



**NEW AGE**  
—METALS INC.—

---

Q1 2024

**LEADERS IN GREEN**  
METAL EXPLORATION  
& DEVELOPMENT



Pd



Pt



Li

# DISCLAIMERS



## SAFE HARBOUR STATEMENT

This report includes forward-looking statements covered by the Private Securities Litigation Reform Act of 1995. Because such statements deal with future events, they are subject to various risks and uncertainties and actual results for fiscal year 2010 and beyond could differ materially from the Company's current expectations. Forward-looking statements are identified by words such as "anticipates," "projects," "expects," "plans," "intends," "believes," "estimates," "targets," and other similar expressions that indicate trends and future events.

## QUALIFIED PERSON STATEMENT

The information in this presentation that relates to Exploration Results or Mineral Resources at the River Valley Palladium Project is based on information compiled, reviewed or prepared by Dr. Bill Stone. Dr. Stone is a Qualified Person, as defined by National Instrument 43-101, and has reviewed and approved the technical content of this presentation.

The information in this presentation also relates to Exploration Results or Mineral Resources at Manitoba Lithium Project is based on information compiled, reviewed or prepared by Lynde Guillaume. Lynde Guillaume is a Qualified Person, as defined by National Instrument 43-101, and has reviewed and approved the technical content of this presentation.

## FORWARD-LOOKING STATEMENTS

Certain information presented, including discussions of future plans and operations, contains forward-looking statements involving substantial known and unknown risks and uncertainties. These forward-looking statements are subject to risk and uncertainty, many of which are beyond control of company management. These may include, but are not limited to, the influence of general economic conditions, industry conditions, fluctuations of commodity prices and foreign exchange rate conditions, prices, rates, environmental risk, industry competition, availability of qualified staff and management, stock market volatility, timely and cost-effective access to sufficient working capital or financing from internal and external sources. Actual results, performance, or achievements may differ materially from those expressed or implied by these forward-looking statements

# WHY NEW AGE METALS

- Diversified green commodity portfolio (PGMs & Lithium)
- 100% ownership of a multi-million ounce district scale North American Palladium asset
- Flagship project location – 100 km north east of Sudbury metallurgical complex whose major facilities have available capacity to take River Valley concentrates
- River Valley Project completed 2023 PEA
- Partnership with one of top 5 global lithium producers, Mineral Resources Limited (MRL), to explore and develop NAM's lithium division. 2023/24 budget: \$7 million including 15,000m diamond drilling.
- Partnership with Australian junior miner Native Mineral Resources on McLaughlin Lake Project in Northern Manitoba.
- Excellent exploration upside across the Company's project portfolio
- Company's Price to Net Asset Value presents an enticing entry point for new investors.
- Seeking partnership for 2 Northern Manitoba Lithium properties and Alaska PGM Cu-Ni Project.

Q1 2024



NAM GEOLOGISTS AT TRENCH 8 NORTH OF DANA NORTH ZONE



# TWO DIVISIONS, ONE GREEN, CRITICAL METAL FOCUS



## PLATINUM GROUP METALS DIVISION



RIVER VALLEY PALLADIUM  
PROJECT  
ONTARIO, CAN



GENESIS PGM-COPPER-  
NICKEL PROJECT  
ALASKA, USA

## LITHIUM DIVISION



LITHIUM AND RARE  
ELEMENT PROJECTS  
MANITOBA, CAN

# CORPORATE OVERVIEW

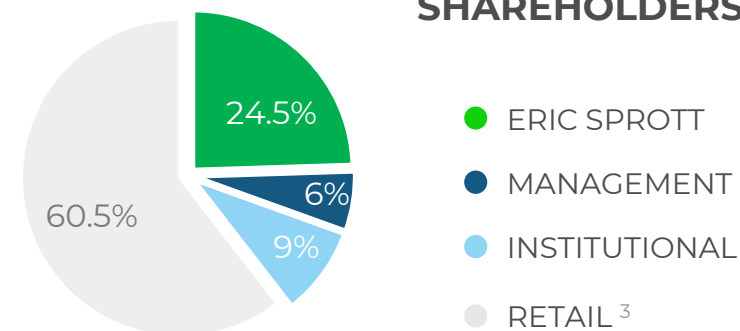


## CAPITAL STRUCTURE

222,137,002	ISSUED & OUTSTANDING
5,983,331	OPTIONS
32,116,675	WARRANTS <sup>1</sup>
260,237,008	FULLY DILUTED

\$9,996,165	MARKET CAP (CAD)
\$0.045	SHARE PRICE <sup>2</sup>

## SHAREHOLDERS



## CASH POSITION

JAN 2024    ~\$3,700,000

<sup>1</sup> avg. price \$0.15    <sup>2</sup> as of 18th Jan 2023

<sup>3</sup> approx. 3,000 shareholders

# BOARD OF DIRECTORS



## HARRY BARR

CHAIRMAN & CEO

Founder, Chairman and CEO of International Metals Group

30+ years of experience in the mining industry, focus on acquisition, finance and development of mineral projects on international scale

Oversaw over 300 option/joint venture agreements with major, mid-tier, and junior mining companies

## JOHN LONDRY

DIRECTOR

Held senior positions with Camflo, Noranda Exploration, Hemlo Gold Mines, and Battle Mountain Gold

30 years of experience in both the finance and mineral industries

Received his B.Sc. and M.Sc. degrees in Geology from the University of Windsor

## COLIN BIRD

DIRECTOR

30+ years of international experience in developing, financing, operating and managing nickel, copper, gold and coal mines

A UK-chartered mining engineer

Currently serving as Non-Executive Chairman of Jubilee Metals Group, Executive Chairman of Xtract Resources, Galileo Resources, Bezant Resources and Tiger Royalties and Investments

## RON HIEBER

DIRECTOR

Former head of worldwide exploration for Anglo Platinum

Internationally recognized expert in Platinum Group Metals

Geology graduate of Rhodes University, South Africa; PGM Specialist

## CHRIS BERLET

DIRECTOR

Currently serving as the President & CEO, Director of Canuc Resources, and Stakeholder Gold Corp.

30 years of experience in both finance and the mineral industries

Graduate of Mining Engineering from Queen's University (Canada); Diploma in Accounting & Finance from London School of Economics and Political Science (UK); CFA Charter Holder (USA)

# NEW AGE **LEADERSHIP**



## **HARRY BARR**

CHAIRMAN & CEO

## **ROBERT GUANZON**

CFO

## **CHARLOTTE BROWN**

CORPORATE SECRETARY

## **GORDON CHUNNET, B.Sc.**

PGM SPECIALIST, ADVISOR

## **RICHARD ZEMOROZ**

PROJECT GEOLOGIST

## **FARID MAMMADOV**

MARKETING & COMMUNICATIONS

## **BILL STONE, Ph.D., P. Geo.**

CONSULTING GEOSCIENTIST, PGM SPECIALIST

## **Axiom Exploration.**

CONSULTING GEOSCIENTISTS; LITHIUM, RARE METALS SPECIALISTS

## **CURT FREEMAN**

CONSULTING GEOLOGIST

## **ALI HASSANALIZADEH, M.Sc., P. Geo., MBA**

ADVISORY BOARD, CONSULTING GEOLOGIST

## **FARAZ RASHEED, B. Eng**

BUSINESS DEVELOPMENT

# COMMUNITY **ENGAGEMENT**



## **ABORIGINAL COMMUNITY RELATIONS**

NAM has established strong relationships with aboriginal communities in Ontario and Manitoba



## **EXPLORATION AGREEMENTS**

NAM has long standing agreements with the Temagami First Nation (2014) and the Nipissing First Nation (2022) in Ontario and the Sagkeeng First Nation (2018) in Manitoba, that provide a framework for consultation and collaboration through the exploration and development of our projects



## **CAPACITY BUILDING**

NAM has provided training and employment to aboriginal community members throughout the exploration phases of work at our projects







Areal View of Dana North Outcrops and Access Road– View Looking westwards

## PLATINUM GROUP METALS DIVISION

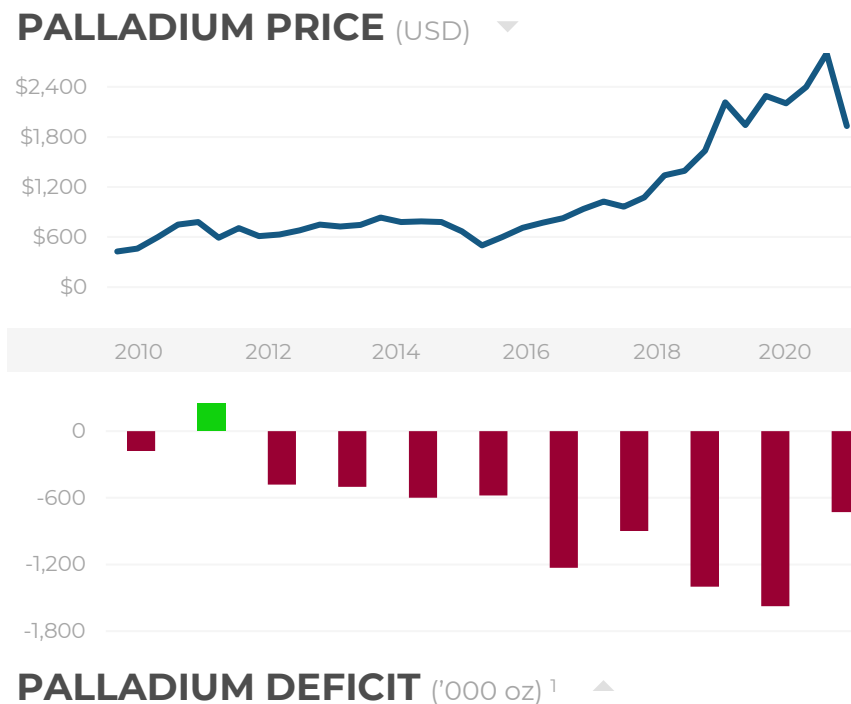


Pd

Pt

Rh

# PALLADIUM (Pd) MARKET



Pd in supply deficit since 2012



Auto industry demand ~85%.  
Temporary auto chip shortage  
decreasing demand for Pd.  
Recovery expected in H2 2022<sup>2</sup>



Pd more valuable than gold



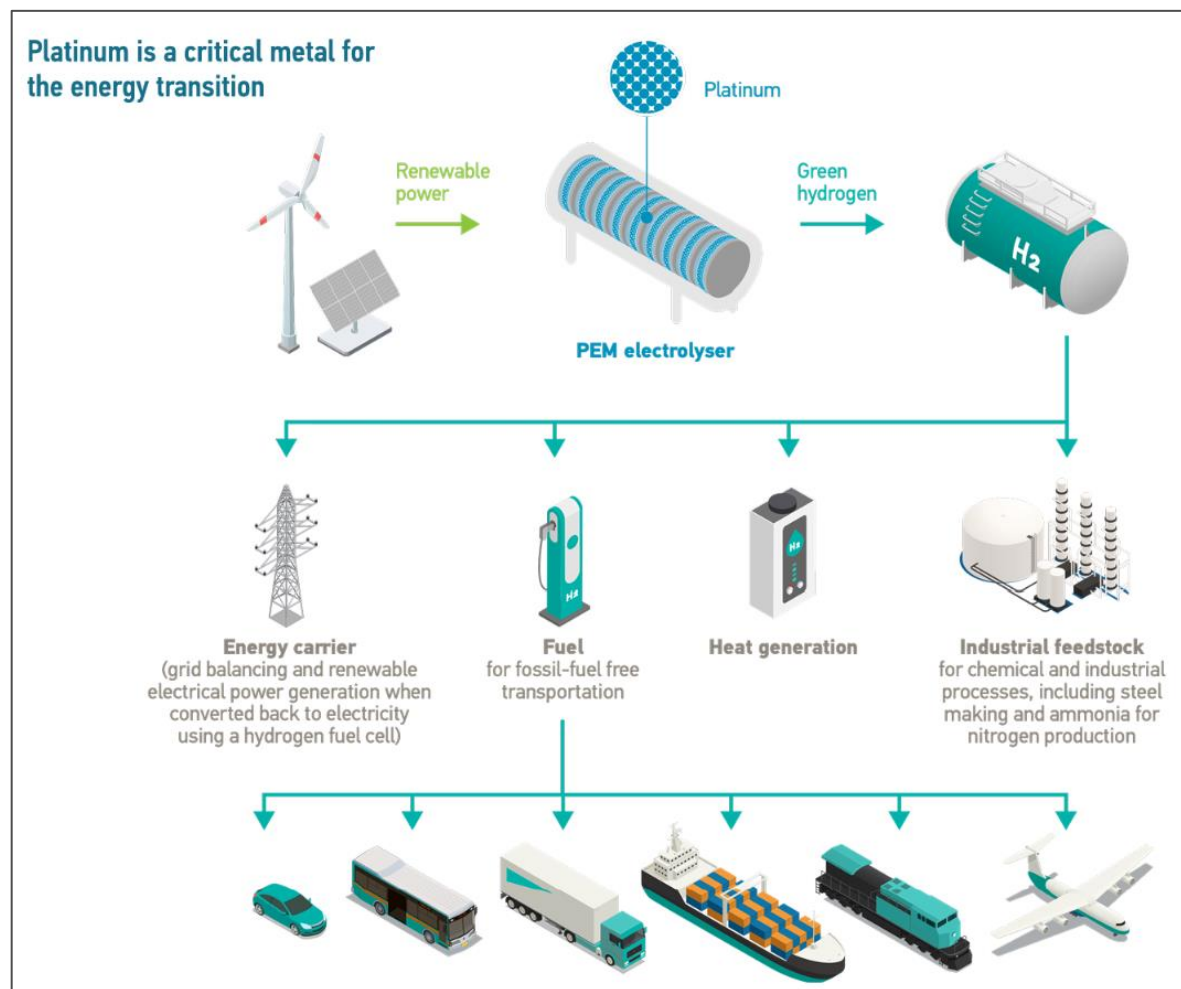
More emissions legislation  
gives favourable outlook



Russia accounts for 40% Of  
global Pd exports. Western  
countries seek alternative Pd  
supply channels

sources: <sup>1</sup>Johnson Matthey, Metals Focus, <sup>2</sup>SFA Oxford Palladium Standard 2021

# The Future Hydrogen Economy



WPIC 2023

11

# RIVER VALLEY **PALLADIUM** PROJECT



Located 100 road-km  
from Sudbury, Ontario



Long-established, world-  
class Ni-Cu (PGM) mining  
district



Major mineral processing  
& metal recovery facilities





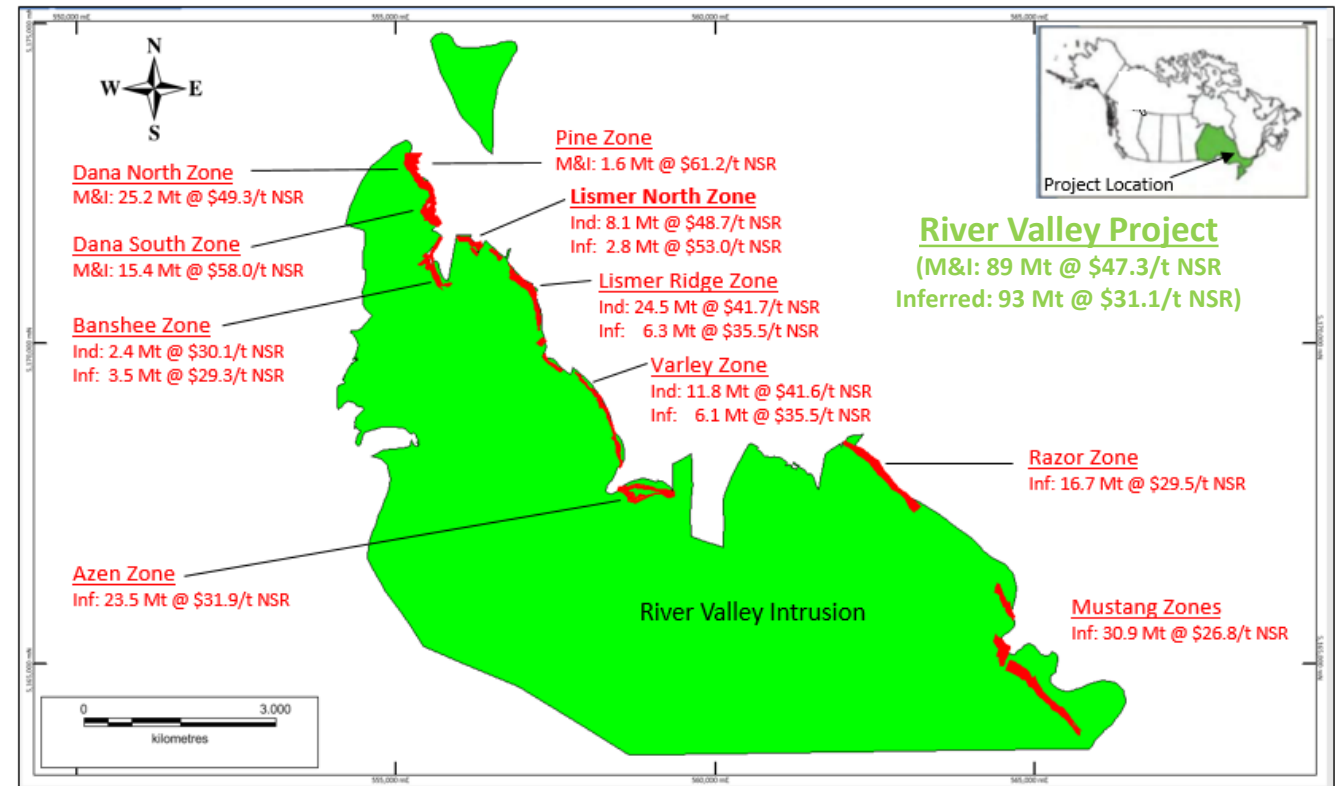
# RIVER VALLEY PROJECT OVERVIEW

## FACTS<sup>1</sup>

<b>Primary Metals:</b>	Pd, Pt, Cu
<b>Project Stage:</b>	Completed PEA Summer 2023
<b>Location:</b>	near City of Sudbury, Ontario
<b>Mineral Resources:</b>	2.25 Moz Pd+Pt+Au (M+I) & 1.7 Moz (Inf.) (updated October, 2021)
<b>Land Position:</b>	107 km <sup>2</sup> (includes 2 Mining Leases)
<b>Diamond Drilling:</b>	733 holes totalling >155,00 metres
<b>Ownership:</b>	100% NAM (subject to 3% NSR)

## UPCOMING MILESTONES

- 2023 Preliminary Economic Assessment completed
- PLATSOL leaching test work program
- 2024 drill exploration program



Mineralized zones of the giant River Valley Palladium Project, near Sudbury, Ontario

# 2021 UPDATED MINERAL RESOURCE ESTIMATE SUMMARY



**1,568,300** oz  
PALLADIUM M+I<sup>1</sup>

**1,073,700** oz  
INFERRED



**606,400** oz  
PLATINUM M+I

**480,600** oz  
INFERRED



**53,800** oz  
RHODIUM M+I

**43,700** oz  
INFERRED



**114.7** Mlbs  
COPPER M+I

**88.1** Mlbs  
INFERRED



**106,700** oz  
GOLD M+I

**94,200** oz  
INFERRED



**759,800** oz  
SILVER M+I

**756,000** oz  
INFERRED

<sup>1</sup> Measured + Indicated Mineral Resources

\*see Appendix (slide 28) for full results summary

# River Valley 2023 Preliminary Economic Assessment



- Pre-Tax NPV(5%): \$296M; After-Tax: \$140M
- Pre-Tax IRR: 16%; After-tax IRR: 11%
- Annual Production: 2.5 Mt of potential process plant feed at an average grade of 1.19 g/t PdEq and process recovery of 71.5%, resulting in an average annual payable Pd production of 47,400 oz.
- Total Tonnes Processed over Life of Mine: 38.6 Mt/16 years
- Pre-production Capital Requirement: \$269M
- Average Unit Operating Cost: \$30.98/t
- Assumed US\$ Metal Prices: \$2,150/oz Pd, \$1,050/oz Pt, \$1,830/oz Au, \$4.00/lb Cu
- River Valley Process Plant Feed: Treated in an on-site conventional sulphide flotation plant to produce a saleable PGM-enriched Cu concentrate for transport off-site for smelting and refining
- Project Enhancement Opportunities: Increased metal recoveries and expanded Mineral Resources

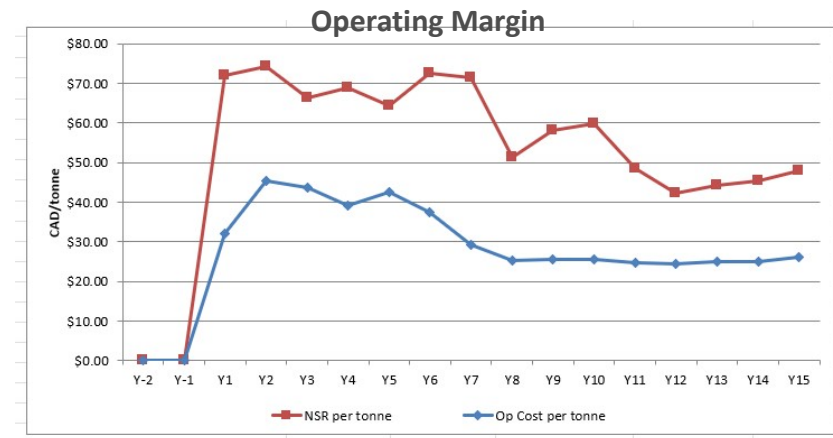
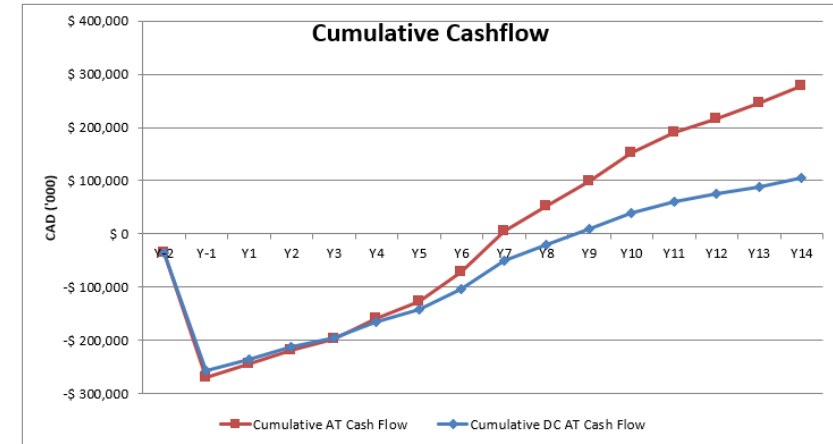
# 2023 PEA Results

## Financial Metrics

- **Pre-Tax NPV(5%):** \$296M; **After-Tax:** \$140M
- **Pre-Tax IRR:** 16%; **After-Tax IRR:** 11%
- **Pre-Production CAPEX:** \$269M
- **Average Unit OPEX:** \$31/t (value = \$71.4/t NSR)
- **Metal Prices:** \$2,150/oz Pd, \$1,050/oz Pt, \$4/lb Cu

## Physical Metrics

- **Annual Production:** 2.5 Mt process plant feed
- **Average Grade:** 1.19 g/t PdEq
- **Process Recovery:** 71% Pd
- **Annual Payable Metal:** 47,400 oz Pd
- **Total Tonnes Processed:** 38.6 Mt
- **Life of Mine:** 16 years



*The PEA suggests RVP could make money operationally, but would struggle to payback CAPEX*



# New PEA: Site Layout Plan

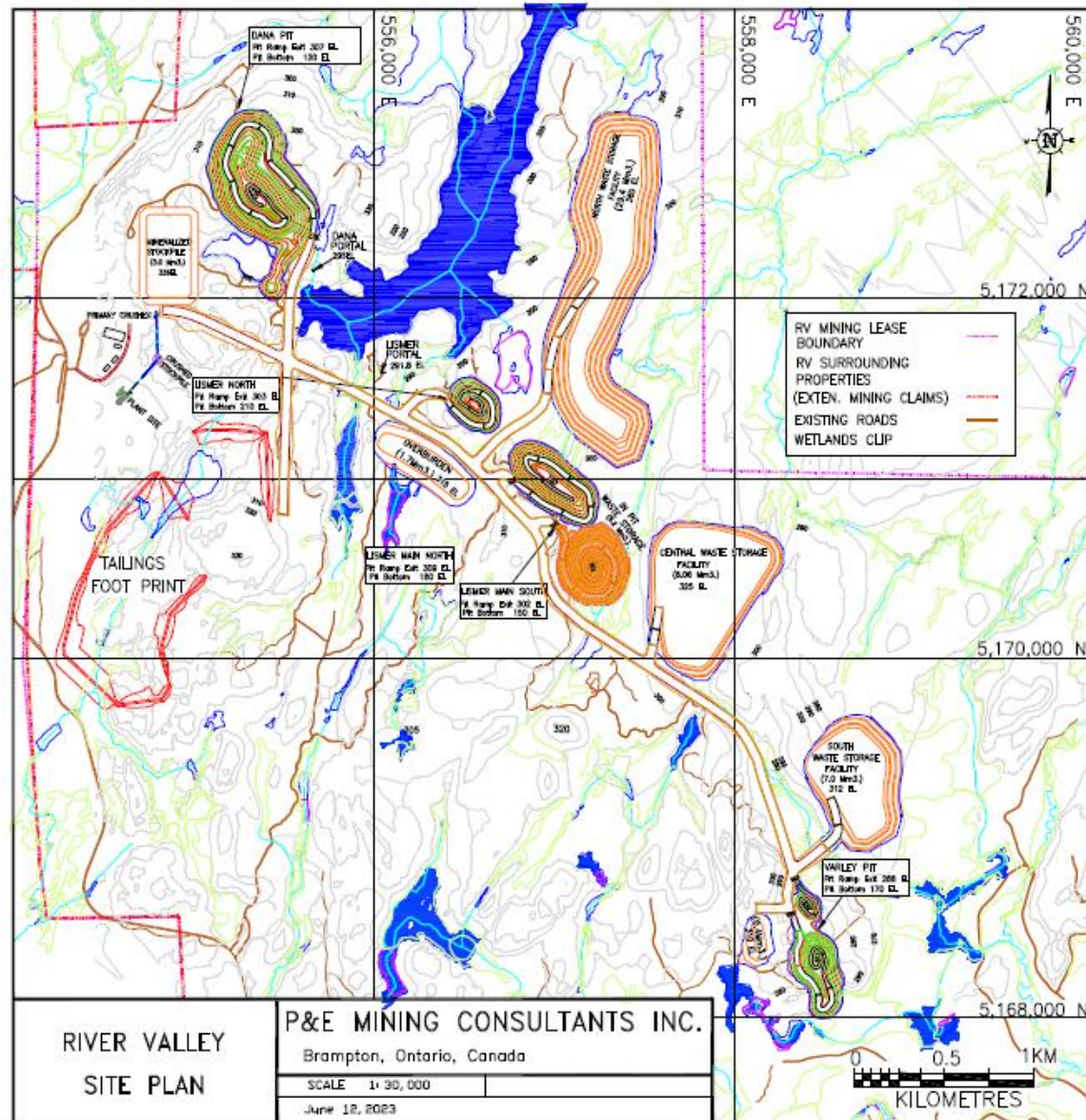


## Project Components

- 5 OP Mines
- 2 UG Mines
- 3 Waste Rock Piles
- 1 Overburden Pile
- 1 Stockpile
- 1 Tailings Facility
- 1 Processing Plant

## Compared to 2019 PEA

- Smaller operation
- Lower CAPEX
- Reduced environmental footprint





# RIVER VALLEY PROJECT **GO-FORWARD** PLAN

- Follow-up on PEA recommendations for permitting and Feasibility-level studies
- PLATSOL proof-of-concept study to improve recovery of PGMs
- Continue community consultations and engagements
- Complete planned exploration programs and rhodium distribution study





# Project Value Enhancement Opportunities

1. Improve Metals Recoveries
2. Increase Mineral Resources
3. Continue Environmental Studies



# 1. Improve Metal Recoveries

## Sulphide Flotation Recoveries at RVP

- 71% Pd, 57% Pt, 86% Cu
- Bulk Cu Concentrate: >100 g/t Pd + Pt, 13% Cu
- Viewed by smelters as a low-value product

## PLATSOL™

- High-pressure high-temperature acid leach and solvent extraction technique
- Optimized for PGM recovery from low-grade, polymetallic sulphide concentrates, like RVP
- PGM and Cu recoveries  $\geq 90\%$  in laboratory testwork on PGM-bearing concentrates from elsewhere
- High-value, direct to refinery product
- No smelter, reduced transport costs
- Technology proven at laboratory scale, but not yet scaled-up to commercial operation

## Next Steps

- Complete Proof-of-Concept PLATSOL™ Study on RVP mineralized material
- At SGS Canada Inc. (Lakefield facility) with guidance from D.E.N.M. Engineering
- Timeframe = 2 months (completed December 2023)



# PLATSOL™: What is it?

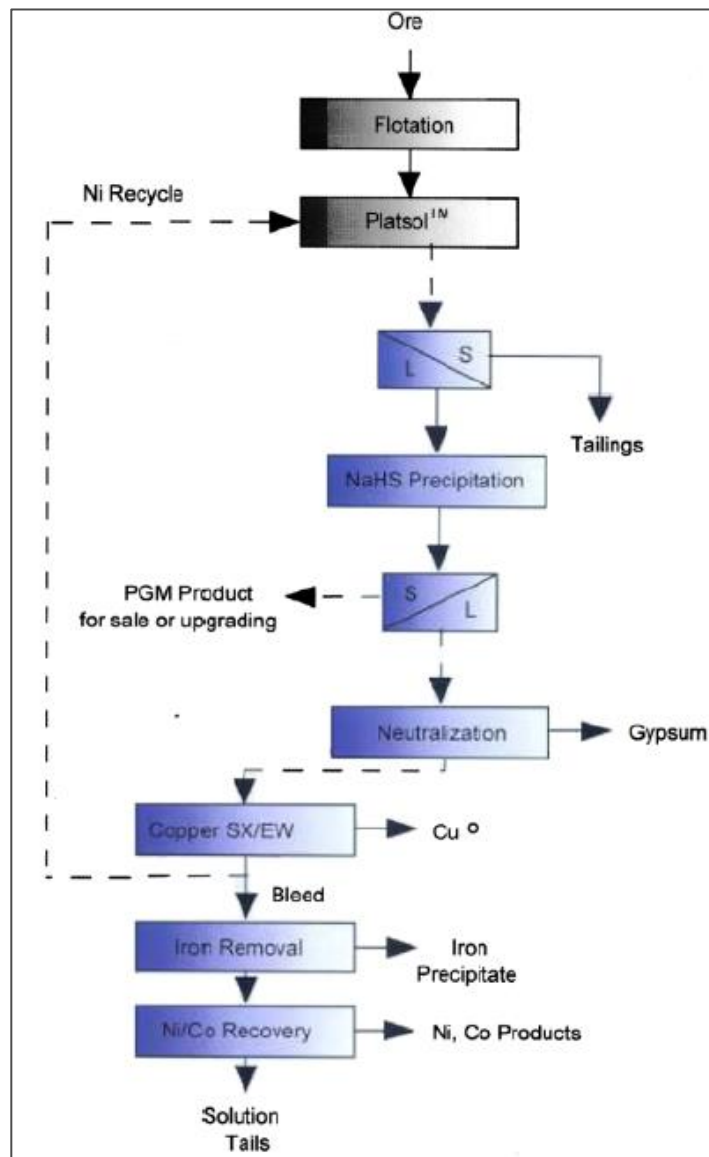


CCD circuit used to do solid liquid separation after pilot-scale leaching.

**Source:** SGS Mineral Services. 2022. PLATSOL™ process provides a viable alternative to smelting. Technical Services Paper 2002-01. 5 pages.



Conceptual Plant (Outotec)



Conceptual flowsheet for gold, PGM and base metal recovery from sulphide concentrate.

## 2. Increase Mineral Resources

### Goals

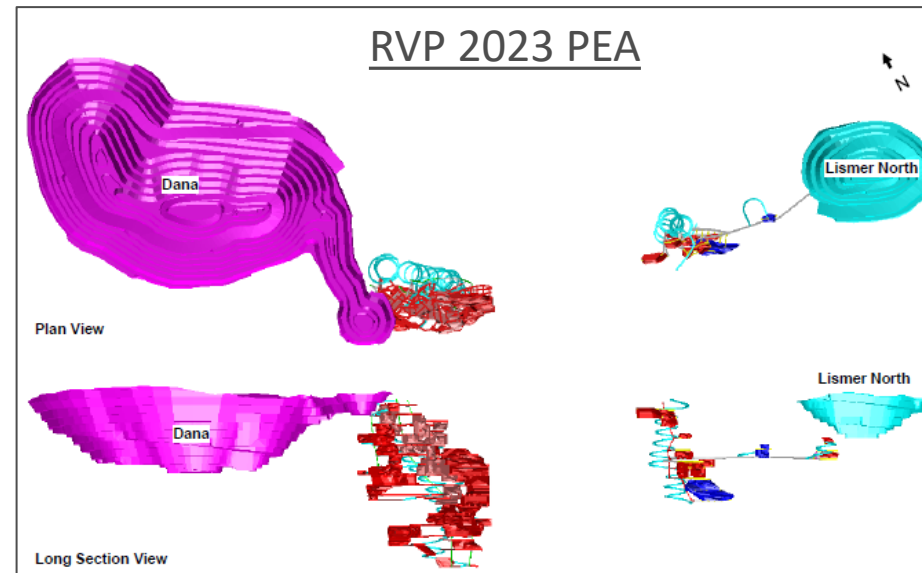
- Double size of higher-grade Measured & Indicated Mineral Resources; and
- Build-up Mineral Resources for UG mining

### Drill Targets

- Dana South Zone
- Lismer North Zone
- Varley Zone (south part)

### When

- Subject to financing



Dana South UG extends to approximate depth of 420 m below surface

# PGM EXPLORATION TARGETS



Many IP anomalies similar to pine zone extend NE<sup>1</sup> & SW<sup>2</sup> from footwall contact



Priority exploration targets detected in IP geophysical surveys over footwall



Palladium targets located adjacent to existing mineral resources (zones) and potential open pit locations



Possible magmatic feeder zones and structural offsets



Additional 12 km of IP remains to be completed, in order to identify new targets for drill testing

# 3. Continue Environmental Studies

- **Purpose:** For future permitting

## Hydrology & Water Monitoring Studies

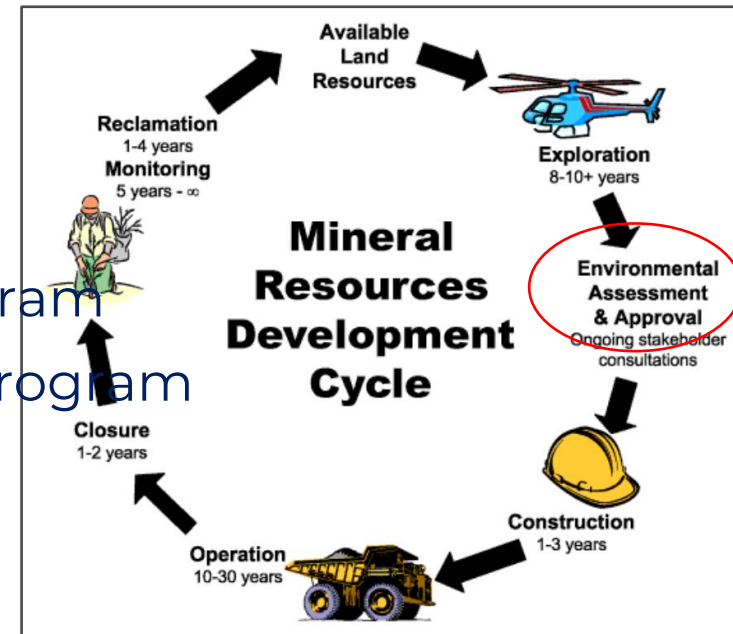
- Story Environmental
- First Nations

## Next Steps

- Plan and execute Fall 2023 Program
- Plan and execute Spring 2024 Program

## PLATSOL™

- Environmental considerations
- Possible plant location(s)





# GENESIS PGM-Cu-Ni PROJECT



100% OWNED



3 KM FROM HIGHWAY & ELECTRIC TRANSMISSION LINE



KNOWN PGM-Cu-Ni MINERALIZATION COVERS 9 KM. **FALL 2021 SURFACE SAMPLING AND MAPPING PROGRAM**



**SEEKING EXPLORATION AND DEVELOPMENT OPTION/JV PARTNER**



DRILL-READY PGM-Cu-Ni REEF STYLE TARGET: 2.4 G/T PD, 2.4 G/T PT, 0.96% NI AND 0.58% CU IN SURFACE GRAB SAMPLES

## LITHIUM DIVISION



Li

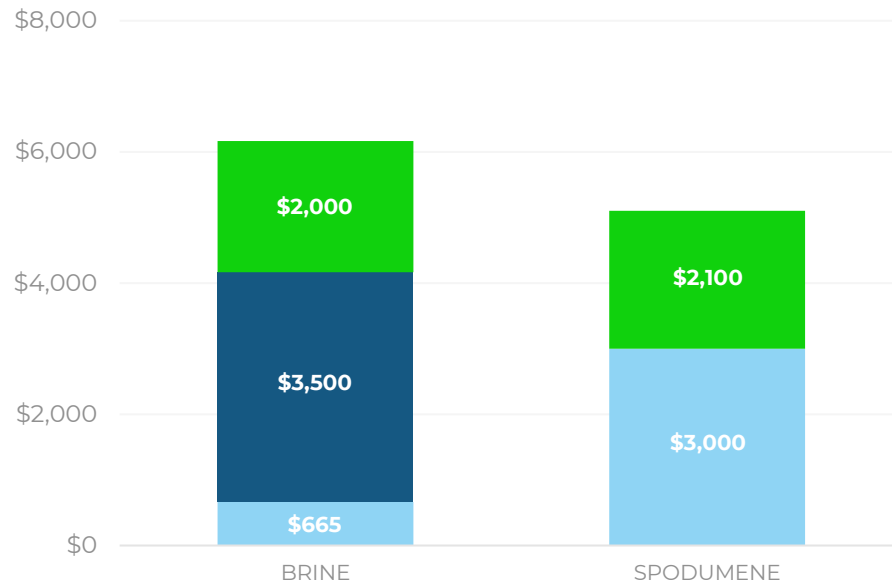


SPODUMENE-LEPIDOLITE SURFACE MINERALIZATION AT LITHIUM ONE PROJECT



# SPODUMENE SUPERIORITY

## BRINE VS. SPODUMENE COST COMPARISON <sup>1</sup>



● raw material ● carbonate conversion ● hydroxide conversion



LiOH CATHODE BATTERIES HAVE BETTER ENERGY DENSITY, LIFE CYCLE AND SAFETY



SPODUMENE IS PREFERRED FEEDSTOCK FOR ELECTRIC VEHICLE MANUFACTURERS



SPODUMENE IS A LOWER COST SOURCE FOR LITHIUM HYDROXIDE VS. BRINE



~60% OF GLOBAL LITHIUM PRODUCTION IS FROM SPODUMENE VS. 40% FROM BRINE



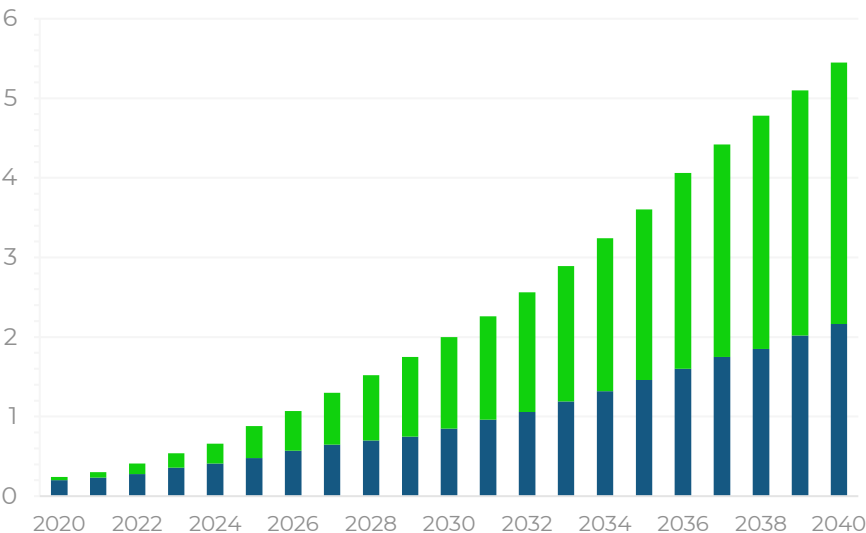
“LITHIUM EXTRACTED FROM MINING...IS MORE STABLE TO EXTRACT, EASIER TO SCALE AND GENERALLY MORE SUSTAINABLE.”

VW, 2019

<sup>1</sup> source: McKinsey & Co. (2025 costs, typical South American brine vs. typical Western Australian spodumene)

# LITHIUM HYDROXIDE DEMAND

**LITHIUM DEMAND BY TYPE** <sup>1</sup> (M TONNES/Y LCE <sup>2</sup>)



LITHIUM HYDROXIDE REQUIRED IN HIGH-NICKEL MATERIALS FOR LONG-RANGE EVs



21% PROJECTED COMPOUND ANNUAL GROWTH IN LiOH DEMAND



LiOH SHORTAGES EXPECTED BY 2025

● Lithium Carbonate ● Lithium Hydroxide (LiOH)

<sup>1</sup> source: Benchmark Mineral Intelligence

<sup>2</sup> Lithium Carbonate Equivalent

# NAM LITHIUM PROJECTS



14 100%-OWNED PROJECTS, 3 DRILL-READY



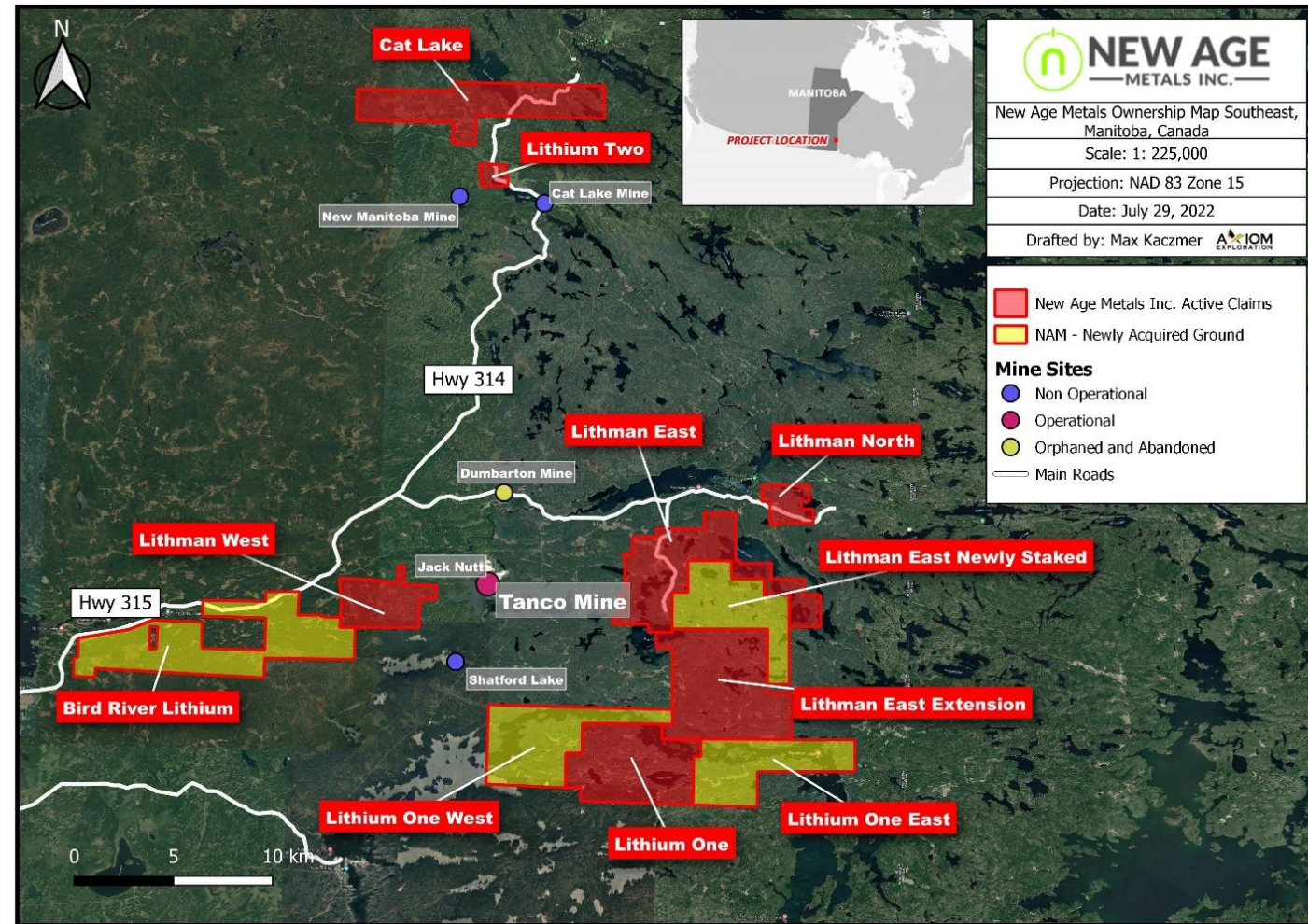
LARGEST REGIONAL CLAIM HOLDER: 21,611 HECTARES IN SOUTHEASTERN MANITOBA. TOTAL HOLDING 74,448 HECTARES



JOINT VENTURE WITH MINERAL RESOURCES AND TERM SHEET WITH NATIVE MINERAL RESOURCES



3 NEWLY ACQUIRED 100% OWNED LITHIUM PROJECTS IN NORTHERN MANITOBA





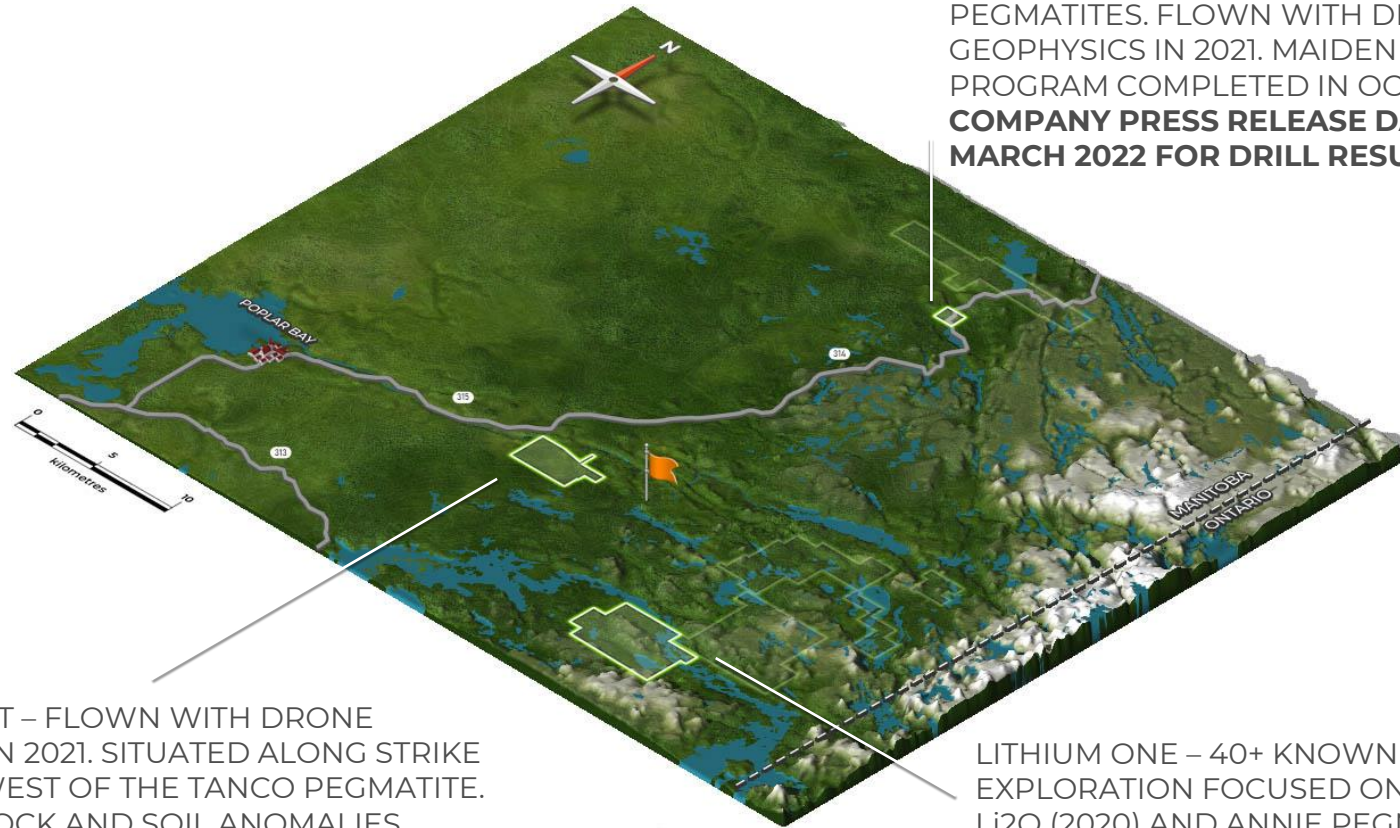
# New Age Metals – Mineral Resources Limited

## Joint Venture Agreement



- NAM has entered into a binding term sheet with Australian lithium and iron ore producer, Mineral Resources Limited (MRL) in 2021.
- MRL has the right to acquire an initial 51% interest by completing C\$4,000,000 of exploration activities and C\$400,000 in cash payments within 42 months from the Effective Date
- MRL can earn an additional 14% interest (65%) by completing a NI 43-101 compliant mineral resource estimate and PFS
- MRL can earn an additional 10% interest (75%) by funding the Project to the point of a final construction decision made by MRL
- NAM will act as the field manager and in return, receive a management fee

# DRILL-READY LITHIUM PROJECTS



LITHIUM TWO – HISTORICAL RESOURCE OF 544,000 TONNES AT 1.4%  $\text{Li}_2\text{O}^1$ . 3 KNOWN PEGMATITES. FLOWN WITH DRONE GEOPHYSICS IN 2021. MAIDEN DRILL PROGRAM COMPLETED IN OCTOBER 2021. **SEE COMPANY PRESS RELEASE DATED 30 MARCH 2022 FOR DRILL RESULTS.**

LITHMAN WEST – FLOWN WITH DRONE GEOPHYSICS IN 2021. SITUATED ALONG STRIKE AND TO THE WEST OF THE TANCO PEGMATITE. NUMEROUS ROCK AND SOIL ANOMALIES WARRANT DRILLING.

LITHIUM ONE – 40+ KNOWN PEGMATITES, EXPLORATION FOCUSED ON SILVERLEAF (4.1%  $\text{Li}_2\text{O}$  (2020) AND ANNIE PEGMATITES (0.6%  $\text{Li}_2\text{O}$  (2018))

# MANITOBA GO-FORWARD **EXPLORATION** PLAN



## 2023/2024 - Budget of \$7 million funded by MRL

- Mapping – Complete updated property bedrock geology maps with detailed structural analysis of pegmatite distribution and internal zonation.
- Lithogeochemistry – Property wide rock sampling to gather geochemical data on identified targets and develop future drill target.
- Mobile Metal Ion (MMI) Soil Geochemistry – Targeted sampling grids to identify pegmatite extensions and anomalous areas where surficial cover prohibits bedrock analysis
- Biogeochemistry - Targeted sampling grids to identify pegmatite extensions and anomalous areas where the terrain does not permit MMI soil sampling
- The main objective is to define and prioritize drill targets and bring additional projects to a drill ready stage in an effort to establish an economically exploitable lithium deposit in close proximity to Tanco Mine.
- 15,000 meters of diamond drilling slatted for winter 2024





# OVERVIEW OF NEWLY ACQUIRED PROPERTIES

- **Mclaughlin Lake – 19,321 ha Mineral Exploration License**

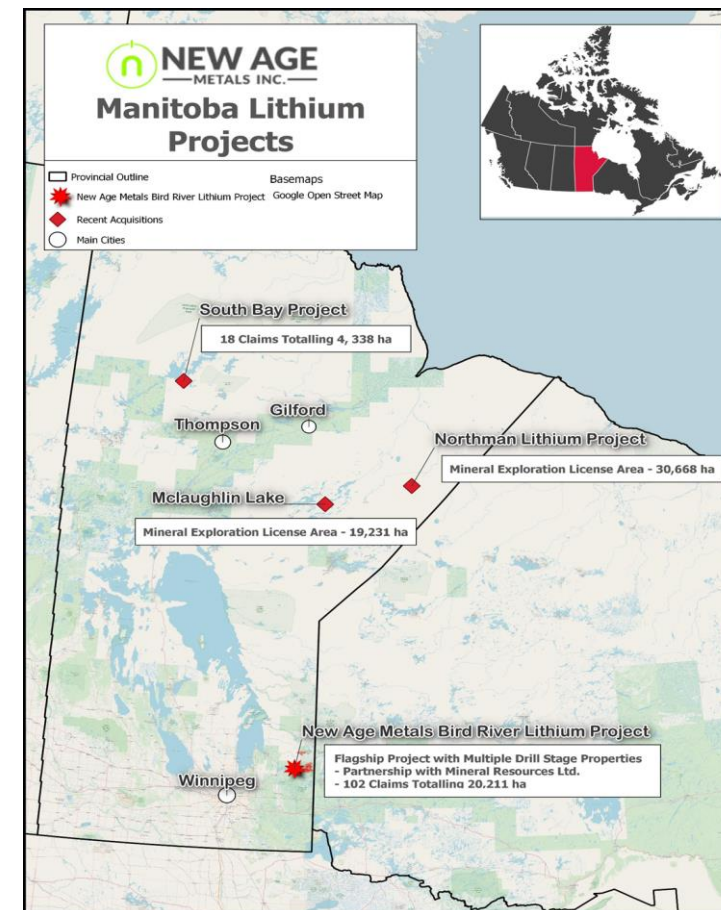
- ▶ Under term sheet agreement with Native Mineral Resources
- ▶ Multiple mapped Lithium bearing pegmatites with Spodumene and/or Lepidolite
- ▶ Spodumene bearing dyke has reported surface exposure of 400 m strike length and varies in width from 1.2 to 2.2 m
- ▶ A channel sample, across the dyke, assayed 1.32 per cent Li<sub>2</sub>O over a width of 1.52 m (Barry, 1962).
- ▶ Two representative grab samples from a second smaller dyke assayed 2.87 and 0.98 per cent Li<sub>2</sub>O (Barry, 1962).

- **South Bay Lithium Project– 4,300 ha Physical Claims**

- ▶ Established Infrastructure: Intersected by all weather road (PR493) and powerline. Lies 65 km east of mining friendly town Leaf Rapids with the nearby historic Ruttan Deposit (Zn-Cu)
- ▶ Limited exploration has uncovered an extensive swarm of rare-metal bearing pegmatites
- ▶ Samples from the area have graded up to 1.75% Cs<sub>2</sub>O indicating a fractionated system with a high potential for associated Lithium and Tantalum
- ▶ 2019 Assessment Report concluded that the complex pegmatite is anomalous to significantly enriched in Ta, N, B, Cs, Li, Rb, and Be

- **Northman Lithium Project – 30,668 ha Mineral Exploration License**

- ▶ Along shear zone that hosts extremely fractionated pegmatites
- ▶ Proximal Red Cross Lake Pegmatites assayed up to 1.25% Li<sub>2</sub>O and 2.86% Cs<sub>2</sub>O (LPG pegmatite) and 2.97% Li<sub>2</sub>O (SPC pegmatite)
- ▶ Large mapped Leucogranite intrusion with spodumene + qtz replacing petalite



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- Seeking partnership for 2 Northern Manitoba Lithium properties and Alaska PGM Cu-Ni Project.

Q1 2024



NAM GEOLOGISTS AT TRENCH 8 NORTH OF DANA NORTH ZONE



# THANK YOU

FOR MORE INFORMATION CONTACT US AT :



1-613-659-2773



[info@newagemetals.com](mailto:info@newagemetals.com)

SIGN UP TO RECEIVE COMPANY UPDATES :



<https://newagemetals.com/join>



# APPENDIX

# MINERAL RESOURCE ESTIMATES 2021

Pit Constrained Cut-off = CDN\$15/t NSR and Out-Of-Pit = CDN\$50/t NSR Cut-offs

	Tonnes '000	Pd g/t	Pt g/t	Rh g/t	Au g/t	Cu%	Ni%	Co%	NSR (C\$/t)
Measured	15,488	0.70	0.25	0.02	0.05	0.07	0.02	0.003	59.54
Indicated	74,152	0.51	0.20	0.02	0.04	0.06	0.01	0.002	45.08
Measured + Indicated	89,640	0.54	0.21	0.02	0.04	0.06	0.01	0.002	47.58
Inferred	94,268	0.35	0.16	0.01	0.03	0.04	0.02	0.002	31.69

	Pd Moz	Pt Moz	Au Moz	Cu Mlbs
Measured	0.347	0.122	0.022	23.70
Indicated	1.221	0.484	0.084	91.00
Measured + Indicated	1.568	0.606	0.106	114.7
Inferred	1.073	0.480	0.094	88.1

## NOTES



1. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
2. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
3. The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could potentially be upgraded to an Indicated Mineral Resource with continued exploration.
4. The Mineral Resources were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council. Numbers may not add exactly due to rounding.
5. The Mineral Resource Estimate is based on US\$ metal prices of \$1,850/oz Pd, \$900/oz Pt, \$1,600/oz Au, \$3.00/lb Cu, \$16/lb Co, \$6.50/lb Ni, \$8,000/oz Rh, \$18.50/oz Ag. The US\$:CDN\$ exchange rate used was 0.75.
6. The NSR estimates use flotation recoveries of 80% for Pd, 80% for Pt, 80% for Au, 85% for Cu, 25% for Co, 90% for Ni, 80% for Rh and 65% for Ag and smelter payables of 80% for Pd, 80% for Pt, 85% for Au, 85% for Cu, 50% for Co, 90% for Ni, 80% for Rh and 65% for Ag.
7. The pit optimization used a mining cost of \$2.25/t mined, combined processing and G&A costs of CDN\$15/t, and pit slopes of 50°. The out-of-pit Mineral Resources used underground mining, processing and G&A cost of CDN\$50/t.

# Mineral Resources **Limited** – Corporate Overview



- Mineral Resources was established in July 2006 when pipeline manufacturing and contracting business PIHA, Crushing Services International and Process Minerals International merged and was listed on the Australian Securities Exchange (ASX:MIN).
- At present, MRL is focused on the design, construction and commissioning of mining projects primarily in Australia. MRL is also involved in various joint venture agreements with 3<sup>rd</sup> parties
- MRL's mining services include :
  - 23 operating plants across MRL and client sites
  - Portable and fixed crushing plants
  - 19 open pits
  - Mining equipment fleet: 24 dozers, 23 excavators, 109 dump trucks , 105 wheel loaders
  - In house project design, engineering, construction
  - Second largest crane fleet in WA
  - Own all construction equipment
- MRL's stated objectives for their lithium commodities division include:
  - Restart Wodgina 750ktpa
  - Kemerton Lithium Hydroxide plant ramp up to full production 2022
  - Evaluate opportunities to access additional conversion capacity for spodumene concentrate

Source: Mineral Resources Limited



# Mineral Resources **Limited** – Lithium Overview



## Hard Rock Lithium Assets

MRL has partnered with two of the largest downstream lithium companies on its hard rock lithium mines

### 1. Wodgina - MRL (40%) / Albemarle (60%)

Wodgina was acquired in 2017 and quickly developed into one of the world's largest spodumene mines.

#### Key Facts:

- 2nd largest hard rock lithium mine in the world. 259Mt of available resources
- 750ktpa spodumene concentrate plant (5.6Mtpa feed)
- Delivered first ore within 18 months of financial investment decision (FID).
- All project and construction management activities delivered internally by MRL

### 2. Mt Marion - MRL (50%) / Ganfeng (50%)

#### Key Facts

- 3rd largest hard rock lithium mine in the world. 71Mt of available resources.
- 450ktpa spodumene concentrate plant (2.4Mtpa feed)
- The project was designed, constructed and commissioned over approximately 12 months
- MRL manages the project via a life of mine services agreement and owns a 50% interest in the joint venture alongside Ganfeng Lithium with a life of mine offtake agreement

The Mt Marion project was designed, built and constructed utilizing MRL's in house project management capabilities.

### 3. Kemerton Lithium Hydroxide Conversion Plant – MRL (40%), Albemarle (60%)

In 2019, Albemarle commenced construction of the Kemerton lithium hydroxide processing plant in Western Australia. Once construction is complete, Kemerton will process spodumene ore to produce lithium hydroxide product and a sodium sulfate by-product. Kemerton is expected to have an initial capacity of about 50,000 metric tons LCE of lithium hydroxide, with an ability to expand to 100,000 metric tons LCE over time. Kemerton is expected to start commissioning by the end of 2021.



*Kemerton Lithium Hydroxide Conversion Plant, WA*

Source: Mineral Resources Limited