

Prairie Creek

Canada's Next High-Grade Silver-
Zinc-Lead Mine, Path to Production

Corporate Presentation
December 2022



NORZINC
A PREMIUM MINE DEVELOPER

Forward Looking Statements

Cautionary Statement

For the full details of the 2021 Preliminary Economic Assessment (“PEA”) and further information with respect to the key assumptions, parameters, and risks associated with the results of the PEA, the mineral resource estimate included therein, and other technical information, please refer to the complete Technical Report entitled, “Prairie Creek NI 43-101 Technical Report on Preliminary Economic Assessment”, filed under the Company’s profile on SEDAR. The EBITDA projections summarized in this presentation are not measures recognized under Canadian generally accepted accounting principles (“GAAP”) and do not have any standardized meanings prescribed by GAAP.

Forward Looking Statements

This presentation contains forward-looking statements that are made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and under Canadian securities laws that involve a number of risks and uncertainties. Such statements are based on the Canadian Zinc Corporation’s (the “Company”, the “Registrant”, “NorZinc” or “NZC”) current expectations, estimates and projections about the industry, management’s beliefs and certain assumptions made by it. We use words such as “expect,” “anticipate,” “project,” “believe,” “plan,” “intend,” “seek,” “should,” “estimate,” “future” and other similar expressions to identify forward-looking statements. The Company’s actual results could differ materially and adversely from those expressed in any forward-looking statements as a result of various factors.

Statements about the Company’s planned/proposed Prairie Creek Project operations, which includes future mine grades and recoveries; the Company’s plans for further exploration at the Prairie Creek Project and other exploration properties; future cost estimates pertaining to further development of the Prairie Creek Project and items such as long-term environmental reclamation obligations; financings and the expected use of proceeds thereof; the completion of financings and other transactions; the outlook for future prices of zinc, lead and silver; the impact to the Company of future accounting standards and discussion of risks and uncertainties around the Company’s business are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict. Therefore, the Company’s actual results could differ materially and adversely from those expressed in any forward-looking statements as a result of various factors. You should not place undue reliance on these forward-looking statements.

Information relating to the magnitude or quality of mineral deposits is deemed to be forward-looking information. The reliability of such information is affected by, among other things, uncertainty involving geology of mineral deposits; uncertainty of estimates of their size or composition; uncertainty of projections relating to costs of production or estimates of market prices for the mineral; the possibility of delays in mining activities; changes in plans with respect to exploration, development projects or capital expenditures; and various other risks including those relating to health, safety and environmental matters.

The Company cautions that the list of factors set forth above is not exhaustive. Some of the risks, uncertainties and other factors which negatively affect the reliability of forward-looking information are discussed in the Company’s public filings with the Canadian securities regulatory authorities, including its most recent Annual Report, quarterly reports, material change reports and press releases, and with the United States Securities and Exchange Commission (the “SEC”). In particular, your attention is directed to the risks detailed herein concerning some of the important risk factors that may affect its business, results of operations and financial conditions. You should carefully consider those risks, in addition to the other information in this presentation and in the Company’s other filings and the various public disclosures before making any business or investment decisions involving the Company and its securities.

The Company undertakes no obligation to revise or update any forward-looking statement, or any other information contained or referenced in this presentation to reflect future events and circumstances for any reason, except as required by law. In addition, any forecasts or guidance provided by the Company are based on the beliefs, estimates and opinions of the Company’s management as at the date of this Presentation and, accordingly, they involve a number of risks and uncertainties. Consequently, there can be no assurances that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. Except as required by law, the Company undertakes no obligation to update such projections if management’s beliefs, estimates or opinions, or other factors should change.

NorZinc Company Overview

ADVANCING THE PRAIRIE CREEK PROJECT



World Class Project

- Large and high-grade deposit, with mineralization demonstrating significant potential for expansion
- Compelling economics demonstrated in PEA based on 2,400 tpd over 20-year mine life



Low-Risk Jurisdiction

- Located in Northwest Territories Canada
- Project has long history with local communities



Experienced Leadership in Key Areas

- NorZinc management experienced in financing and developing projects
- RCF has significant technical experience and balance sheet to support development



Strong & Comprehensive CSR Approach

- Established relationships with key permitting governing bodies
- Project's longevity and relevance within the community mitigates uncertainties



Real Near-Term Potential

- Shovel ready, all major mining permits received and in final stages of permitting for Phase 1 of access road
- Feasibility Study work underway



Prairie Creek Project

CANADA'S NEXT HIGH-GRADE ZINC-SILVER-LEAD MINE

Project Overview

Large and high-grade zinc-silver-lead deposit

- 9.8 Mt of M&I Resources at 22.7% ZnEq
- 6.4 Mt of Inferred Resources at 24.1% ZnEq

Superior Geology

- Consists of 3 sulphide mineralization styles
- Consistent ore body ideal for long hole stoping

Robust Economics

- US\$299M NPV and avg EBITDA US\$123M over 20-year mine life
- Strong free cashflow

Established History & Infrastructure

- C\$64M Cadillac Mine built in 1980 with completed 1000tpd mill
- Project has a long history in region and with local communities

Readily Saleable Concentrates

- MOU signed with Boliden and Korea Zinc for zinc concentrates
- Silver-rich lead concentrate



Recent Achievements

A FRESH APPROACH TO A LONGSTANDING PROJECT

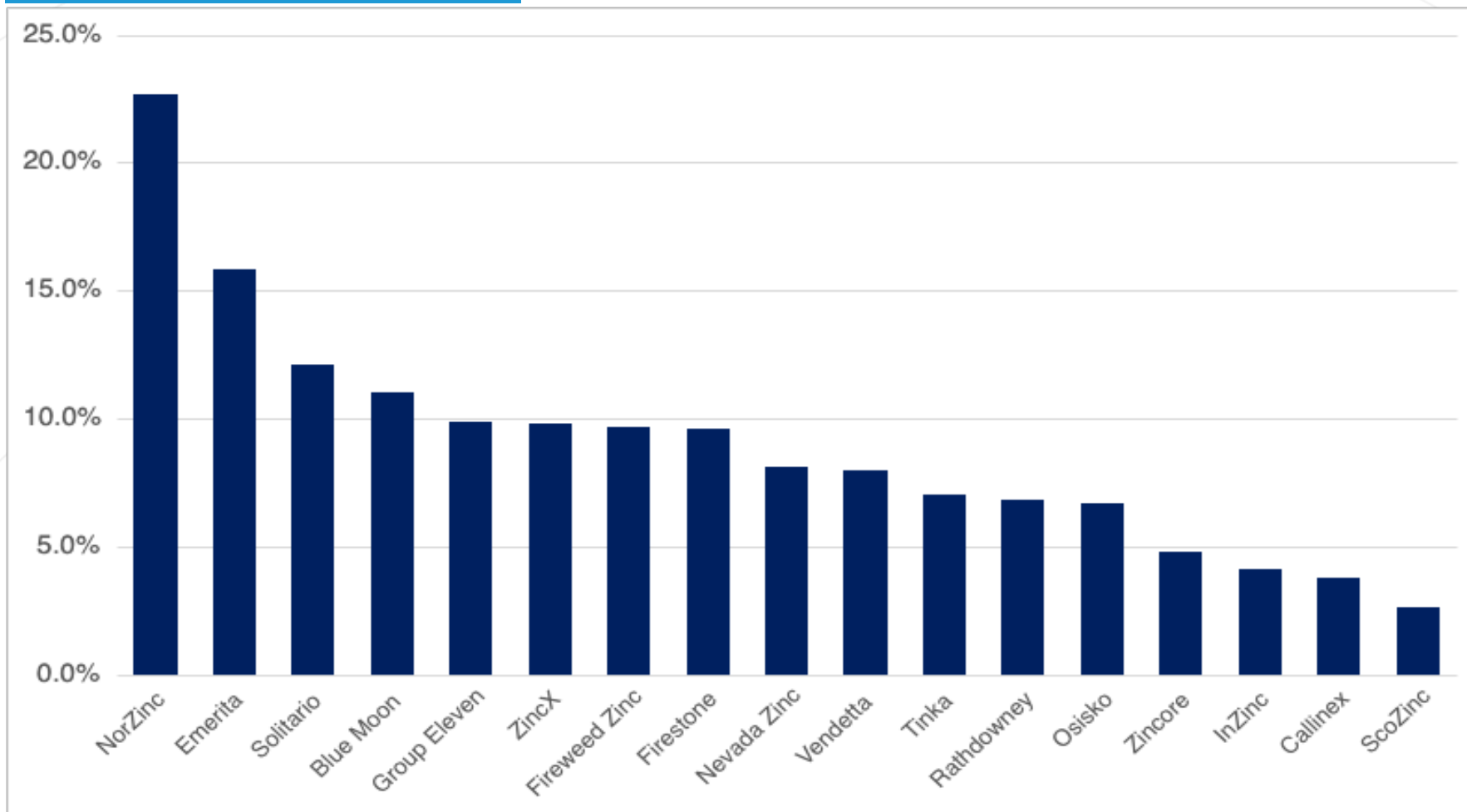
- ✓ Receipt of full permits for construction of Phase 1 of the All-Season Road (the PWR)
- ✓ Major permitting progress – Full new mining permits received for 2,400tpd mine expansion (Land Use Permit and Water License)
- ✓ Transport Corridor Benefits Agreement signed with Acho Dene Koe First Nation
- ✓ Environmental Agreement signed with Naha Dehe Dene Band and the Liidlii Kue First Nation Band
- ✓ 2,400 tpd expansion amendment mining license proceeded without an Environmental Assessment and draft licenses in public comment phase
- ✓ Final IBA signed with Liidlii Kue First Nation (Road Benefit Agreement)
- ✓ MOU signed with Parks Canada (valid for 5 years)
- ✓ MOU signed with Boliden to significantly increase zinc concentrate offtake
- ✓ Base metal markets showing exceptional strength in short term with positive long-term fundamentals
- ✓ Management team focus - finance/build/operate
- ✓ Critical metals for Canada and USA – zinc added to Canada's critical mineral list (Mar 2021) and USA (Nov 2021)

"The 31 critical minerals on Canada's list are used to develop clean technologies, from solar panels to EV batteries. They're all essential to lowering emissions, increasing our competitiveness, and strengthening our energy security. Canada's list signals to investors where Canada will focus and where Canada will lead. Critical minerals will get us to net-zero." Seamus O'Regan Jr., Canada's Minister of Natural Resources, March 2021

Mineral Resource Grade Comparison

PRIMARY ZINC-LEAD PEERS

Zinc Equivalent Basis (ZnEq%)

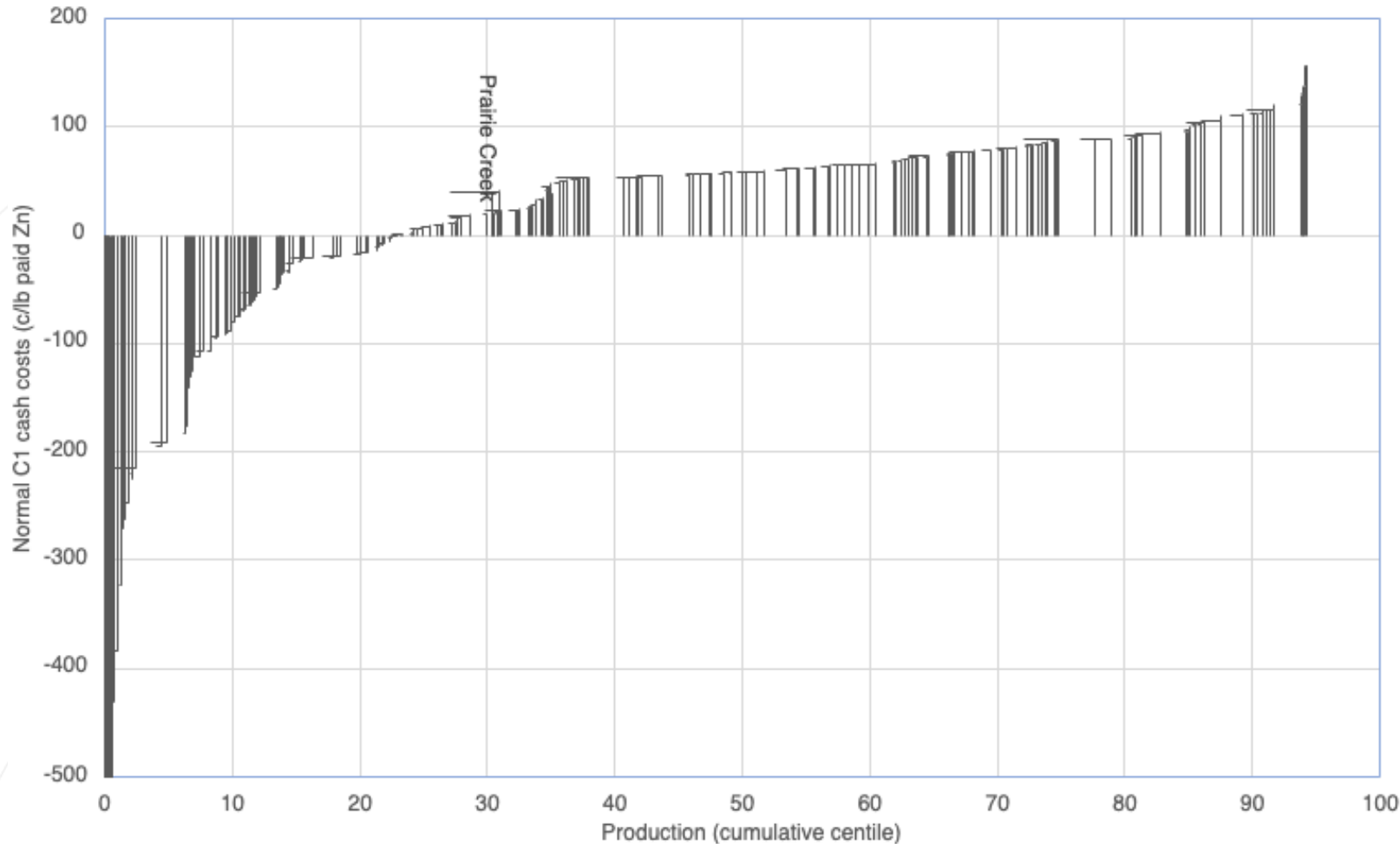


Source: Cormark (June 2021); Company reports

A Low-Cost Producer

PROJECTED NORMAL C1 CASH COST CURVE – YEAR 2027

Global Zinc Normal C1 Cash Cost Curve



Of 230 projects, Prairie Creek falls within lowest third of cash costs using Normal (Byproduct) C1 Cash Cost of \$0.19/lb Zn and C3 Cost of \$0.60/lb Zn

Projects projected to be in production in the year 2027 according to Wood Mackenzie

Preliminary Economic Assessment for Prairie Creek

ROBUST RESULTS BASED ON 2,400 TPD

NPV_{8%} \$299M

IRR 17.7%

At \$1.20/lb zinc

NPV_{8%} \$479M

IRR 22.8%

At approx. spot \$1.50/lb zinc

20.3 Yr
Mine Life

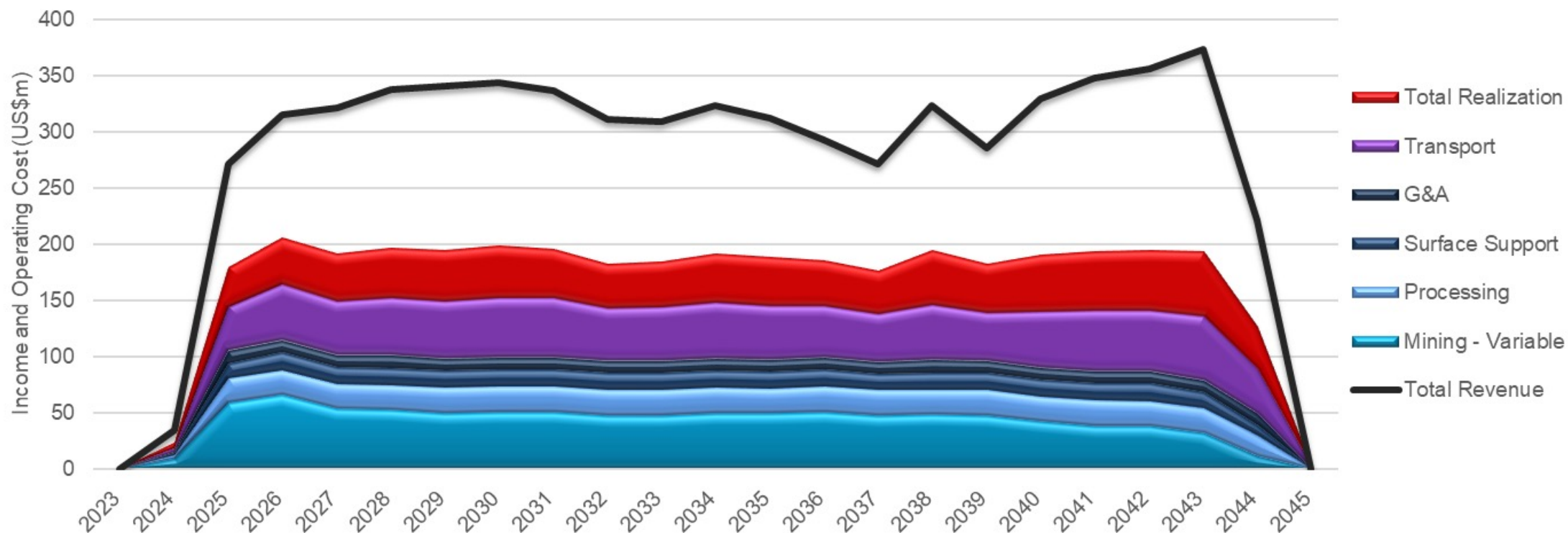
\$123M
Avg EBITDA

Low Cost
LOM C1 \$0.19
(by-product costs)

4.8 Yr
Payback Period

\$368M
Initial Capex

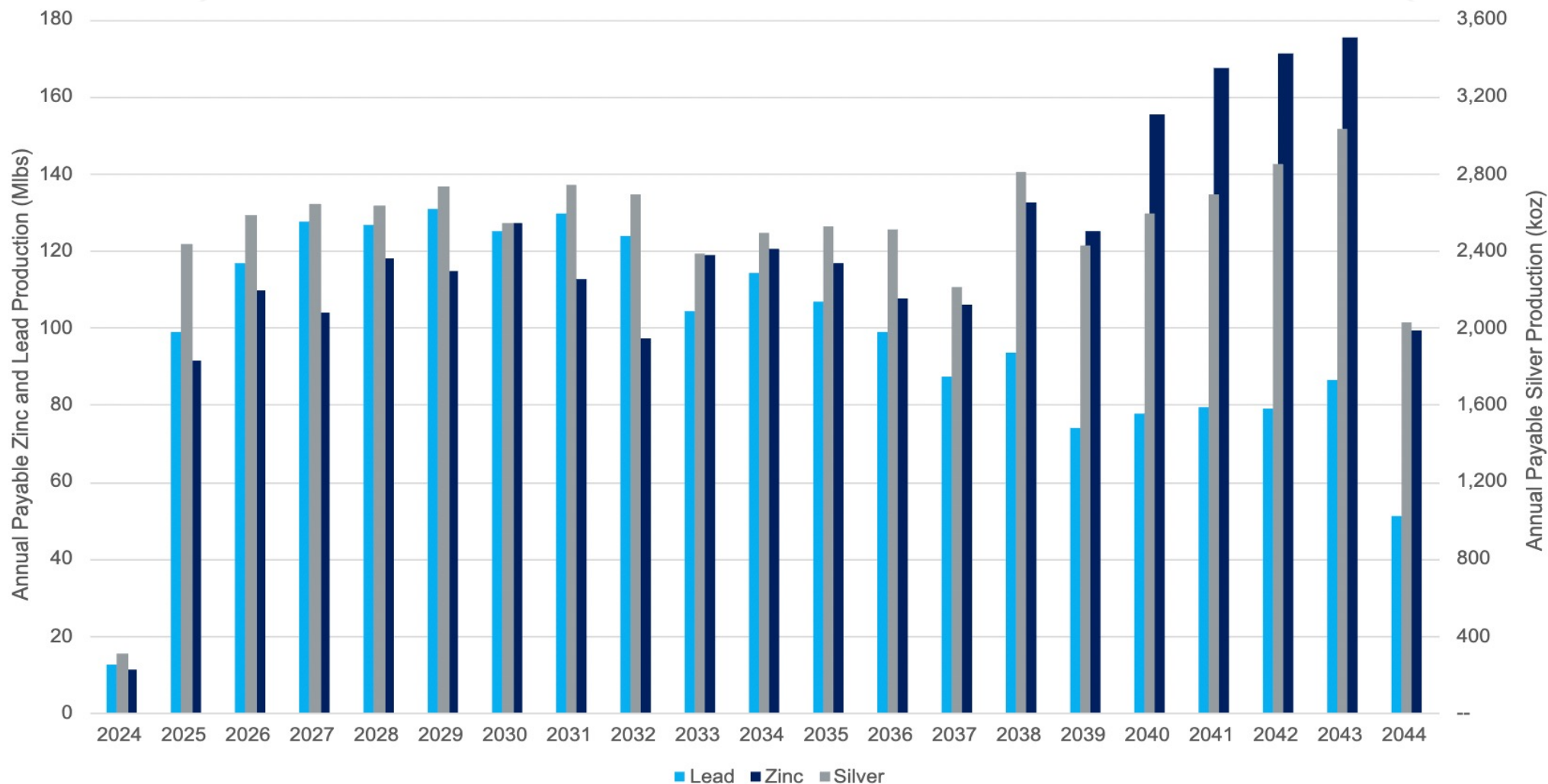
Income and Expenses



LOM Payable Production

PAYABLE ZINC & LEAD PRODUCTION

Annual Payable Production



Responsibility

COMMITTED TO SUSTAINABLE DEVELOPMENT



The NorZinc Commitment:

NorZinc is committed to building strong relationships and respect with the Indigenous Peoples whose land we work on by ensuring benefits to Northern residents and local businesses through our sustainable development.

Environment

- Minimal footprint– no tailings, 100% paste and backfill
- Permits issued for mine and road
 - Currently amending permits for increased production
- 100% water recycling in plant design
- Use of alternative energy

Social Responsibility and Social License

- Strong local Indigenous Support
 - Naha Dehé (Nahanni Butte) Dene Band (NDDB/NBDB) IBA and EA signed
 - Liidlii Kue First Nation (LKFN) IBA and EA signed
 - Acho Dene Koe First Nation (ADK) Transport benefit agreements signed
- Long mine life providing long-term economic benefits

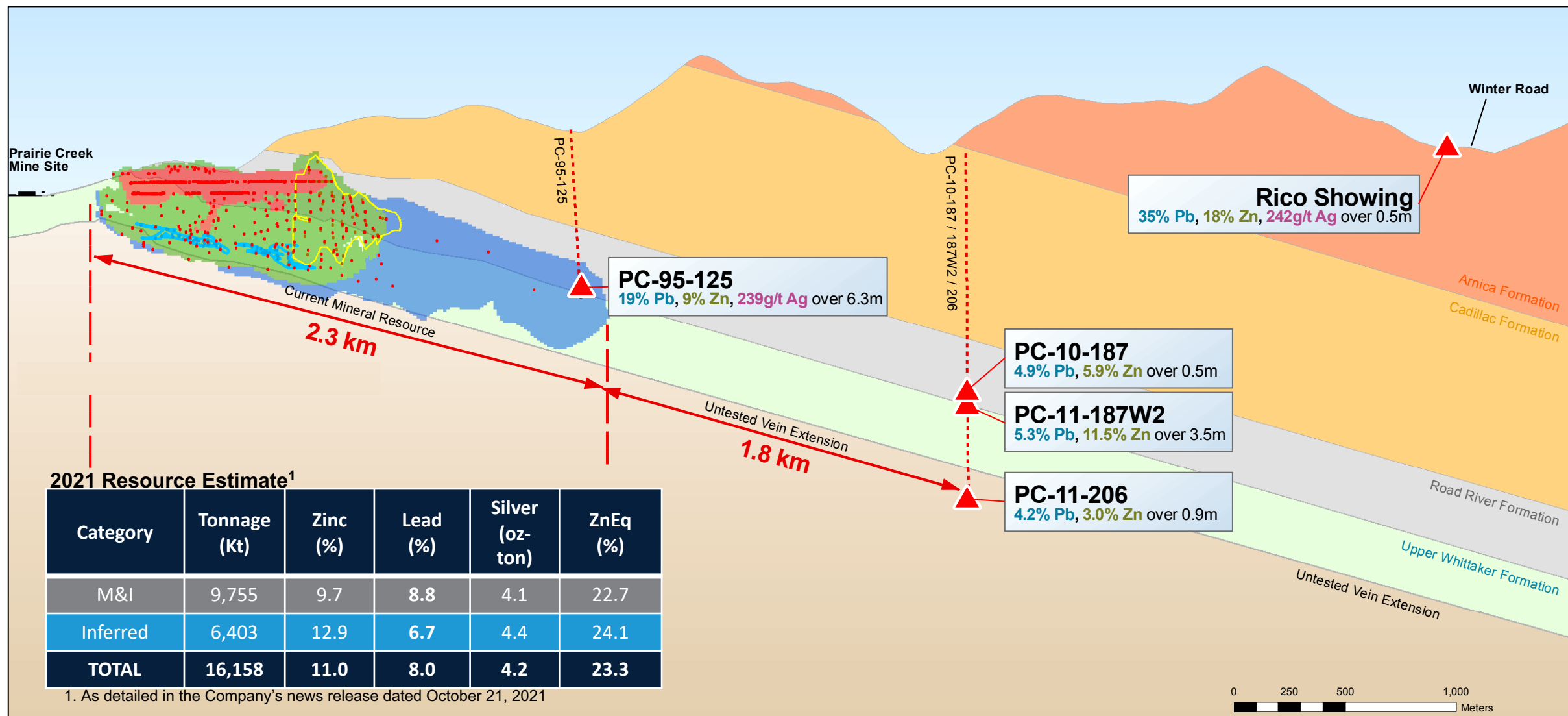
Governance

- Socio-Economic Agreement signed with the GNWT to provide benefits to the Dehcho Region
- Indigenous decision makers alongside governments (co-management)



Mineral Resource & Expansion Potential

LONG SECTION VIEW FACING WEST



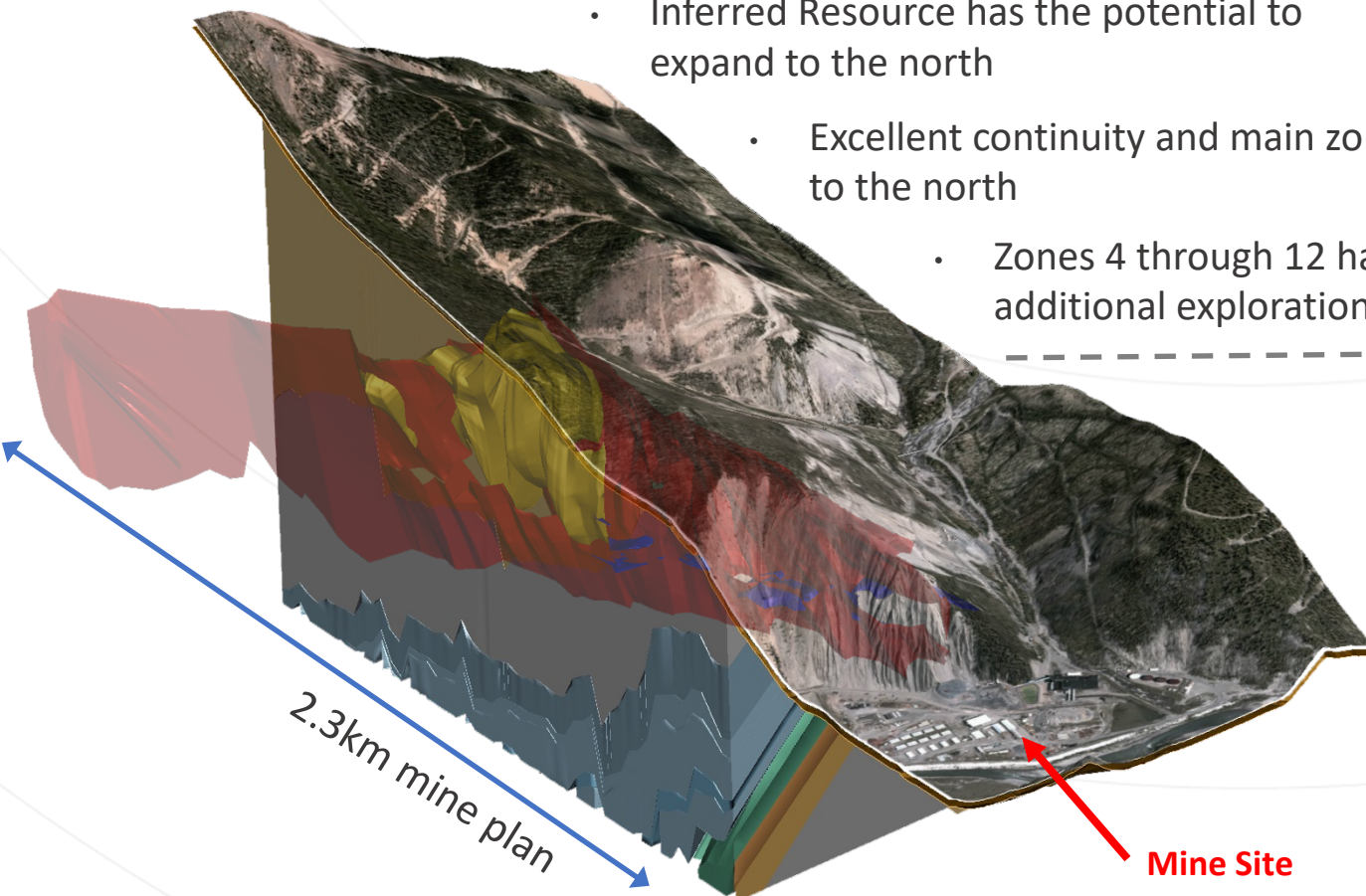
District Geology

WORLD CLASS GEOLOGY

Mine life of **20 years**

Mine plan represents 2.3km of the total 16km MQV strike length

- Inferred Resource has the potential to expand to the north
- Excellent continuity and main zone is open to the north
- Zones 4 through 12 have additional exploration potential



Grab Sample: 820 g/t Ag,
10% Zn, 16% Pb, 3.5% Cu



Sam Trench Results: 1.52m @
20% Zn, 13% Pb, 219g/t Ag

Zinc in soil anomaly

Gate Fault
Prairie Creek

Rico Trench Results: 1.1m @
18% Zn, 35%Pb, 242g/t Ag

Surveys indicate strong
geochemical anomalies
between Main Zone and
Rico

DDH 11-187W2: 3.5m @
11.5% Zn, 5.3% Pb, 84g/t Ag
Deep Hole Exploration Program

ZONE 3:
Prairie Creek Mine
(Defined Resource)

DDH 95-103: 2.0m @
29% Zn, 13%Pb, 73g/t Ag

DDH 95-124: 5.5m @
7.5% Zn, 2%Pb, 49g/t Ag

DDH 94-064: 2.1m @
21% Zn, 9%Pb, 192g/t Ag

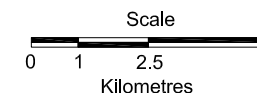
DDH 06-170: 10.13m @
6% Zn, 9%Pb, 113g/t Ag

Trenching, drilling and underground
work done by previous operators in
Zones 7 through 12 to be followed up
by CZN exploration campaigns.

Legend

- Property Claims & Leases
- Mineralized Zones
- Defined Resource
- Mineralized Soil Anomaly

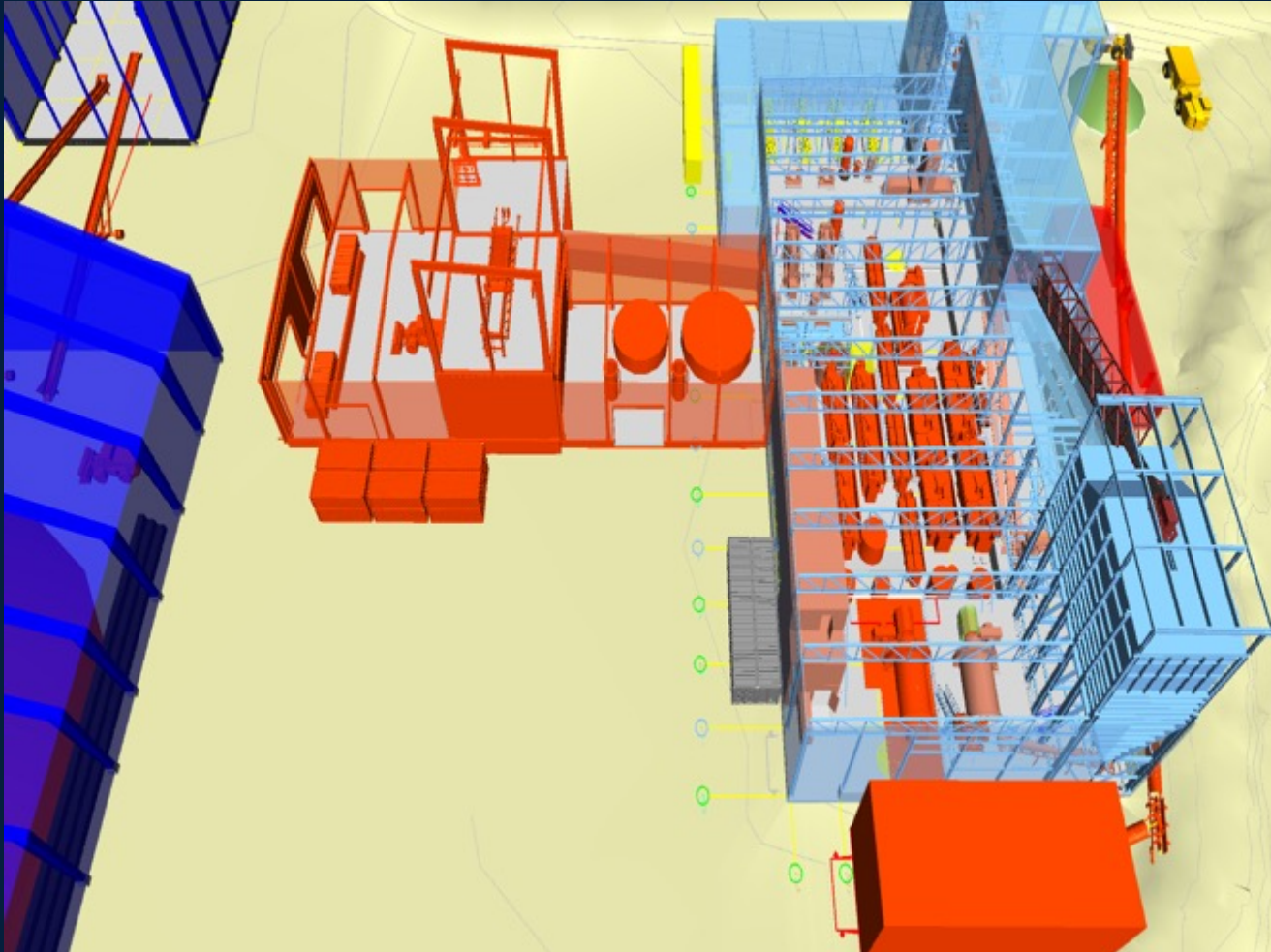
16 km



Mill Expansion to 2,400 TPD

EXISTING CAPACITY 1,000 TPD

Conceptual Drawings of Plant Expansion Plans

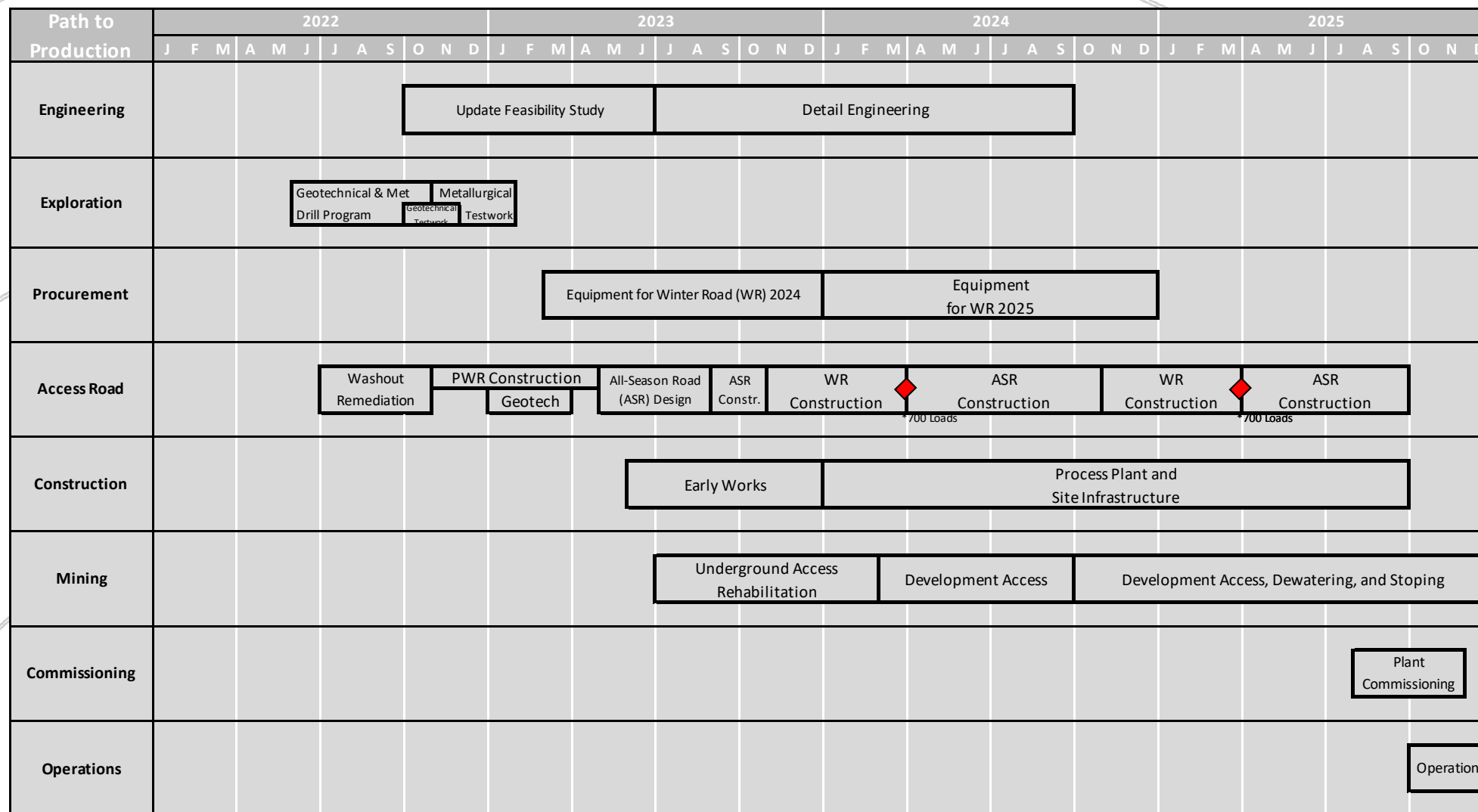


Existing Mill to be Refurbished



Projected Timeline to Production

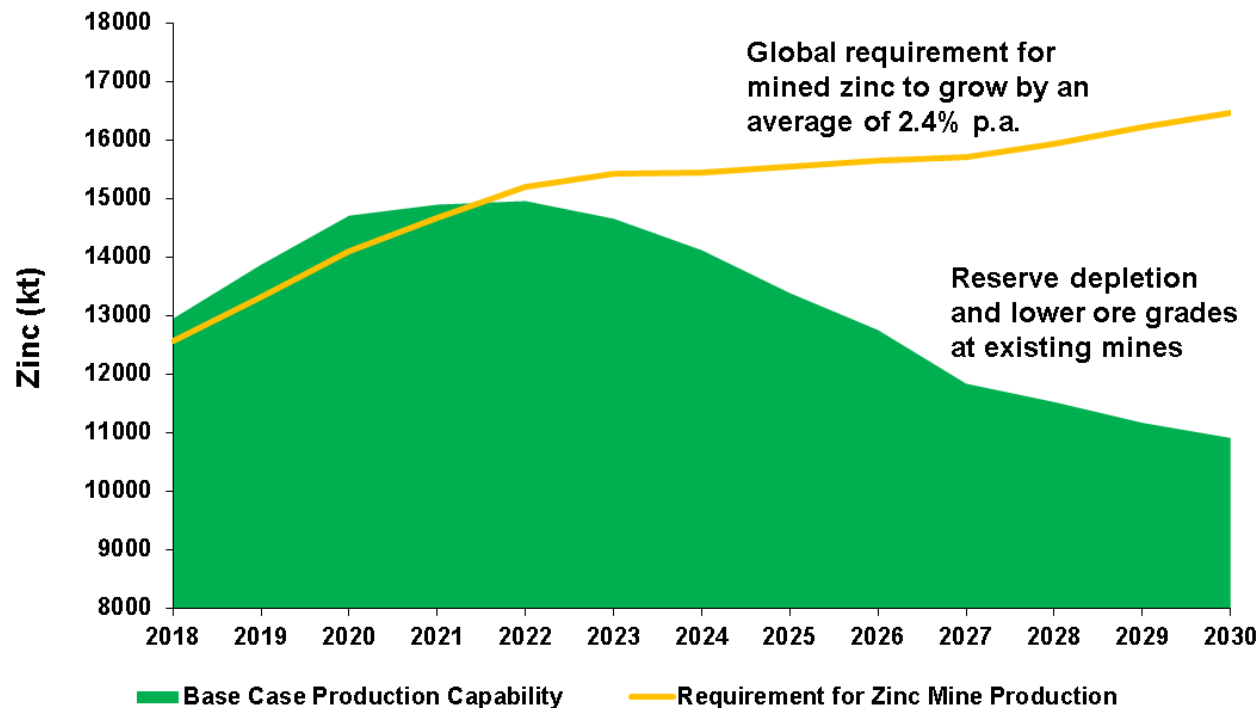
COMPREHENSIVE ESTIMATION OF PATH TO PRODUCTION



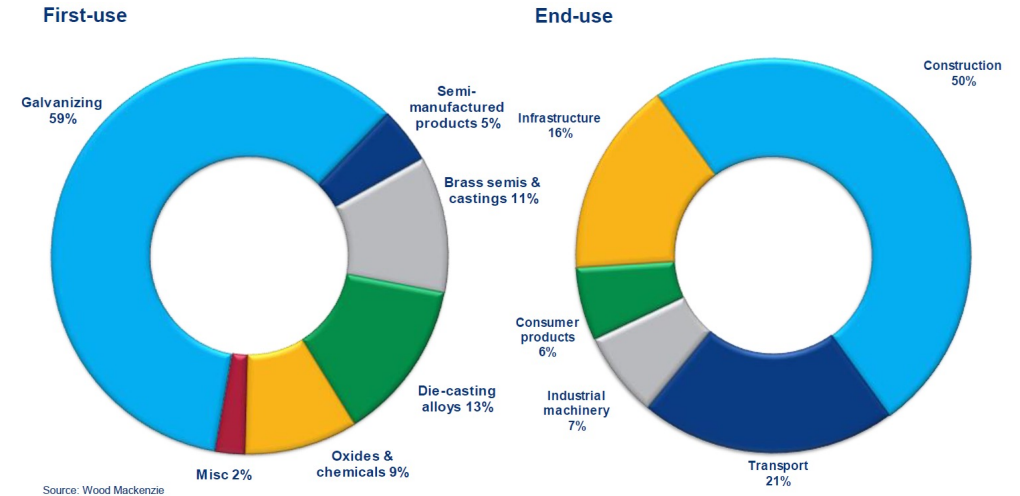
Zinc Market

THE 4TH MOST MINED METAL GLOBALLY

Urbanisation and industrialisation will remain the dominant driving force behind global zinc consumption



Source: WoodMackenzie_Q4 2018



Consumption of zinc to be boosted by new applications:

- Zinc based battery technologies
- Rechargeable zinc air technology better, cheaper and safer than lithium iron alternative
- Huge potential for telecoms, handheld devices, electric transport and power grids (NantEnergy.com)

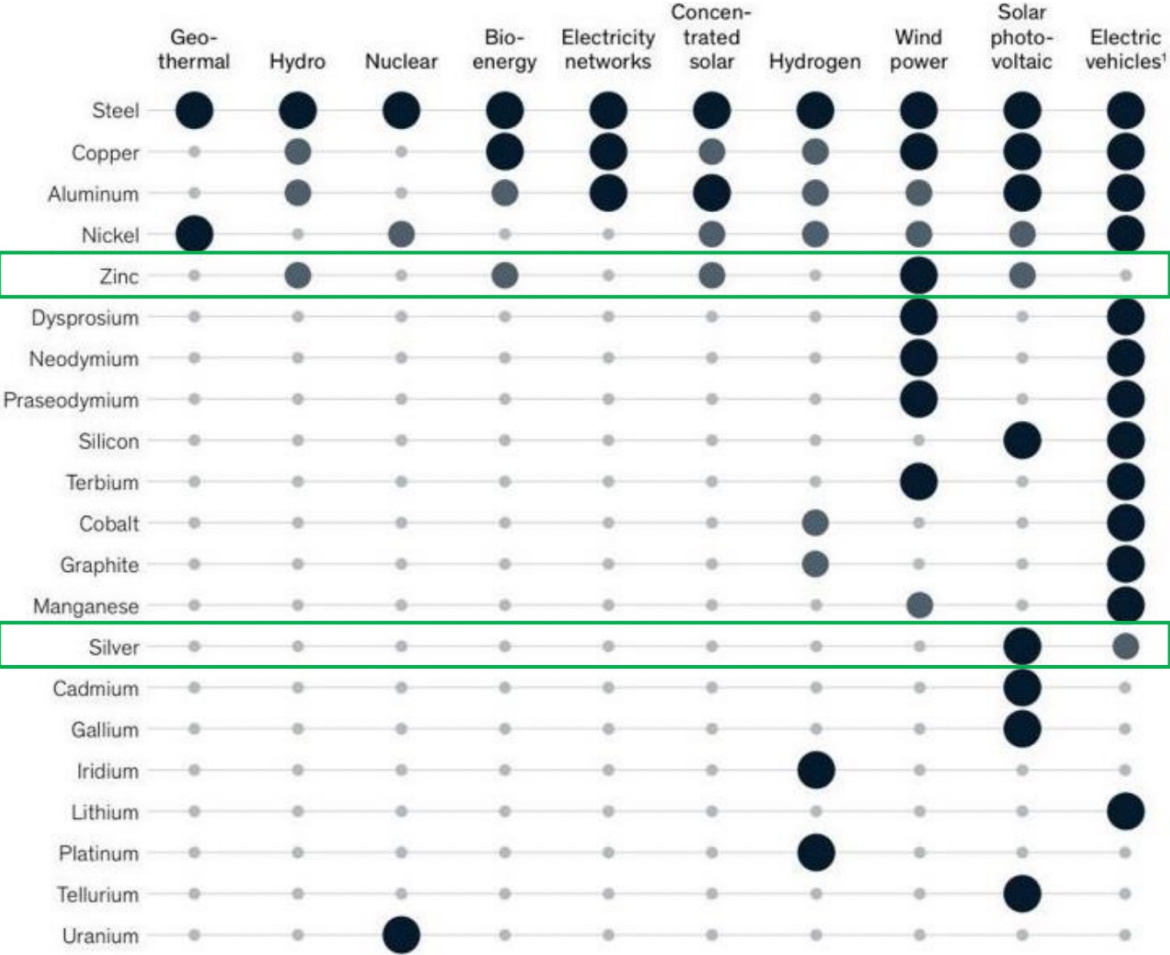
New types of coating:

- Zn, Mg, Al alloys
- Protecting lightweight automotive body-work

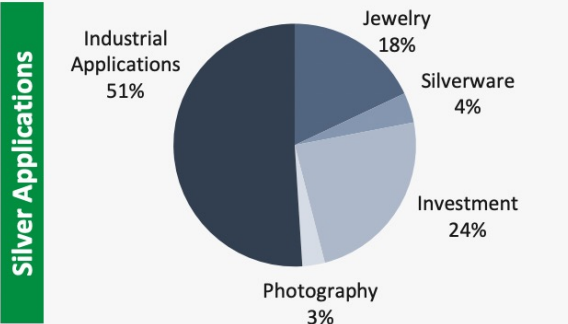
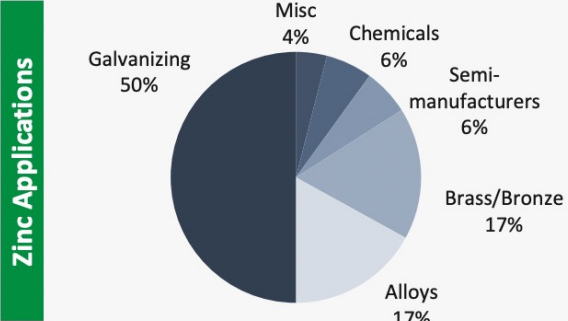
Zinc in fertilizers:

- Better crop yields
- Higher nutritional value
- Improved farmers income

Zinc – A Critical Metal for the Green Revolution



✓ Zinc designated as a strategic metal by US government in November 2021



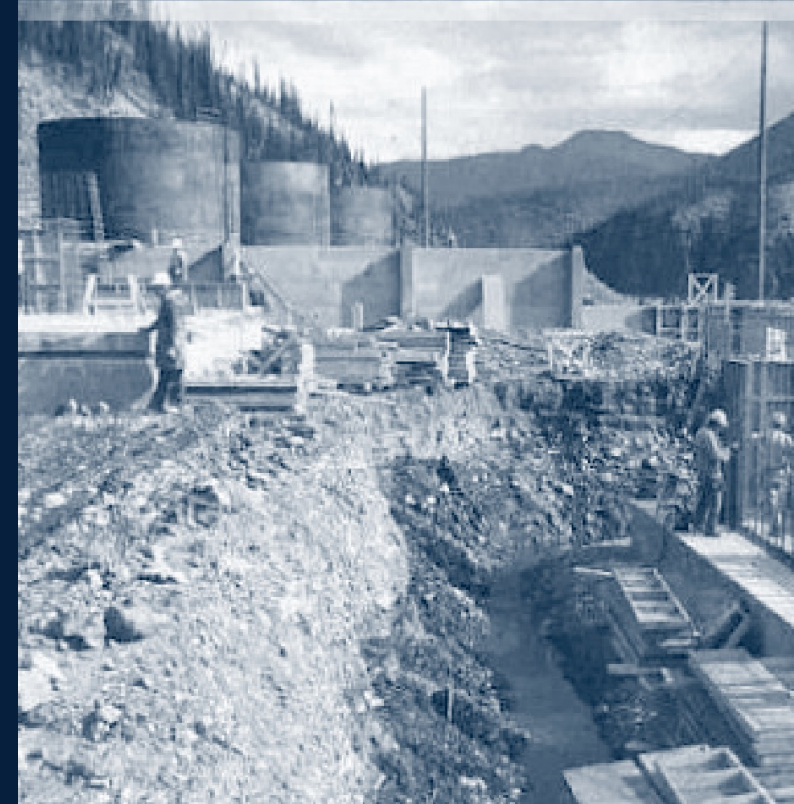
¹Includes energy storage.
Source: Critical raw materials for strategic technologies and sectors in the EU, A foresight study, European Commission, Mar 9, 2020; The role of critical minerals in clean energy transitions, IEA, May 2021; McKinsey analysis



Summary

A PREMIUM MINE DEVELOPER

- World class asset; large, high-grade deposit with strong leverage to silver
- Highly experienced leadership and ownership with development and financing expertise
- Premier Jurisdiction; Northwest Territories Canada
- Fully permitted to 2,400 tpd design and for Phase 1 construction of the All-Season Access Road to site
- Robust plan-to-production utilizing existing infrastructure
- ESG vision and strategy, strong community and government support



APPENDIX



NORZINC
A PREMIUM MINE DEVELOPER

Mineral Resource Estimate

EFFECTIVE OCTOBER 15, 2021

Domain	Classification	Tonnes	ZnEq %	Ag ppm	Pb %	Zn %
Main Quartz Zone (MQV)	Measured	903,000	30.3	206	11.2	12.9
	Indicated	5,248,000	27.7	181	12.0	10.3
	M & I	6,152,000	28.0	184	11.9	10.7
	Inferred	3,849,000	31.4	207	8.4	16.7
Stockwork (STK)	Measured	128,000	17.4	97	4.1	10.3
	Indicated	2,754,000	12.6	63	3.2	7.6
	M & I	2,883,000	12.8	65	3.2	7.7
	Inferred	2,187,000	12.7	67	4.0	6.7
Stratabound Massive Sulphides (SMS)	Indicated	722,000	16.4	53	5.1	9.7
	Inferred	367,000	15.4	47	4.4	9.6
TOTAL	Measured	1,031,000	28.7	193	10.3	12.6
	Indicated	8,724,000	22.0	133	8.6	9.4
	M & I	9,755,000	22.7	139	8.8	9.7
	Inferred	6,403,000	24.1	150	6.7	12.9

Updated Prairie Creek Resource Estimate September 2021					Previous Resource Estimate September 2015				
MQV+STK+SMS	Tonnes	Ag ppm	Pb %	Zn %		Tonnes	Ag ppm	Pb %	Zn %
Measured	1,031,000	193	10.3	12.6		1,482,000	200	10.8	13.2
Indicated	8,724,000	133	8.6	9.4		7,222,000	123	8.5	8.7
Measured & Indicated	9,755,000	139	8.8	9.7		8,704,000	136	8.9	8.9
Inferred	6,403,000	150	6.7	12.9		7,049,000	166	7.7	11.3

1. Stated at a cut-off grade of 8% ZnEq based on prices of Zn = \$1.15 USD/lb, Pb = \$1.00 USD/lb, Ag = \$20.00 USD/troy oz. 2. Average overall processing recovery factors for the purposes of the resource estimate for Zn, Pb and Ag are 81.5%, 84.3%, and 95.1% respectively, with payables similarly as 85.0%, 94.8%, and 85.0%. Numbers may not compute exactly due to rounding. 3. $\text{ZnEq\%} = (\text{Grade of Zn in \%}) + [(\text{Grade of Pb in \%} * \text{Price of Pb in \$/lb} * 22.046 * \text{Recovery of Pb in \%} * \text{Payable Pb in \%}) + (\text{Grade of Ag in g/t} * (\text{Price of Ag in US\$/Troy oz} / 31.10348) * \text{Recovery of Ag in \%} * \text{Payable Ag in \%})] / (\text{Price of Zn in US\$/lb} * 22.046 * \text{Recovery of Zn in \%} * \text{Payable Zn in \%})$. For the purposes of the stated mineral resource estimate, prices used are Zn = \$1.15 USD/lb, Pb = \$1.00 USD/lb, Ag = \$20.00 USD/troy oz, overall average LOM recoveries for Zn, Pb and Ag are 81.5%, 84.3%, and 95.1% respectively, with payables similarly as 85.0%, 94.8%, and 85.0%. For the purposes of the modelled mine physicals, prices used are Zn = \$1.20 USD/lb, Pb = \$1.05 USD/lb, Ag = \$24.00 USD/troy oz.

Geology

WORLD CLASS PROJECT WITH SUPERIOR GEOLOGY

3 sulphide mineralization styles at Prairie Creek:

MQV (Main Quartz Vein)

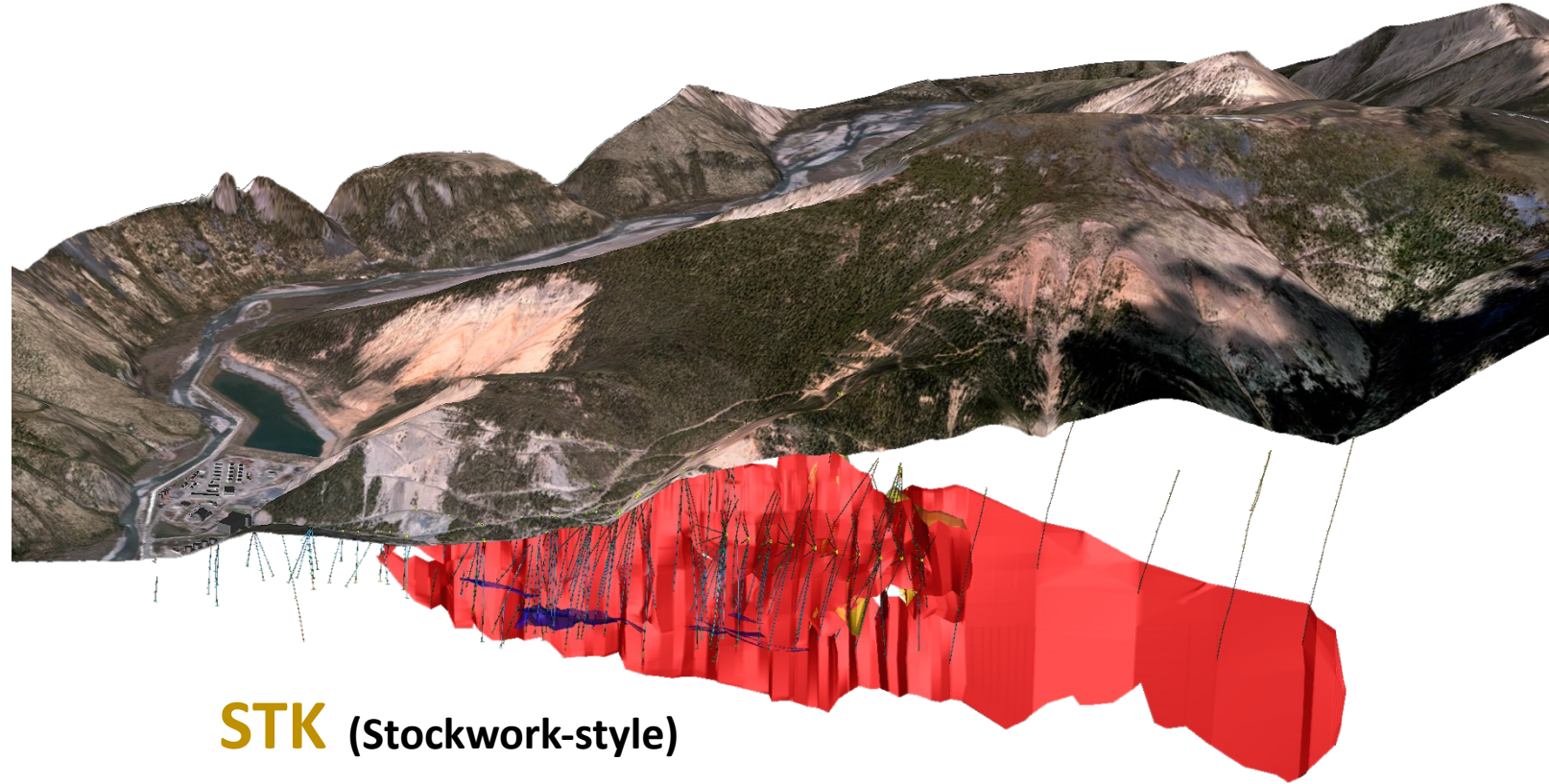
Steeply dipping 3-5m wide fault infilled with quartz carbonate dolomite, with abundant galena and sphalerite, with lesser pyrite and tennantite-tetrahedrite.

SMS (Stratabound Massive Sulphides)

Occurs as stratabound semi-massive sphalerite-galena-pyrite replacement, with typically half the lead and a third of the silver grades, and predates the MQV and STK.

STK (Stockwork-style)

Occurs as parallel vertical high-grade galena and sphalerite veins up to 60cm wide, but spaced far enough apart that in bulk, grades less than the MQV and SMS.



Main Quartz Vein

CONSISTENT ORE BODY IDEAL FOR LONG-HOLE OPEN STOPING

MQV in the
underground workings
(930 Level XC9)

Intercept > **50% ZnEq**:
5.9% Pb, 39.4% Zn and
177g/t Ag over 1.9m



Preliminary Economic Assessment (PEA)

EFFECTIVE OCTOBER 15, 2021



After-Tax Net Present Value ("NPV") (Discount Rate 8%)	\$299M
After-Tax Internal Rate of Return ("IRR")	17.7%
After-Tax Payback Period	4.8 Years
Pre-Production Capex	\$368M
Sustaining Capex and Closure Costs	\$332M
Average Annual Payable Silver	2,551 koz
Average Annual Payable Zinc	122 Mlbs
Average Annual Payable Lead	101 Mlbs
Life of Mine ("LOM")	20.3 Years
Total Resource Mined	17.2 Mt
Average ZnEq Diluted Grade of Mineral Resources Mined	17.10%
Gross Revenue After Royalty (LOM)	\$6,274M
After-Tax Free Cash Flow (LOM)	\$1,121M
Average Annual EBITDA	\$123M
C1 Costs over LOM (By-Product)	\$0.19/lb Zn
C3 Costs over LOM (By-Product)	\$0.60/lb Zn
C1 Costs over LOM (Co-Product)	\$0.73/lb ZnEq
C3 Costs over LOM (Co-Product)	\$0.92/lb ZnEq
Zinc Price - Flat (LOM)	\$1.20/lb
Lead Price - Flat (LOM)	\$1.05/lb
Silver Price - Flat (LOM)	\$24.00/oz
FX Rate (CAD:USD)	1.25

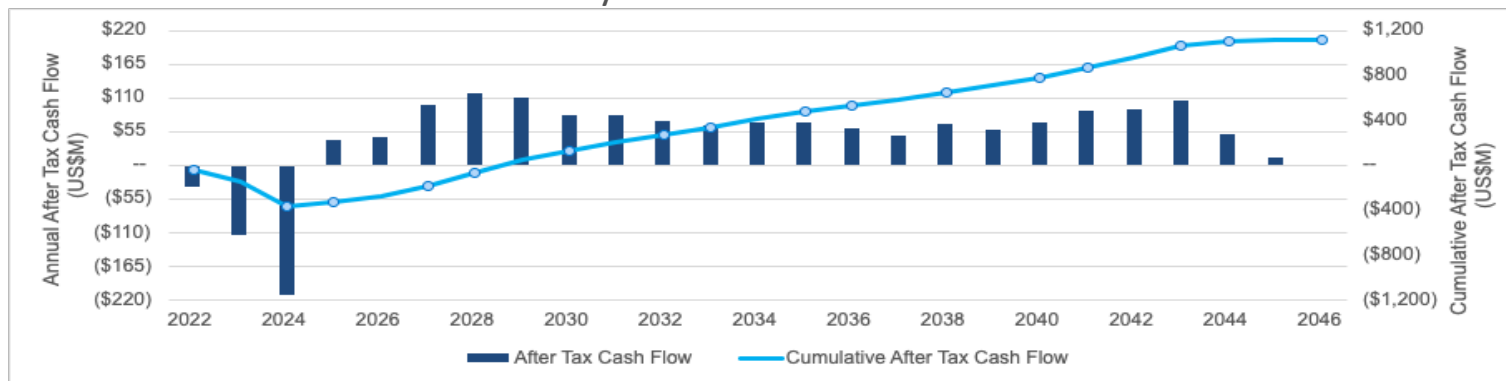
- PEA provides economic assessment for an underground mine development based on 2,400 tonnes per day
- High-grade updated Mineral Resource Estimate:
 - 9.8 Mt of Measured & Indicated Resources at 22.7% ZnEq
 - 6.4 Mt of Inferred Resources at 24.1% ZnEq
- At recent zinc spot price of approximately \$1.50/lb zinc, after-tax NPV8% increases to \$479 and IRR increases to 22.8%
- Low LOM C1 and C3 by-product costs of \$0.19/lb Zn and \$0.60/lb Zn place Prairie Creek in the lowest third of zinc mines once in operation
- Significant opportunity to improve initial costs through cost optimization

All figures in USD throughout unless otherwise stated

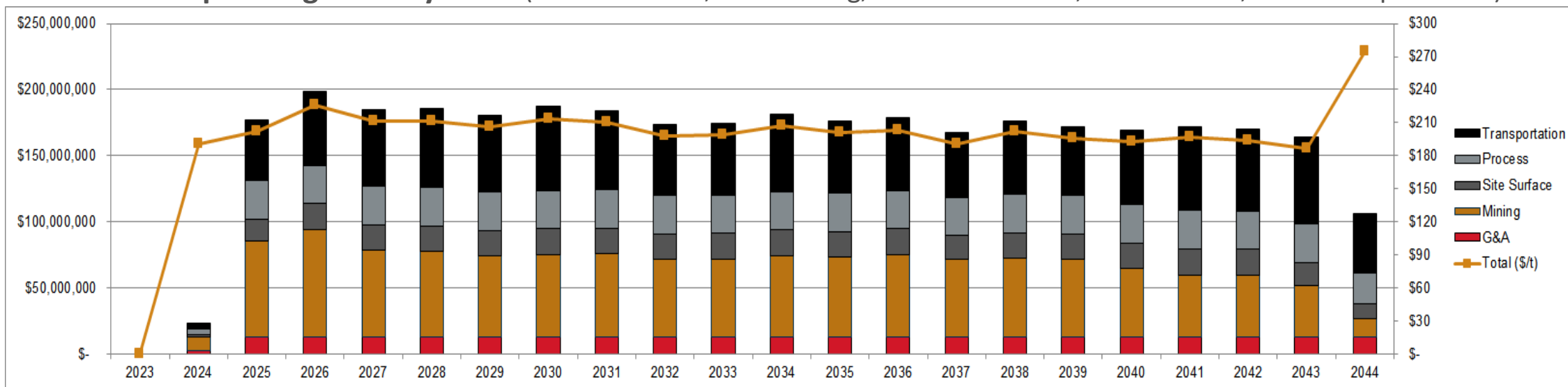
PEA Envisions 2,400 TPD Operation

STRONG AVERAGE ANNUAL CASH FLOW

Annual after tax cash flow: Payback 4.8 Years



Annual cash operating costs by area: (LOM: 7% G&A, 32% Mining, 10% Site Surface, 16% Process, 34% Transportation)

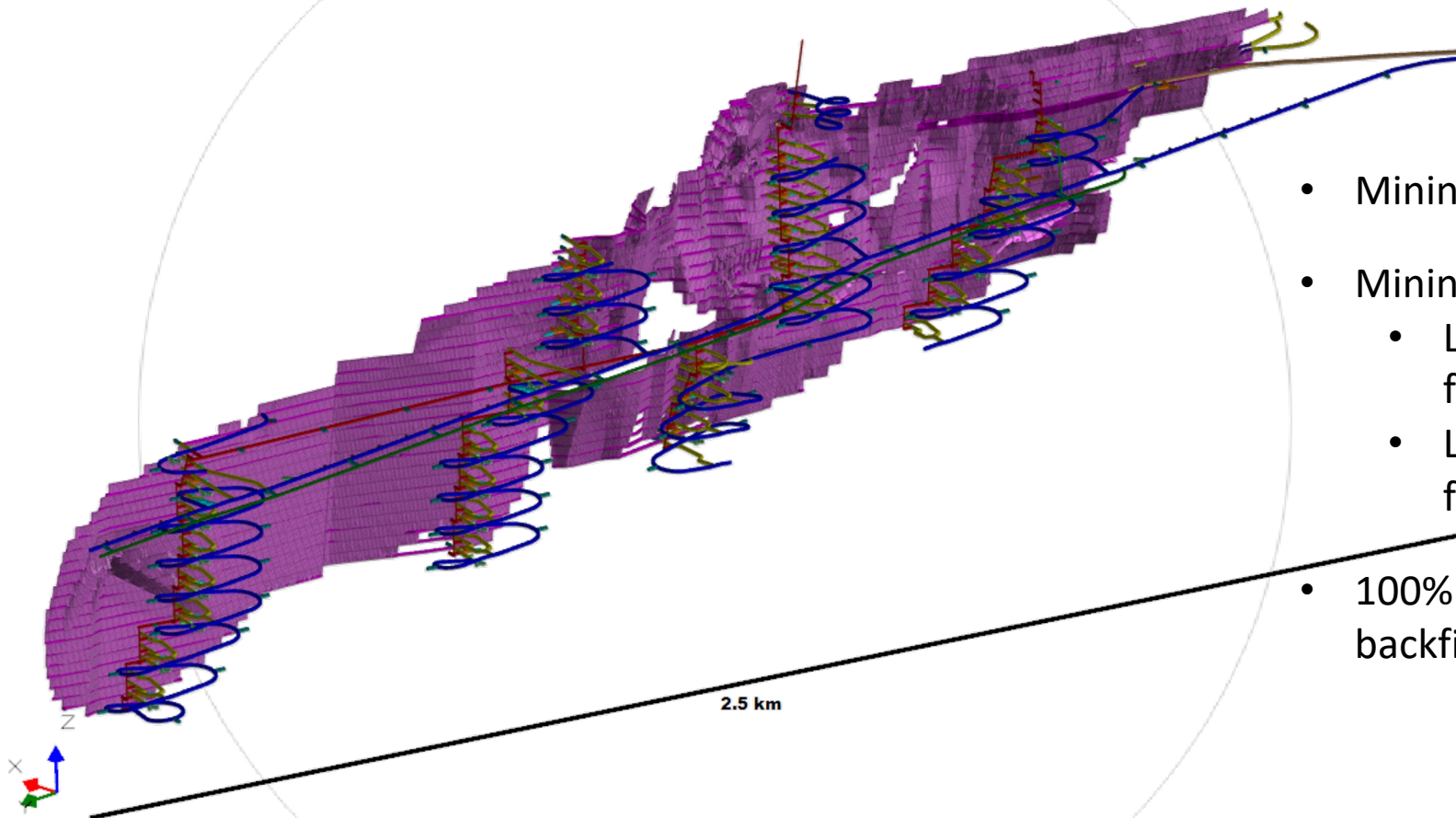


All figures in USD throughout unless otherwise stated

Conceptualized Mine Design

2,400 TDP THROUGHPUT RATE

Underground Mining Scenario



- Mining inventory of **17.2 Mt** as outlined in PEA
- Mining rate of **2,400 tpd**:
 - Longitudinal Retreat Longhole Open Stopping for MQV, STK
 - Longitudinal Retreat Uppers Stopping for SMS
- 100% of tailings returned underground as paste backfill

Management Team

AN EXPERIENCED TEAM OF MINE BUILDERS AND OPERATORS



ROHAN HAZELTON

President & CEO



Mr. Hazelton is a Chartered Professional Accountant (CPA, CA) with more than 25 years of international finance experience, 20 of those years dedicated to the mining industry. He was previously the CFO of Cerrado Gold and Ascendant Resources and also Co-founder and CEO of KORE Mining. He was one of the founding members of Goldcorp (Wheaton River) with 15 years of progressively senior positions including VP Finance, CFO Mexican Operations and VP Strategy and contributed to 5 mine builds. He was also a founding member of Wheaton Precious Minerals (Silver Wheaton). He is a graduate of Harvard University in Applied Math and Economics.

PETER PORTKA

CFO



Mr. Portka is a mining financial professional with extensive metals and mining experience in corporate finance, corporate development, public accounting and M&A advisory. He was most recently the VP Finance of Quintana Resources Capital, a US-based mining investment company and prior to that held senior positions at Sandstorm Gold and Sandstorm Metals & Energy. Mr. Portka holds Chartered Professional Accountant and Chartered Financial Analyst designations and has a Bachelor of Commerce degree from the University of British Columbia.

SCOTT FULTON

VP, Project Development



Mr. Fulton has 25 years of multi-industry experience and has spent the last 12 years in mine construction and development as a Project Manager for Wood (formerly Amec Foster Wheeler), where he executed a number of new mine builds in Canada and the US, including New Afton, Kitsault, Mount Emmons, Brucejack, Rainy River and Carlsbad East. Prior to that, he worked on significant industrial projects at Hatch. Mr. Fulton is a P.Eng. and has an honours degree in Mechanical Engineering.

CLAUDINE LEE

VP, CSR

Ms. Lee joined NorZinc in February 2021 as the VP of Corporate Social Responsibility. She was most recently Head of Health, Safety, Environment Communities and Training at Dominion Diamond Mines. In this position, she was responsible for the implementation and maintenance of Dominion's Health, Safety, Risk and Hygiene and Environment programs and policies ensuring compliance with all federal and territorial regulations. Ms. Lee holds a MSc in Geology/Environmental Geochemistry from Queen's University and an Honours BSc in Geology and Environmental Science. She started her career as an Exploration Geologist.

DAVID HARPLEY

VP, Permitting

David Harpley is currently VP Permitting, has been with NorZinc since 2004, and was responsible for obtaining permits for the Mine and All-Season Road. He is an environmental specialist with 42 years' experience. In addition to permitting, he has undertaken and managed baseline studies, impact assessments, reclamation and closure plan developments and site assessments. David has a B.Sc. in Geology and an M.Sc. in Mining and Mineral Exploration.

JOSEPH LANZON

VP, Corporate Affairs

Mr. Lanson has over 20 years of executive management experience in Mining, government regulatory approaches and in developing community partnerships with Indigenous, Federal, and Provincial governments. Mr. Lanson previously worked for the Government of Canada, assisting on two Royal Commissions. He holds both a Bachelor and master's degree in Public Administration (BPA)(MPA) and has completed the Executive Leadership Program ELP (2001) an Executive Business program at McGill university.



NORZINC

A PREMIUM MINE DEVELOPER

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