¹

(MINERAL RESOURCE AS OF JUNE 30, 2022)

Elk Creek 2022 In Situ Mineral Resource Estimate (rare earth oxides) excluding reserves								
Class	NSR Cut-off	Tonnage (Mt)	La2O3 (%)	La2O3 (kt)	Ce2O3 (%)	Ce2O3 (kt)	Pr2O3 (%)	Pr2O3 (kt)
Indicated	180	151.7	0.0766	116.2	0.1320	200.2	0.0140	21.3
			Nd ₂ O ₃ (%)	Nd ₂ O ₃ (kt)	Sm ₂ O ₃ (%)	Sm ₂ O ₃ (kt)	Eu ₂ O ₃ (%)	Eu ₂ O ₃ (kt)
			0.0511	77.5	0.0116	17.6	0.0040	6.0
			Gd2O3 (%)	Gd2O3 (kt)	Tb2O3 (%)	Tb2O3 (kt)	Dy2O3 (%)	Dy2O3 (kt)
			0.0096	14.6	0.0011	1.6	0.0044	6.7
			Ho2O3 (%)	Ho2O3 (kt)	Er2O3 (%)	Er2O3 (kt)	Tm2O3 (%)	Tm2O3 (kt)
			0.0006	1.0	0.0015	2.2	0.0002	0.3
			Yb2O3 (%)	Yb2O3 (kt)	Lu2O3 (%)	Lu2O3 (kt)	Y2O3 (%)	Y2O3 (kt)
			0.0010	1.5	0.0001	0.2	0.0187	28.4
			LREO (%)	LREO (kt)	HREO (%)	HREO (kt)	TREO (%)	TREO (kt)
0.2737	415.2	0.0528	80.0	0.3265	495.2			
Class	NSR Cut-off	Tonnage (Mt)	La2O3 (%)	La2O3 (kt)	Ce2O3 (%)	Ce2O3 (kt)	Pr2O3 (%)	Pr2O3 (kt)
Inferred	180	108.3	0.0943	102.1	0.1576	170.6	0.0163	17.7
			Nd ₂ O ₃ (%)	Nd ₂ O ₃ (kt)	Sm ₂ O ₃ (%)	Sm ₂ O ₃ (kt)	Eu ₂ O ₃ (%)	Eu ₂ O ₃ (kt)
			0.0575	62.2	0.0116	12.6	0.0038	4.1
			Gd2O3 (%)	Gd2O3 (kt)	Tb2O3 (%)	Tb2O3 (kt)	Dy2O3 (%)	Dy2O3 (kt)
			0.0090	9.8	0.0010	1.1	0.0042	4.6
			Ho2O3 (%)	Ho2O3 (kt)	Er2O3 (%)	Er2O3 (kt)	Tm2O3 (%)	Tm2O3 (kt)
			0.0006	0.7	0.0014	1.5	0.0002	0.2
			Yb2O3 (%)	Yb2O3 (kt)	Lu2O3 (%)	Lu2O3 (kt)	Y2O3 (%)	Y2O3 (kt)
			0.0010	1.1	0.0001	0.1	0.0182	19.7
			LREO (%)	LREO (kt)	HREO (%)	HREO (kt)	TREO (%)	TREO (kt)
0.3257	352.6	0.0512	55.5	0.3769	408.1			

NOTE: The Qualified Person for the Mineral Resource estimate is Understood Mineral Resources Ltd. The estimate has an effective date of June 30, 2022.

Notes:

- Classification of Mineral Resources in the above tables is in accordance with the S-K 1300 classification system. Mineral Resources in this table are reported exclusive of Mineral Reserves
- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- The Mineral Resources are reported at a Diluted Net Smelter Return (NSR) Cut-off of US \$180/tonne.
- The diluted NSR is defined as:
 - Diluted NSR (U.S. \$) =
$$\frac{\text{Revenue per block Nb}_2\text{O}_5 \text{ (diluted)} + \text{Revenue per block TiO}_2 \text{ (diluted)} + \text{Revenue per block Sc (diluted)}}{\text{Diluted tonnes per block}}$$
 - The diluted revenue from Nb₂O₅, TiO₂, and Sc per block used the following factors:
 - Nb₂O₅ Revenue: a 94% grade recovery, a 0.696 factor to convert Nb₂O₅ to Nb, 82.36% assumption for plant recovery, and a US\$ 39.60 selling price per kg of ferroniobium as of June 30, 2022.
 - TiO₂ Revenue: a 94% grade recovery, a 40.31% assumption for plant recovery, and a US\$ 0.88 selling price per kg of titanium oxide as of June 30, 2022.
 - Sc Revenue: a 94% grade recovery, a 1.534 factor to convert Sc to Sc₂O₃, 93.14% assumption for plant recovery, and a US\$ 3,675 kg selling price per kg of scandium oxide as of June 30, 2022.
 - The diluted tonnes are a 6% increase in the total tonnes of the block.
- Price assumptions for FeNb, Sc₂O₃, and TiO₂ are based upon independent market analyses for each product.
- Numbers may not sum due to rounding. The rounding is not considered to be material.
- Rare Earth Oxides (REO) were evaluated as a potential by-product to the mining of niobium, titanium, and scandium; thus the estimated values of the REOs are reported using the previously determined diluted NSR as derived from the Nb₂O₅, TiO₂, and Sc Mineral Resources and are assigned a price of \$0.
- The stated Light Rare Earth Oxides (LREO) grade (%) is the summation of La₂O₃ (%), Ce₂O₃ (%), Pr₂O₃ (%), and Nd₂O₃ (%) estimates.
- The stated Heavy Rare Earth Oxides (HREO) grade (%) is the summation of Sm₂O₃ (%), Eu₂O₃ (%), Gd₂O₃ (%), Tb₂O₃ (%), Dy₂O₃ (%), Ho₂O₃ (%), Er₂O₃ (%), Tm₂O₃ (%), Yb₂O₃ (%), Lu₂O₃ (%), and Y₂O₃ (%) estimates.
- The stated Total Rare Earth Oxide (TREO) grade (%) is the summation of LREO (%) and HREO (%)
- The effective date of the Mineral Resource, including by-products, is June 30, 2022

Elk Creek S-K 1300 Mineral Reserve¹

(not including REE production)

(MINERAL RESERVE AS OF May 10, 2022)

Underground In Situ Mineral Reserves Estimate for Elk Creek										
Classification	Tonnage (Kt)	Nb ₂ O ₅ Grade (%)	Contained Nb ₂ O ₅ (t)	Payable Nb (t)	TiO ₂ Grade (%)	Contained TiO ₂ (t)	Payable TiO ₂ (t)	Sc Grade (ppm)	Contained Sc (t)	Payable Sc ₂ O ₃ (t)
Proven	-	-	-	-	-	-	-	-	-	-
Probable	36,656	0.81	297,278	170,409	2.92	1,071,182	431,793	70.2	2,573	3,677
TOTAL	36,656	0.81	297,278	170,409	2.92	1,071,182	431,793	70.2	2,573	3,677

NOTES

- The Qualified Person for the Mineral Reserve estimate is Richard Jundis, P.Eng., of Optimize Group Inc. The estimate has an effective date of May 3rd, 2022.
- The Mineral Reserve is based on the mine design and mine plan, utilizing an average cut-off grade of 0.679% Nb₂O₅ with an NSR of US\$ 180/mt.
- The estimate of Mineral Reserves may be materially affected by metal prices, environmental, permitting, legal, title, taxation, socio-political, marketing, infrastructure development, or other relevant issues.
- The economic assumptions used to define Mineral Reserve cut-off grade are as follows:
 - Annual life of mine (LOM) average production rate of ~7,450 tonnes of FeNb/annum in the years of full production,
 - Mining dilution of ~6% was applied to all stopes and development, based on 3% for the primary stopes, 9% for the secondary stopes, and 5% for ore development.
 - Mining recoveries of 95% were applied in longhole stopes and 62.5% in sill pillar stopes.

Parameter	Value	Unit
Mining Cost	42.38	US\$/t mined
Processing	106.70	US\$/t mined
Water Management and Infrastructure	16.62	US\$/t mined
Tailings Management	2.01	US\$/t mined
Other Infrastructure	5.47	US\$/t mined
General and Administrative	8.91	US\$/t mined
Royalties/Annual Bond Premium	8.34	US\$/t mined
Other Costs	6.29	US\$/t mined
Total Cost	196.72	US\$/t mined
Nb ₂ O ₅ to Niobium conversion	69.60	%
Niobium Process Recovery	82.36	%
Niobium Price	39.60	US\$/kg
TiO ₂ Process Recovery	40.31	%
TiO ₂ Price	0.88	US\$/kg
Sc Process Recovery	93.14	%
Sc to Sc ₂ O ₃ conversion	153.40	%

- Price assumptions for FeNb, Sc₂O₃, and TiO₂ are based upon independent market analyses for each product.
- Price and cost assumptions are based on the pricing of products at the "mine-gate," with no additional down-stream costs required. The assumed products are a ferroniobium product (metallic alloy shots consisting of 65%Nb and 35% Fe), a titanium dioxide product in powder form, and scandium trioxide in powder form.
- The Mineral Reserve has an average LOM NSR of US\$ 563.06/tonne.
- Richard Jundis has provided detailed estimates of the expected costs based on the knowledge of the style of mining (underground) and potential processing methods (by 3rd party Qualified Persons).
- Mineral reserve effective date May 10th, 2022. The financial model was run post-February 2019, which reflects a total cost per tonne of US\$ 196.72 versus US\$ 189.91 (May 20, 2022 Mineral Reserve Details Table above). This is not considered a material change.
- Price variances for commodities are based on updated independent market studies versus earlier projected pricing. The updated independent market studies do not have a negative effect on the reserve.

Elk Creek S-K 1300 Mineral Reserve¹

(not including REE production)

(MINERAL RESERVE AS OF June 30, 2022)

Underground In Situ Mineral Reserves Estimate for Elk Creek										
Classification	Tonnage (Kt)	Nb ₂ O ₅ Grade (%)	Contained Nb ₂ O ₅ (t)	Payable Nb (t)	TiO ₂ Grade (%)	Contained TiO ₂ (t)	Payable TiO ₂ (t)	Sc Grade (ppm)	Contained Sc (t)	Payable Sc ₂ O ₃ (t)
Proven	-	-	-	-	-	-	-	-	-	-
Probable	36,656	0.81	297,278	170,409	2.92	1,071,182	431,793	70.2	2,573	3,677
TOTAL	36,656	0.81	297,278	170,409	2.92	1,071,182	431,793	70.2	2,573	3,677

NOTES

- The Qualified Person for the Mineral Reserve estimate is Optimize Group Inc. The estimate has an effective date of June 30, 2022.
- The Mineral Reserve is based on the mine design, mine plan, and cash-flow model utilizing an average cut-off grade of 0.679% Nb₂O₅ with an NSR of US\$ 180/t.
- The estimate of Mineral Reserves may be materially affected by metal prices, environmental, permitting, legal, title, taxation, socio-political, marketing, infrastructure development, or other relevant issues.
- The economic assumptions used to define Mineral Reserve cut-off grade are as follows:
 - Annual life of mine (LOM) production rate of ~7,450 tonnes of FeNb/annum during the years of full production.
 - Initial elevated five-year production rate ~ 7,500 tonnes of FeNb/annum when full production is reached.
 - Mining dilution of ~6% was applied to all stopes and development, based on 3% for the primary stopes, 9% for the secondary stopes, and 5% for ore development.
 - Mining recoveries of 95% were applied in longhole stopes and 62.5% in sill pillar stopes.

Parameter	Value	Unit
Mining Cost	42.38	US\$/t mined
Processing	106.70	US\$/t mined
Water Management and Infrastructure	16.62	US\$/t mined
Tailings Management	2.01	US\$/t mined
Other Infrastructure	5.47	US\$/t mined
General and Administrative	8.91	US\$/t mined
Royalties/Annual Bond Premium	8.34	US\$/t mined
Other Costs	6.29	US\$/t mined
Total Cost	196.72	US\$/t mined
Nb ₂ O ₅ to Niobium conversion	69.60	%
Niobium Process Recovery	82.36	%
Niobium Price	39.60	US\$/kg
TiO ₂ Process Recovery	40.31	%
TiO ₂ Price	0.88	US\$/kg
Sc Process Recovery	93.14	%
Sc to Sc ₂ O ₃ conversion	153.40	%
Sc Price	3,675.00	US\$/kg

- Price assumptions are as follows: FeNb US\$ 39.60/kg Nb, Sc₂O₃ US \$3,675/kg, and TiO₂ US \$0.88/kg. Price assumptions are based upon independent market analyses for each product as of June 30, 2022
- Price and cost assumptions are based on the pricing of products at the "mine-gate," with no additional down-stream costs required. The assumed products are ferroniobium (metallic alloy shots consisting of 65%Nb and 35% Fe), a titanium dioxide product in powder form, and scandium trioxide in powder form.
- The Mineral Reserve has an average LOM NSR of US\$ 563.06/tonne.
- Optimize Group has provided detailed estimates of the expected costs based on the knowledge of the style of mining (underground) and potential processing methods (by 3rd party Qualified Persons).
- Mineral reserve effective date is June 30, 2022. The financial model was run after the estimate of the NSR above, which reflects a total cost per tonne of US\$ 196.72 versus US\$ 189.91. This is not considered a material change.
- Price variances for commodities are based on independent market studies versus earlier projected pricing. The independent market studies do not have a negative effect on the reserve.

Feasibility Study: Indicated Economic Results¹

Operating Year		1	2	3	4	5	6	7	8	9	10	20	30
Production													
Niobium	t-Nb	4,960	4,742	4,949	4,903	4,949	4,716	4,715	4,733	4,799	4,672	4,772	4,773
Scandium	t-Sc ₂ O ₃	116	114	113	109	112	109	105	102	101	101	102	107
Titanium	t-TiO ₂	13,063	12,120	12,747	12,605	12,606	12,114	11,846	12,167	11,926	11,544	12,365	12,527
Realized Pricing													
Niobium	\$/kg	\$45.46	\$45.46	\$45.46	\$45.46	\$45.46	\$45.46	\$45.46	\$45.46	\$45.46	\$45.84	\$47.00	\$47.00
Scandium	\$/kg	\$3,986	\$3,487	\$2,989	\$3,088	\$3,188	\$3,387	\$3,586	\$3,735	\$3,734	\$3,750	\$3,750	\$3,750
Titanium	\$/kg	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99
Gross Revenues (\$M)													
		\$701	\$626	\$575	\$573	\$596	\$594	\$602	\$608	\$608	\$606	\$617	\$637
Total Opex (\$M)													
		(\$205)	(\$200)	(\$201)	(\$207)	(\$210)	(\$196)	(\$201)	(\$202)	(\$210)	(\$211)	(\$207)	(\$200)
EBITDA (\$M) ²													
		\$496	\$426	\$374	\$366	\$386	\$398	\$401	\$406	\$398	\$395	\$411	\$436
EBITDA Margin ²													
		71%	68%	65%	64%	65%	67%	67%	67%	65%	65%	67%	69%
Operating CF (\$M) ²													
		\$496	\$426	\$353	\$328	\$341	\$346	\$342	\$345	\$339	\$339	\$339	\$356
EBT (\$M) ²													
		\$227	\$202	\$181	\$188	\$222	\$259	\$284	\$295	\$287	\$283	\$293	\$326
Net Income (\$M)													
		\$227	\$202	\$161	\$150	\$176	\$207	\$225	\$234	\$228	\$226	\$221	\$245
Income Margin													
		32%	32%	28%	26%	30%	35%	37%	39%	38%	37%	36%	39%

¹ Based on Table 19-12 "Indicative Economic Results" from the S-K 1300 Elk Creek Technical Report Summary. See "Mineral Reserves and Resources" in the Disclaimers & Technical Disclosures at the beginning of this presentation.

² See "Financial Information; Non-GAAP Measures" in the Disclaimers & Technical Disclosures at the beginning of this presentation.

For More Information

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