STRATEGIC METALS FOR THE ENERGY TRANSITION



# AN EMERGING EXPLORATION AND DEVELOPMENT COMPANY

FEBRUARY 2024

TSXV AIR OTCQB CLRMF FRA CKU

CLEANAIRMETALS.CA



## FORWARD-LOOKING STATEMENT

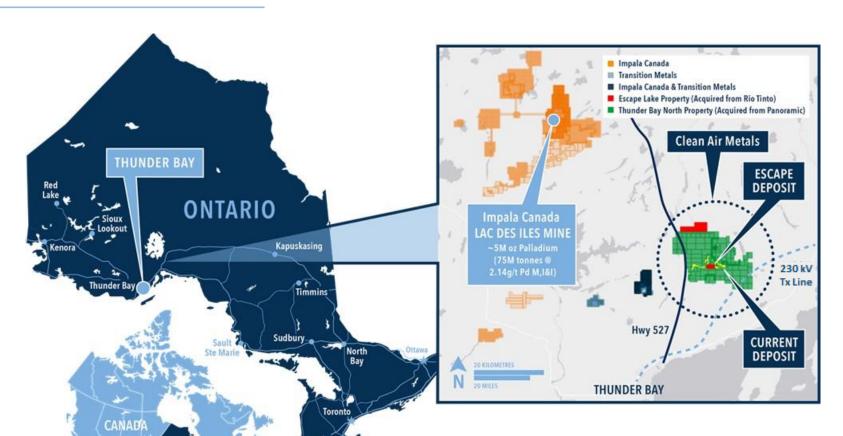
Information set forth in this presentation may contain forward-looking statements. Forward-looking statements are statements that relate to future, not past events. In this context, forward-looking statements often address a company's expected future business and financial performance, and often contain words such as "anticipate", "believe", "plan", "estimate", "expect", and "intend", statements that an action or event "may", "might", "could", "should", or "will" be taken or occur, or other similar expressions. By their nature, forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements, or other future events, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such factors include, among others, risks associated with project development; the need for additional financing; operational risks associated with mining and mineral processing; fluctuations in commodity prices; title matters; environmental liability claims and insurance; reliance on key personnel; the absence of dividends; competition; dilution; the volatility of our common share price and volume; and tax consequences to U.S. Shareholders. Forward-looking statements are made based on management's beliefs, estimates and opinions on the date that statements are made and the Company undertakes no obligation to update forward-looking statements if these beliefs, estimates and opinions or other circumstances should change. Investors are cautioned against attributing undue certainty to forward-looking statements.

Mike Garbutt, P.Eng. a Qualified Person under NI 43-101, has reviewed and approved dissemination of the technical content herein.





## CORNERSTONE ASSET: THUNDER BAY NORTH PROJECT



- 40 km North of Thunder Bay
- 65 km South of Lac des Iles Mine
- Paved provincial Hwy thru NW corner of claims
- 230 KVA tx line through SE corner of claims
- Natural Gas20 km north of project site

Favorable Mining Jurisdiction + proximity to major mining centre + key infrastructure on doorstep

= Low Risk





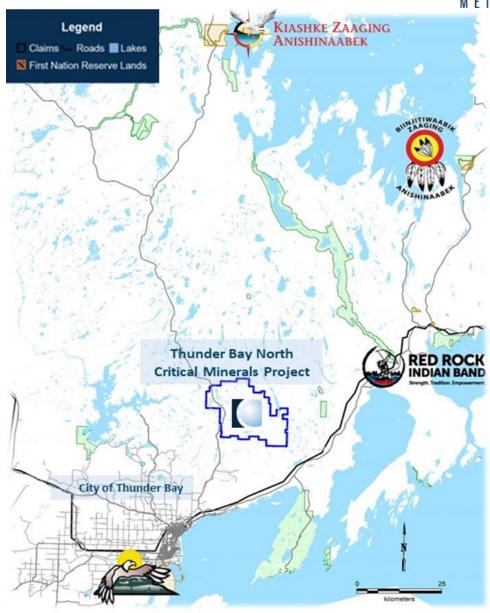
## LAND ACKNOWLEDGMENT

Clean Air Metals Inc. and its wholly owned subsidiary Panoramic PGMs (Canada) Ltd. acknowledge that the Thunder Bay North Critical Minerals Project is located within the area encompassed by the Robinson-Superior Treaty of 1850, and includes the territories of the Fort William First Nation, Red Rock Indian Band, Biinjitiwabik Zaaging Anishinabek and Kiashke Zaaging Anishinabek. Clean Air Metals also acknowledges the contributions of the Métis Nation of Ontario, Region 2 and the Red Sky Métis Independent Nation to the rich history of our area.

The Company appreciates the opportunity to work in these territories and remains committed to the recognition and respect of those who have lived, traveled, and gathered on the lands since time immemorial. Clean Air Metals is committed to stewarding Indigenous heritage and remains committed to building, fostering and encouraging a respectful relationship with First Nations, Métis and Inuit peoples based upon principles of mutual trust, respect, reciprocity and collaboration in the spirit of reconciliation.

### Important relationship milestones and future outlook

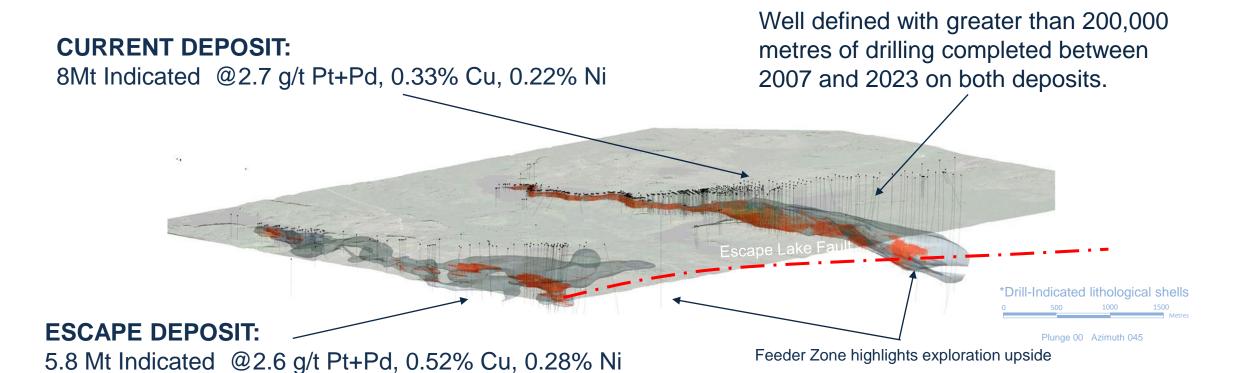
- MOU and warrants 2021
- Exploration agreement 2022
- Interest in future Equity Ownership?







## NEAR SURFACE, TWIN MAGMA CONDUIT SYSTEM OPEN AT DEPTH



Thunder Bay North Project Indicated Resource of 13.8 M tonnes with over 2.4 M Pt Equivalent oz





## DEPOSITS CAN PRODUCE HIGH GRADE MASSIVE SULPHIDES

#### MASSIVE SULPHIDES IN CURRENT DEPOSIT

(HOLE BL10-197)



Escape South Zone 0.7m @ 20.5gpt Pd+Pt+Au +7.3% Cu+Ni

MASSIVE SULPHIDES IN ESCAPE DEPOSIT

(HOLE ELR21-041)





## SIGNIFICANT INTERSECTIONS - THICKNESS AND GRADE



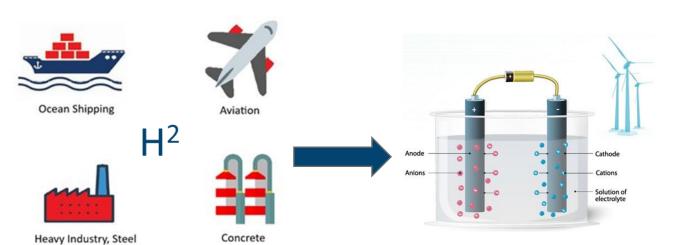


## SIGNIFICANT POTENTIAL FOR VALUE IN THE PGE SPACE

We strongly believe in the potential of a metals supercycle in PGEs and copper.

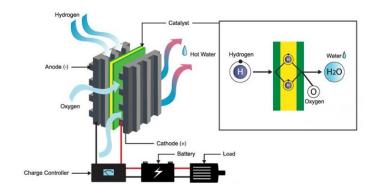
## HYDROGEN ECONOMY

Automobiles only account for 10% of global CO2 loadings. Need alternatives to battery technology for electricity generation, transportation and heavy industry.



**Hydrogen** has greater energy density than current energy use in heavy industry and transportation.

**PGE coating (Pt/Pd)** on anodes and cathodes



**PGE membrane (Pt)** catalysts in Fuel Cell membranes

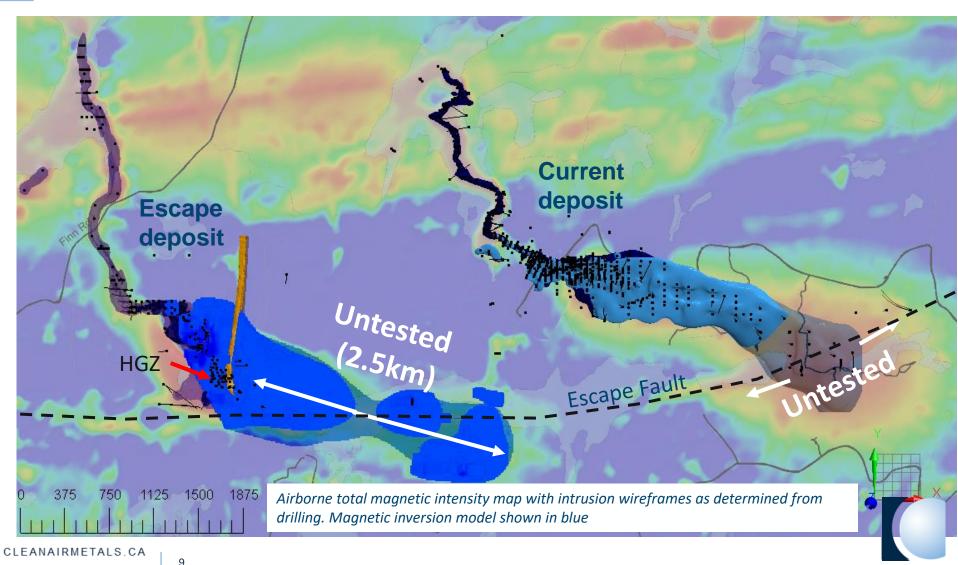
Only 6 million ounces of Pt mined each year, 75% from South Africa.





## DOWN PLUNGE EXPLORATION & FUTURE RESOURCE EXPANSION

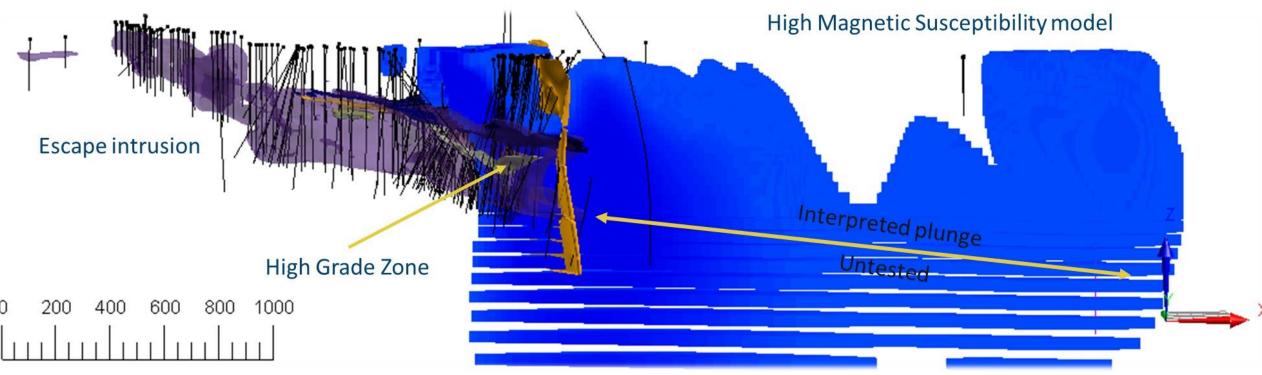
- Both deposits open at depth and across the Escape Fault
- Significant magnetic anomaly extending to depth to SE of Escape High Grade Zone (HGZ).
- We know the systems can produce massive sulphides.





## ESCAPE DEPOSIT DOWN PLUNGE WITH UNTESTED ANOMALY

Long section through Escape chonolith as defined by drilling with HGZ shown. Magnetic inversion model shown on right hand side in blue. Looking NE.



- Magnetic inversion estimates base at ~1100m
- Dynamic magma flow rock types: peridotite & red hybrid as observed in mineralizing environment in both Current and Escape chonoliths identified in ELR20-034 @ ~550m





## SIGNIFICANT TECHNICAL WORK HAS ADVANCED IN LAST THREE YEARS



- Resource well understood.
- Completed the updated resource estimate with NI 43-101 resource filed for both deposits June 19<sup>th</sup>, 2023



- PFS Metallurgical test program completion using Base Metallurgical Labs.
- Preliminary trade-off studies for front-end plant design.
- Preliminary flow-sheet.
- Work completed in July 2023



• Completion of permitting roadmap outlining clear path to construction permits.



- BBA consultants supported us in evaluation of a revised mine design and strategic project options
- Completed additional regional geophysics and updated exploration targeting (down plunge)
- Comprehensive database for environmental baseline.

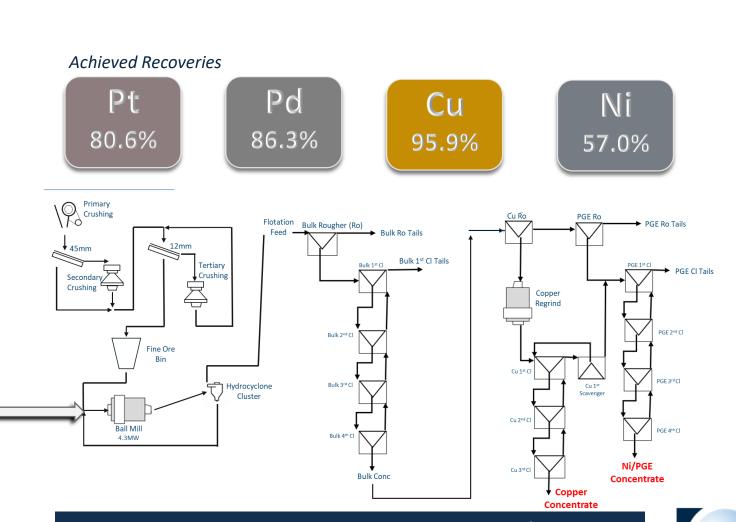




## PFS LEVEL METALLURGICAL TESTING COMPLETED

## Highlights

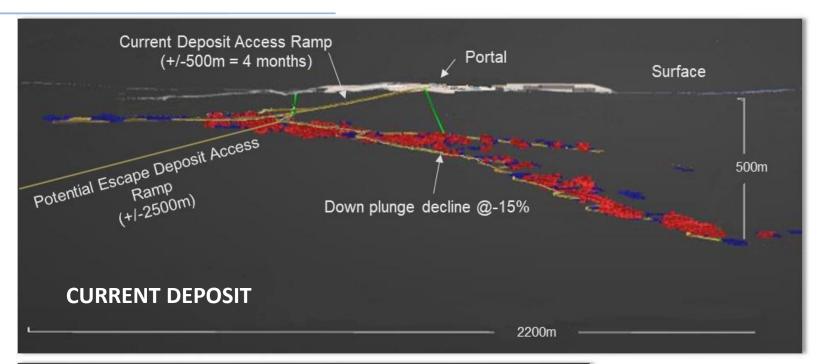
- Confirmation of phase 1 metallurgical test program.
- Two saleable concentrates with indicative terms from domestic and international smelters.
- 6 payable metals.
- High recoveries with conventional flotation technology in a simple flow sheet



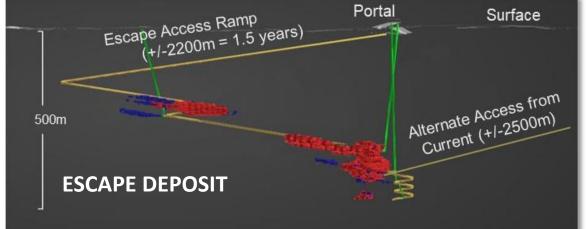
Copper concentrate grading 22.4% Cu + 40g/t Pt+Pd PGE concentrate grading over 53 g/t Pt+Pd + >4% Ni



## SIMPLE AND LOW RISK MINING APPROACH



- Early Access to Current Deposit
- Approximately 4 months of development to reach the Current deposit.
- Simple, highly executable design with rapid ramp-up.



- Access to the Escape deposit can be via Current development to minimize surface footprint
- A second portal at Escape and independent ramp is another viable option



# EVOLVING STRATEGY GROWING OUR ASSET BASE IN ANTICIPATION OF MARKET UPTURN



### **Turning Adversity to Opportunity**

- Metal pricing downturn and weakening investor sentiment have resulted in stagnated base metal projects and placing junior explorers under financial stress.
- Resultantly Cu/Ni & PGE assets are available with exposure to upside in metal pricing, resource expansion through modern exploration and alternative mining and processing.

#### Potential on our doorstep

- Brownfields to Greenfields opportunities
- Prospector finds.
- Application of new geology/geophysics
- Updated geological models



Geologist field mapping mafic-ultramafic rocks in the 1.1Ga Midcontinent Rift

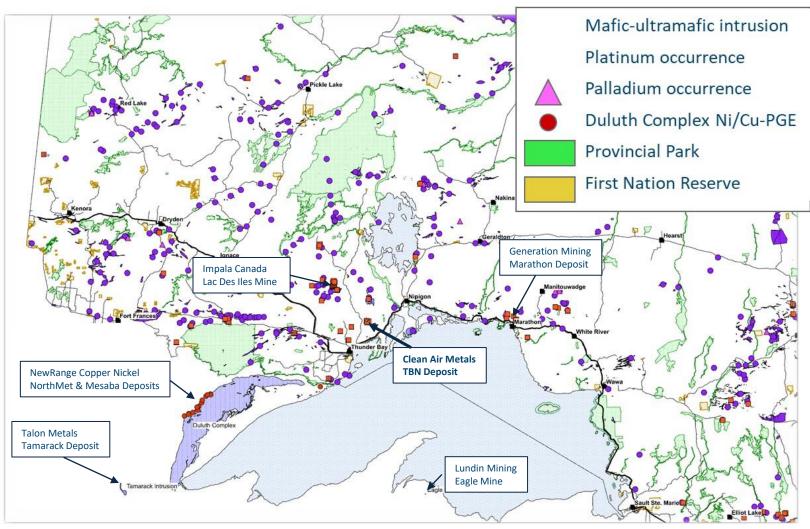


## NORTHWEST ONTARIO HAS AN ABUNDANCE OF KNOWN PGE

CLEAN AIR

**OCCURANCES** 

- Favorable mining jurisdiction
- Au, Pd, Cu-Zn, Ni-Cu mines operated
- Prospective terrain
  - Archean (2.7Ga)
  - Paleoproterozoic (1.1 Ga)
- World class geophysics and geology information through OGS and Ministry of Mines.
- History of discovery, development and production
- Opportunities from brownfields to greenfields



Map of NW Ontario displaying prospective mafic ultramafic intrusions and known Pt & Pd occurrences. Advanced Ni-Cu-PGE projects in Ontario and Minnesota are labelled.





## STRONG LEADERSHIP TEAM WITH EXPERIENCE IN THE REGION



JIM GALLAGHER, P.ENG CEO

Most recently the CEO of North American Palladium (TSX:PDL), which operated the Lac Des Iles mine, at the sale to Impala Platinum Holdings (JSE:IMP) in December 2019 for approximately \$1 Billion.



## MIKE GARBUTT, P.ENG, MBA CHIEF OPERATING OFFICER

Most recently Deputy General Manager of IAMGOLD (XTSE:IMG) at the Côté Gold Project and General Manager, Sudbury at KGHM (KGH:WSE)



GEOFF HEGGIE, P.GEO
VICE PRESIDENT EXPLORATION

Most recently Exploration Manager with Clean Air Metals, Senior Geologist for Noront Resources exploring in the Ring of Fire, and Special Project Geologist with Panoramic PGMs Canada and Magma Metals.



KRIS TUUTTILA, P.GEO (LIMITED)

DIRECTOR OF PERMITTING,

SUSTAINABILITY AND COMMUNITY

RELATIONS

Brings over 20 years of experience in directing multidisciplinary environmental projects and impact assessments related to mine development in Northern Ontario. Has been instrumental in developing meaningful relationship with several Indigenous communities leading to several partnership agreements.



## **CAPITAL STRUCTURE**

#### **End of December 2023**

Shares Issued	224,000,000
Warrants (\$0.25/sh.) Feb 22/24	55,410,400
Warrants (\$0.55/sh.) Feb 22/23	6,372,550
Cash	\$6.4 million

Management ~ 3%

Benton Resources (BEX: TSXV) ~11%

Market Cap -~ \$16.5 M

**Share Price ~ \$ 0.075** 



# OUR STRATEGY AS AN EMERGING PGE, CU, NI EXPLORATION AND DEVELOPMENT COMPANY

## **Advance Thunder Bay North Project**

- ✓ Low-risk foundational asset with upside potential when markets improve.
- ✓ Down plunge exploration is a priority
- ✓ Advance technical work on toll-milling
- ✓ Baseline work already well advanced

## **Growth of resource base regionally**

- ✓ Team has capability to identify, evaluate, permit and develop PGE properties
- ✓ Northwestern Ontario has a significant number of prospective intrusions.
- ✓ Many of these deposits warrant a second look, with expected increase in metal prices

## Continue to Grow Meaningful First Nations Relationships

- ✓ Strong partnership with First Nation communities.
- ✓ Ability to foster positive relationships early in the process.
- Enhance future growth with participation from our partners.







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