

## FORWARD LOOKING STATEMENTS

This presentation contains certain forward-looking information and statements which may not be based on fact, including without limitation, statements regarding the Company's expectations in respect of its future financial position, business strategy, future exploration and production, mineral resource potential, exploration drilling, permitting, access to capital, events or developments that the Company expects to take place in the future. All statements, other than statements of historical facts, are forward-looking information and statements. The words "believe", "expect", "anticipate", "contemplate", "target", "plan", "intends", "continue", "budget", "estimate", "may", "will" and similar expressions identify forward-looking information and statements. In addition to the forward-looking information and statements noted above, this presentation includes those that relate to: the expected results of exploration activities; the estimation of mineral resources; the ability to identify new mineral resources and convert mineral resources into mineral reserves; ability to raise additional capital and complete future financings; capital expenditures and costs, including forecasted costs; the ability of the Company to comply with environmental, safety and other regulatory requirements; future prices of precious metals; the ability of the Company to obtain all necessary approvals and permits in connection with the development of the Bayan Khundii Gold Project.

Such forward-looking information and statements are based upon a number of estimates and assumptions that, while considered reasonable by the Company as of the date of such information and statements, are inherently subject to significant business, economic and competitive uncertainties and contingencies. These estimates and assumptions relate to, among other things, the continuance of the Company and its subsidiaries as a going concern, general economic and market conditions, gold prices, the accuracy of mineral resources and mineral reserve statements, and the other estimates and assumptions contained in the Bankable Feasibility Study.

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The Company has included certain non-IFRS financial measures in this presentation, such as Earnings before Interest, Taxes, Depreciation and Amortization ("EBITDA"), Initial Capital Costs, Total Cash Cost, All-In Sustaining Cost, and Effective Cash Tax Rate which are not measures recognized under IFRS and do not have a standardized meaning prescribed by IFRS. As a result, these measures may not be comparable to similar measures reported by other corporations. Each of these measures used are intended to provide additional information to the user and should not be considered in isolation or as a substitute for measures prepared in accordance with IFRS.

Peter Dalton, P.Geo. (Nova Scotia), Senior Geologist for Erdene and a "Qualified Person" under National Instrument 43-101, has reviewed and approved the scientific and technical information in this presentation. All currencies are reported in Canadian dollars unless otherwise specified.



## DEVELOPING THE HIGH-GRADE KHUNDII MINERALS DISTRICT

Investment Thesis

**First mover** in an unexplored portion of one of the world's great mineral belts – unparalleled discovery potential for large, high grade, gold and copper deposits

Bayan Khundii Gold Project – **high-grade gold development** moving rapidly to production

# Multimillion ounce potential

 multiple high grade gold discoveries adjacent to the Bayan Khundii Gold Project and significant exploration upside in district Powerful Alliance – uniting Erdene with Mongolia's leading miner backed by one of the Country's largest conglomerates

Zuun Mod Molybdenum-Copper Porphyry

Complex — a sleeping giant





# THE EMERGING KHUNDII MINERALS DISTRICT MAKINGS OF A MULTI-MINE, MULTI-COMMODITY MINING DISTRICT

**BAYAN KHUNDII GOLD-**

2025 PRODUCTION @

SILVER DEVELOPMENT

>75.000 OZ PER ANNUM THROUGH 2030

**EXPANSION/ EXTENDED** MINE LIFE BAYAN KHUNDII

2024-2028 ADVANCE TO PRODUCTION DECISION

2030 TO 2040 EXTEND PRODUCTION @ 50,000 TO 100.000 OZ PER ANNUM

ALTAN NAR GOLD - GOLD SILVER LEAD ZINC

2024-2028 ADVANCE TO PRODUCTION DECISION

2028 TO 2040 PRODUCTION @ 75,000 TO 100,000 OZ PER ANNUM AuEa

**ZUUN MOD MOLYBDENUM COPPER** 

2024-2029 ADVANCE TO PRODUCTION DECISION

2030 TO 2050 PRODUCTION

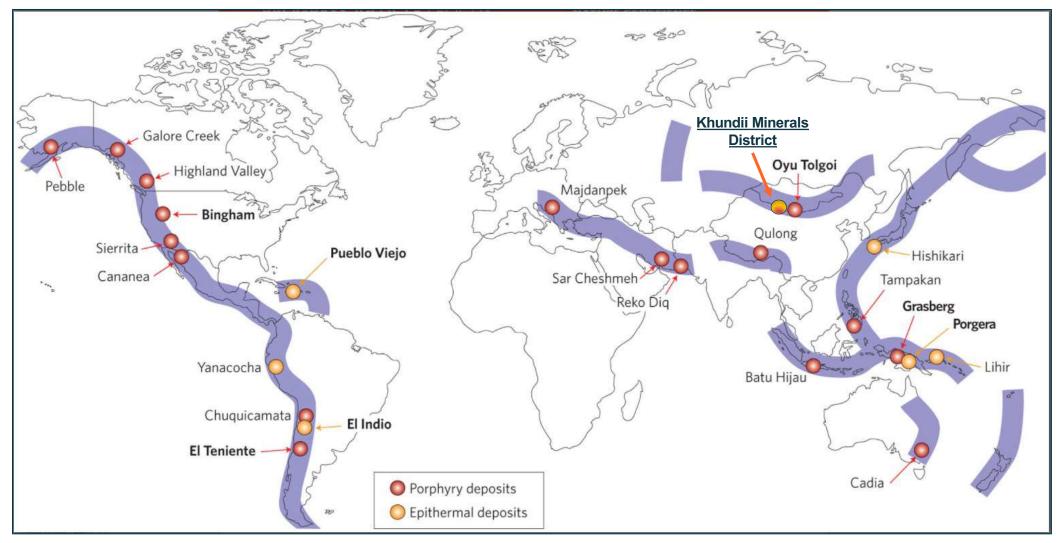
**NEW DISCOVERIES AND ACQUISITIONS** 

HIGH PROBABILITY OF ADDITIONAL DISCOVERIES IN DISTRICT

THE FUTURE: GOLD, COPPER, MOLYBDENUM, SILVER, LEAD & ZINC PRODUCT

## GLOBAL DISTRIBUTION OF ARC RELATED GIANT GOLD AND COPPER DEPOSITS

Khundii Minerals District: A window of opportunity – Limited exploration in a highly prospective belt





## LOCATED IN THE GOLD AND COPPER RICH CENTRAL ASIAN OROGENIC BELT

In the underexplored, highly prospective Trans Altai Terrane in Southwestern Mongolia

#### HOST TO MULTIPLE MAJOR GOLD-COPPER DEPOSITS INCLUDING MURUNTAU (175MOZ AU) AND OYU TOLGOI

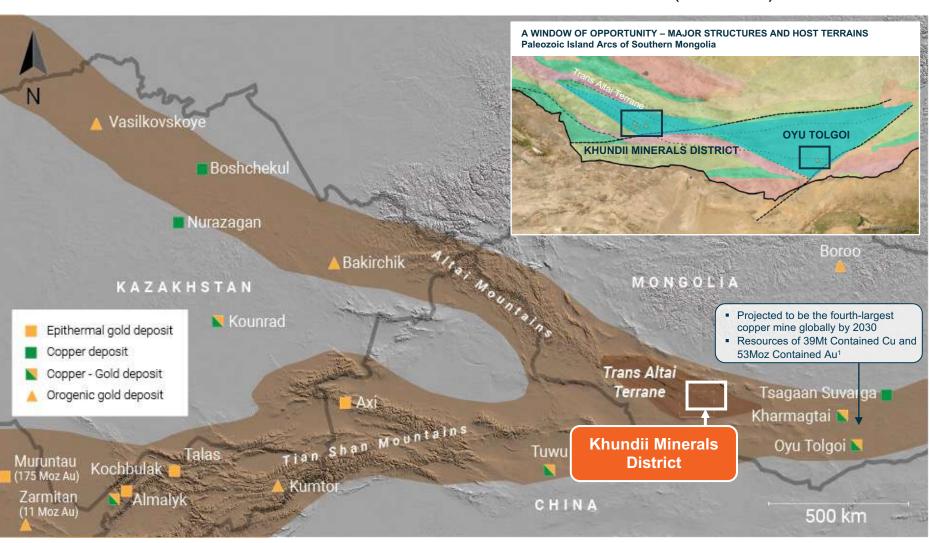


USGS concluded the Trans Altai shows the greatest potential for porphyry / epithermal copper-gold discoveries on the CAOB

#### Notes

 Contained gold = ~53Moz including Inferred Contained copper = ~39Mt including Inferred Source: Rio Tinto 2022 Annual Report

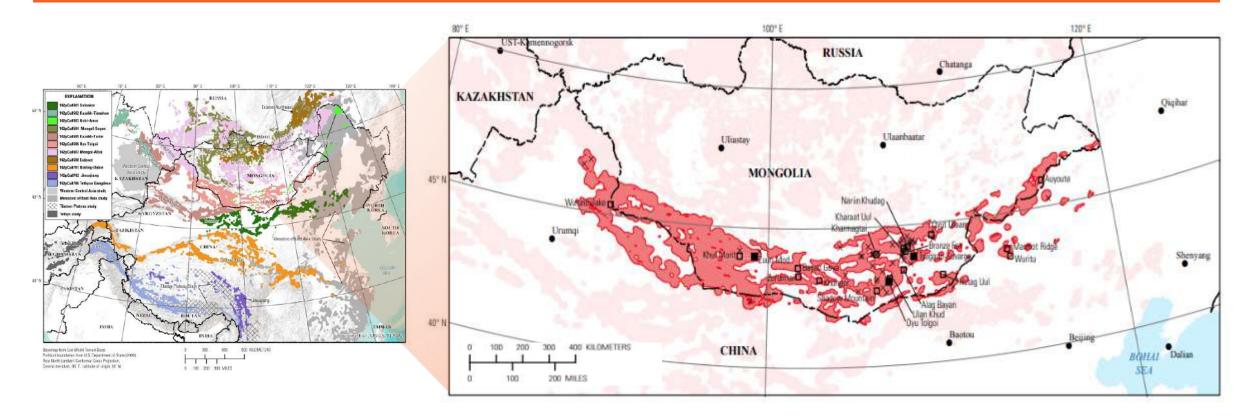




#### HIGHEST POTENTIAL REGION FOR COPPER-GOLD DISCOVERIES

Central Asian Orogenic Belt and Eastern Tethysides - USGS

"Remoteness, harsh terrain, and lack of infrastructure impeded exploration in many areas, with the western end of the tract having not received much attention"\*





## **EXPANDING INFRASTRUCTURE IN A GROWING MINING JURISDICTION**

Less than 200km from the Chinese border, multiple mines in vicinity















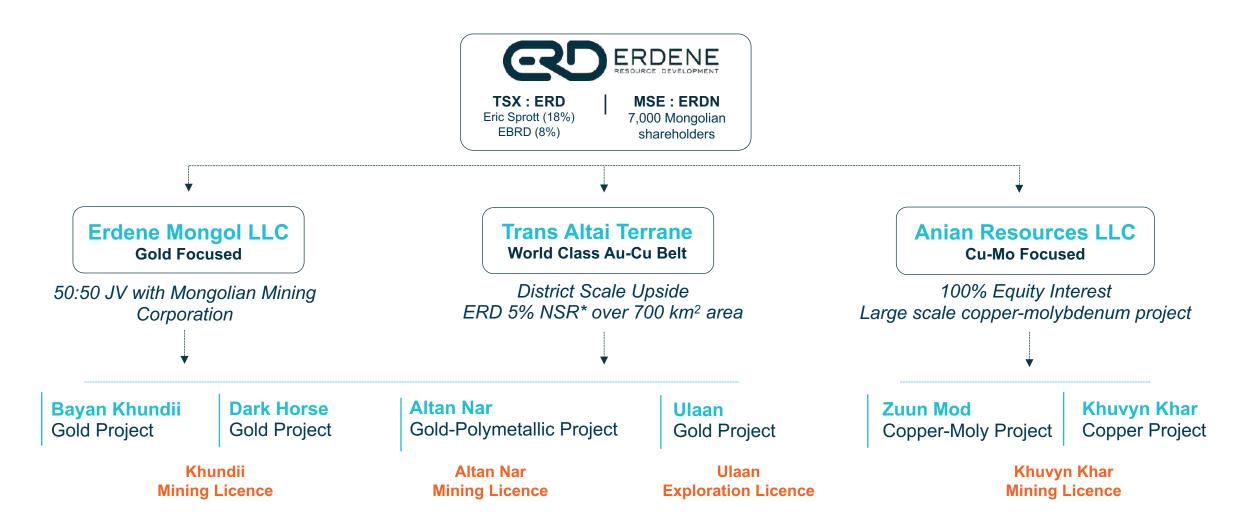
## MAKINGS OF A MULTI-MINE, MULTI-COMMODITY DISTRICT

Multiple deposits in close proximity to be developed in sequence; +20 additional prospects



#### STRATEGIC PARTNER BRINGS CAPITAL AND OPERATIONAL EXCELLENCE

Uniting Mongolia's leading explorer and miner





## STRATEGIC ALLIANCE WITH THE MONGOLIAN MINING CORPORATION

Mongolia's largest independent miner

### Mongolian Mining Corporation ("MMC") is the country's largest publicly traded miner

- Listed on the Hong Kong Stock Exchange (HKEX: 0975)
- ~US\$1B Market Cap (Q2 2024)
- MCS Group, one of Mongolia's largest conglomerates, owns 40%

#### Investment in ERD part of MMC's diversification strategy

 Owns and operates two high-quality coking coal mines: Ukhaa Khudag (UHG) and Baruun Naran (BN)

#### Brings operational expertise

- 15-year operating history (+2,000 employees)
- Strong safety culture 3 LTI from 6.9 million man-hours in 2022
- Major contributor to local economy procuring US\$4.6 million from provincial suppliers and almost 40% of employees hired locally







#### MCS GROUP - LARGEST SHAREHOLDER OF MMC

Mongolia's leading diversified business

- MCS is one of Mongolia's largest conglomerates
  - 30-year history operating in Mongolia; owns 40% of MMC
  - Businesses in mining, engineering, energy, communications, property, consumer goods, healthcare and hospitality
- Employs 13,000 Mongolians
  - Contributes ~US\$500 million to the Mongolian economy annually
  - One of the Country's largest taxpayers
- Committed to developing and enriching the Mongolian economy through responsible corporate excellence and progressive technology
  - Strives to ensure operations benefit communities where it operates
  - Provides transparent sustainability reporting

Source: <u>www.mcs.mn</u>







#### PROJECT FINANCE PARTNERS

Backing of leading international and domestic institutions







# **Eric Sprott**



#### **Mongolian Mining Corporation – Equity**

- US\$40M equity investment in Erdene's subsidiary
- Forecast ~US\$500M EBITDA annually,

#### **Mongolian Mining Corporation – Loan**

- US\$50 million, 5-year shareholder loan repayable in full upon maturity
- Interest rate of 13.8%, with option to capitalize the first four interest payments
- Additional US\$30 million available, on the same terms, at MMC's discretion
- Erdene has the right to purchase 50% of the loan and participate on the same terms as MMC

#### **Bank of Mongolia and Mongolian Commercial Banks**

- Government programs provide financial incentives, tax stability agreements and loans to the gold mining sector
- Discussions with Mongolian commercial banks on bridge and working capital financing for up to US\$30M

#### **European Bank for Reconstruction and Development**

- Major shareholder (8%) following loan conversion in Q4 2020
- Largest foreign direct investor in Mongolia with €2. 3 invested, including senior lender to Oyu Tolgoi

#### **Eric Sprott**

Erdene's largest shareholder (18%)

#### **Mongolian Stock Exchange**

- Sharing benefits with more than 7,000 Mongolian shareholders
- Erdene is first company cross-listed on both Mongolian and Toronto Stock Exchanges
- 1. Per Fitch Ratings report

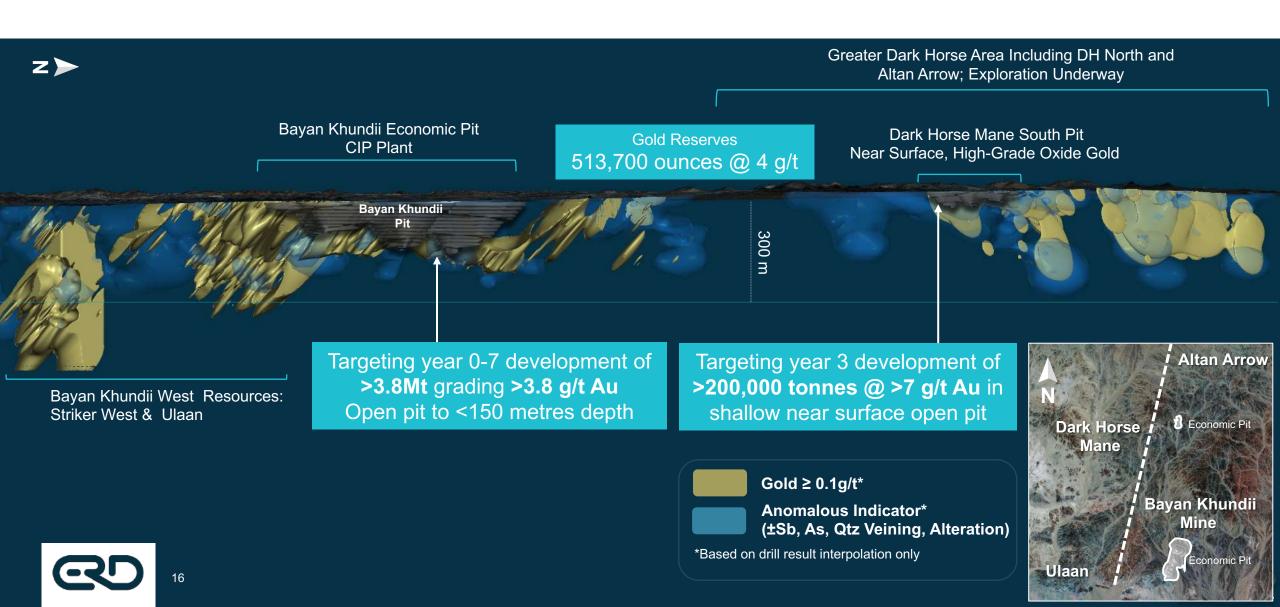






### BAYAN KHUNDII DEPOSIT – EXPANSION ALONG STRIKE AND AT DEPTH

Current Economic Pit Comprise Only A Portion Of The Mineralized Envelopes





One of the highest grade gold mines under development globally – early works complete with first gold in Q2 2025 Erdene has operated in Mongolia for 26 years; meaningful contributions to local community; active and ongoing community engagement

Shallow (150m max. depth); open pit mine with six-year mine life and 93% recovery using Carbon in Pulp

Significant opportunity to extend mine life:
3 other deposits delineated within vicinity and +20 additional prospects

# HIGH MARGIN, LOW-COST MINE WILL UNLOCK KHUNDII DISTRICT

Updated Feasibility Study underscores the strong economics at Bayan Khundii



4.0<sub>g/t</sub>

**Average Head Grade** 

US\$869<sub>oz</sub>

**AISC** 

**42**%

**IRR** 

2.05<sub>years</sub>

**Payback** 

us\$100M

**Capital Expenditure** 

86,900<sub>oz</sub>

Average Annual Production (years 2-5)

**us**\$223M

After-Tax NPV<sub>5%</sub> (\$2,000oz/Au)

513,700<sub>oz</sub>

**Gold Reserves** 

References 2023 Feasibility Study Figures represent 100% of Project



## **GOOD TORQUE TO GOLD**

Higher gold prices materially enhance economics

#### **AFTER-TAX NPV5% SENSITIVITY TO GOLD PRICE**



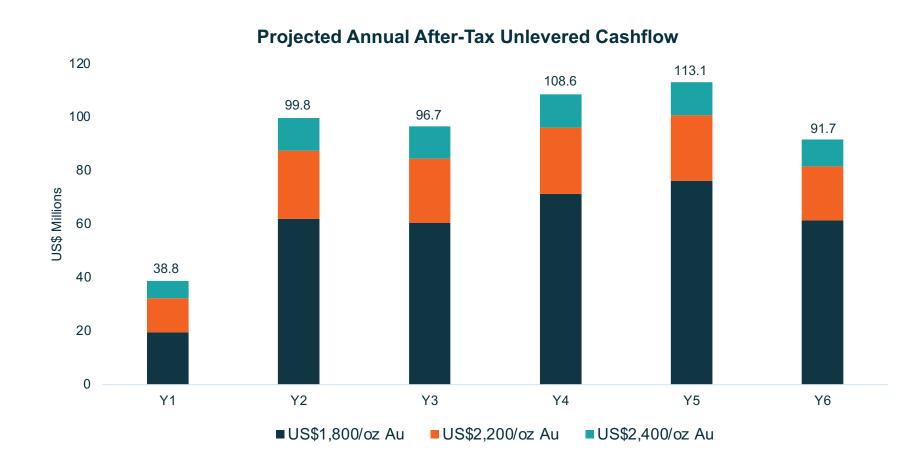
#### AFTER-TAX IRR SENSITIVITY TO GOLD PRICE





## **MEANINGFUL CASH FLOW TO FUND GROWTH STARTING IN 2025**

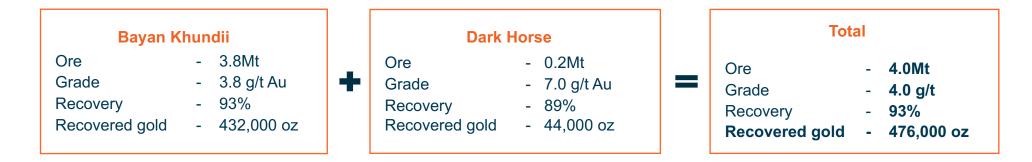
Average annual free cash flow of \$60M under US\$1800 base case and ~\$100M at \$2,200/oz Au

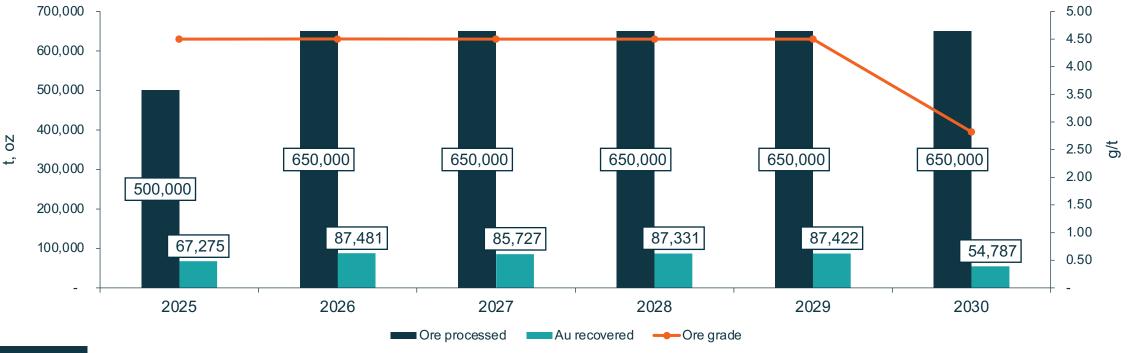




### BAYAN KHUNDII GOLD PROJECT UPDATED FEASIBILITY STUDY

25% increase in recovered gold compared to 2020 study









# THE BAYAN KHUNDII PROJECT SITE /Q3 2024/













## CONSTRUCTION, EQUIPMENT AND POWER CONTRACTS EXECUTED

AGREEMENTS IN PLACE FOR ALL MAJOR CONSTRUCTION WORKS: LOGISTICAL ACTIVITIES ARE PROGRESSING STEADILY

#### Engineering, Procurement & Construction contract executed with MCS Property LLC

- One of the country's largest construction firms with a 25-year history, +1,500 employees and +225 engineers
- Major contractor to the mining industry including projects for Rio Tinto's Oyu Tolgoi and MMC's Ukhaa Khudag operations
- Owned by MCS Group, one of Mongolia's largest conglomerates, and cornerstone investor in MMC
- -Strong safety culture 3 LTI from 6.9 million man-hours in 2022
- Total contract value of US\$55M, including completed early works

#### **Power Purchase Agreement signed with MCS International LLC**

- Hybrid solution consisting of a 14.5MW diesel station, 5MW solar farm, 3MWh battery storage and associated infrastructure
- MCSI will build, own, and operate under a take-or-pay arrangement

#### Orders placed for all key processing equipment

- Contracted with CITIC for Ball and SAG mills, COMO for the elution circuit and Hot Chengdu for filtration equipment
- Major equipment (Mills, Elution Circuit, Gold Room, Screen & Feeders onsite or in transit)



Oyu Tolgoi Underground Conveyor – MCSP



18MW UHG Power Plant – MCSI



### FIRST GOLD SCHEDULED IN 2025

Early works and construction readiness completed in 2023





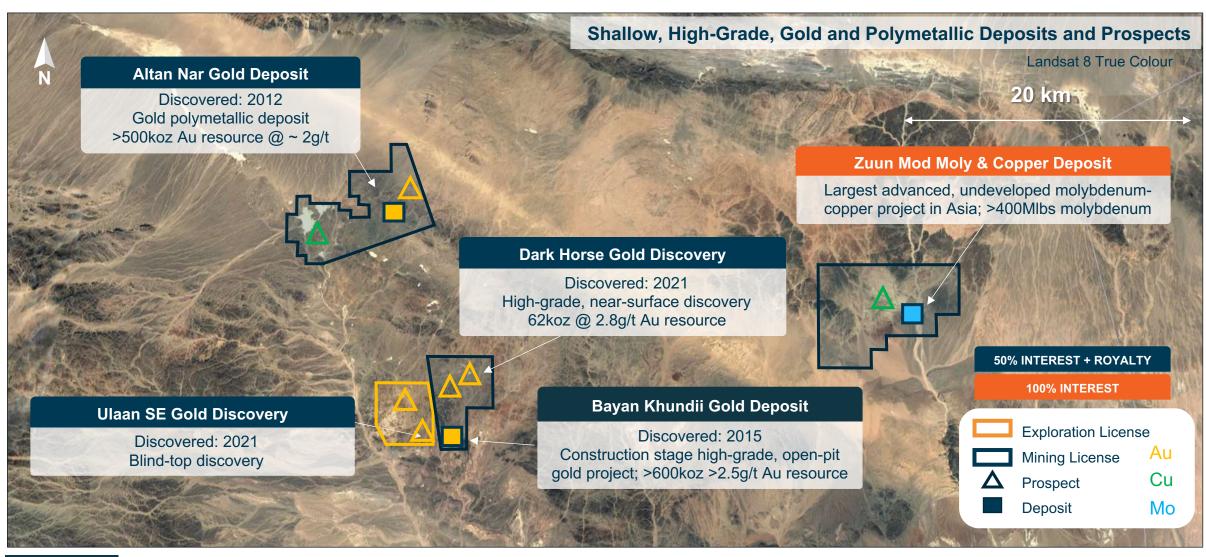
Complete III In progress



Completion date

### THE PIPELINE: MULTIPLE HIGH-QUALITY GOLD, COPPER AND MOLYBDENUM DEPOSITS AND PROSPECTS

Four gold discoveries, molybdenum-copper deposit and +20 high priority targets



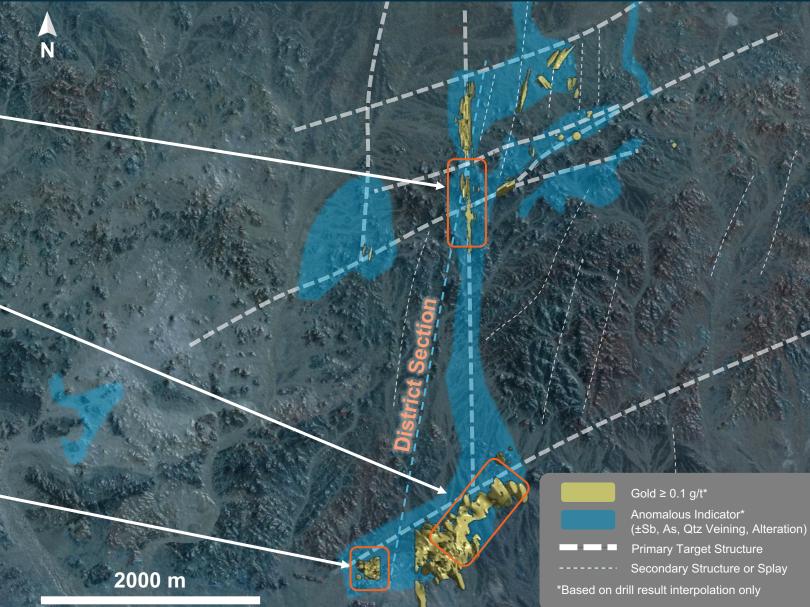
# **BAYAN KHUNDII DEPOSIT – EXCEPTIONALLY HIGH-GRADE DISCOVERIES**

Over 10km of mineralized structures with limited exploration below 150 meters

DARK HORSE DEPOSIT  Top Gold Intersections						
Drill Hole	From	То	М	Au g/t	G*M	
AAD-58	10	55	45	6.0	268	
AAD-137	1.5	26	24.5	9.4	230	
AAD-146	15	32	17	16.6	283	
AAD-177	1	24	23	11.4	262	
AAD-178	11	26	15	42.8	643	

Top Gold Intersections						
Drill Hole	From	То	М	Au g/t	G*M	
BKD-292	0.9	23	22.1	20.0	442	
BKD-98	39	170.5	131.5	3.9	508	
BKD-261	13	125	112	5.9	661	
BKD-288	11.5	17	5.5	125.9	692	
BKD-231	193	207	14	158.3	2216	

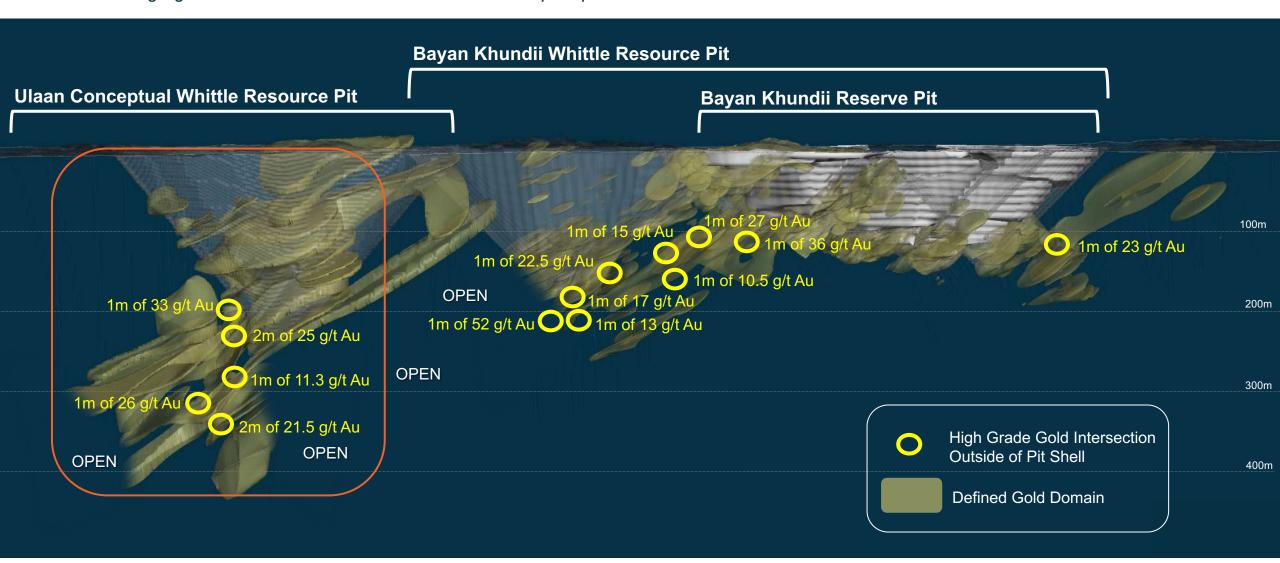
ULAAN Deposit Top Gold Intersections						
Drill Hole	From	То	М	Au g/t	G*M	
UDH-10 (D)	99	139	40	3.8	151	
UDH-14	192	226	34	5.4	185	
UDH 22	85	150	65	3.1	202	
UDH-21	115	192	77	3.2	246	
UDH-35	187	228	41	8.1	332	





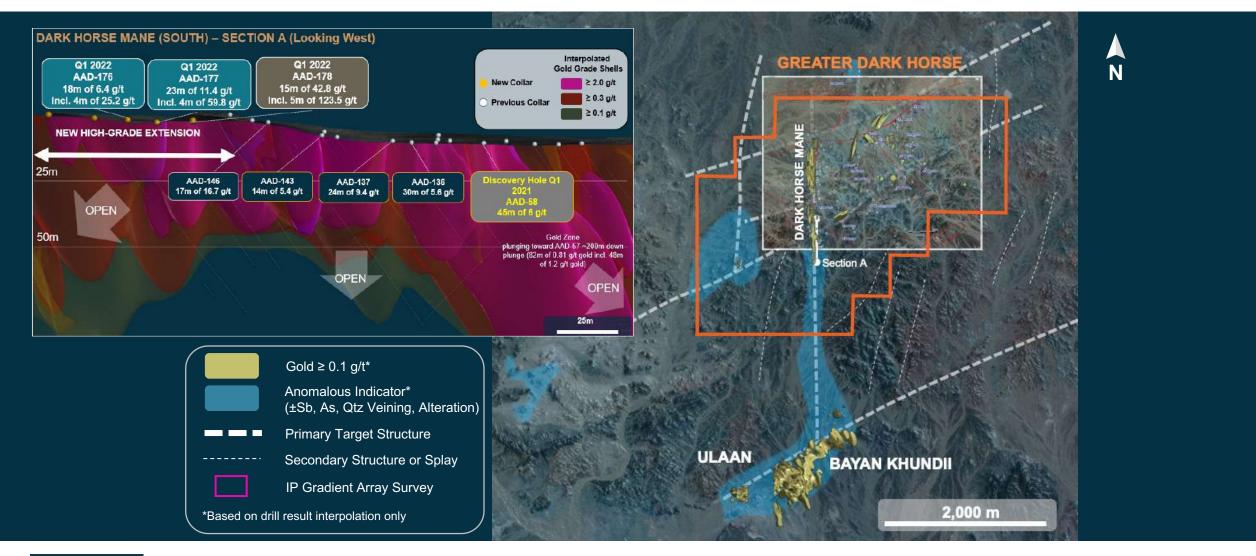
### BAYAN KHUNDII DEPOSIT – ADDITIONAL HIGH-GRADE OPPORTUNITIES

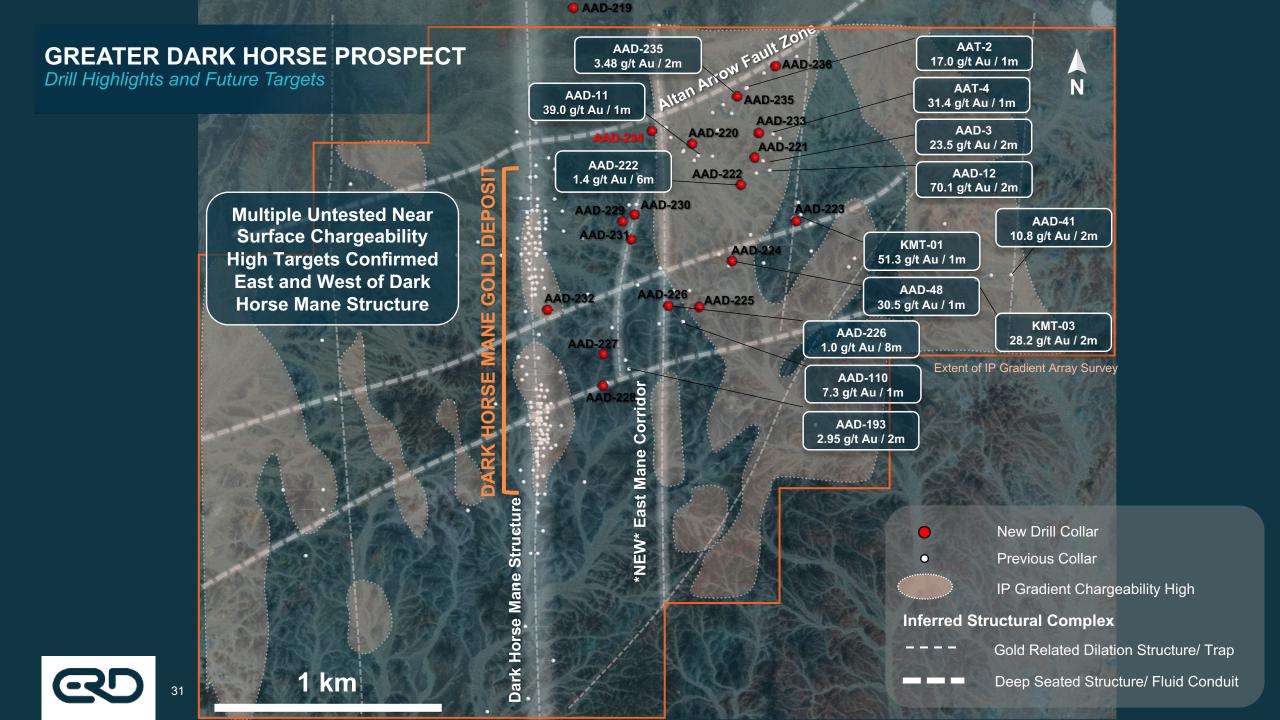
Numerous high-grade intersections outside the current mine plan pits



## **GREATER DARK HORSE – ULTRA HIGH-GRADE DEPOSIT**

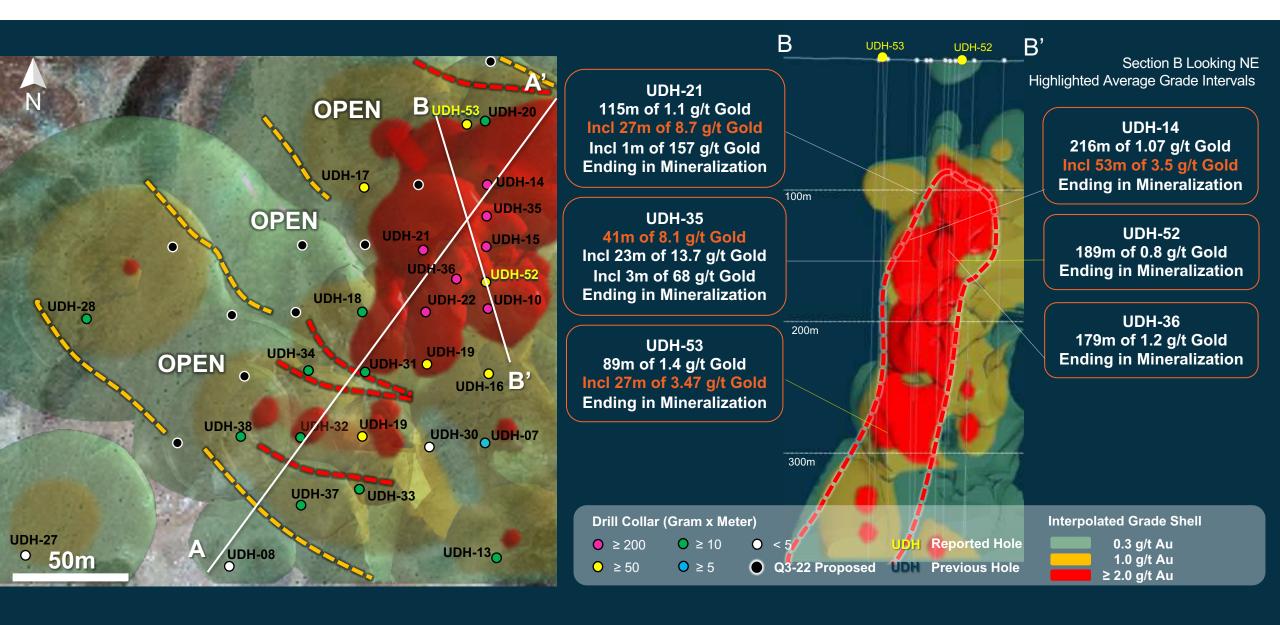
Shallow, oxide resource with grades averaging 7g/t Au; significant upside





## **ULAAN SE DEPOSIT – EXCEPTIONAL GRADES ADJACENT TO BAYAN KHUNDII**

High-grade structure 300 meters west of Bayan Khundii



#### **ALTAN NAR – 5.6KM MINERALIZED SYSTEM**

High grade deposit just 16km north of Bayan Khundii

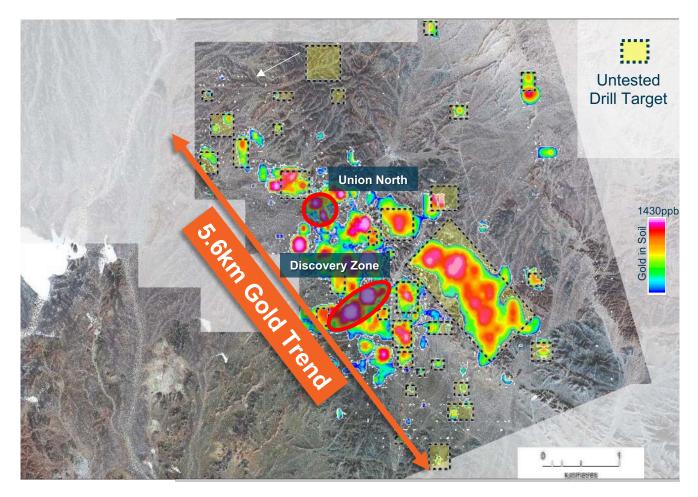
2019 Resource	Category	Au Oz (1.9g/t)	Ag Oz (~10g/t)	Pb lbs (~0.6%)	Zn lbs (~0.6%)
Altan Nar	Indicated	318,000	2,350,000	63,800,000	69,520,000
0.7g/t AuEq cut-off	Inferred	186,000	866,000	49,060,000	52,140,000

# Carbonate base metal-intermediate sulfidation epithermal deposit similar to some of the world's largest:

- Fruta del Norte (Ecuador): 6.7Moz Au
- Porgera (Papua New Guinea): >25Moz Au
- Kelian (Indonesia): 5.7Moz Au
- Montana Tunnels (USA): 36Moz Ag
- Roşia Montană (Romania): 17Moz Au

# Tremendous potential to materially increase resources with minimal drilling

- Resources are focused in two zones within a 5.6km x 1.5km mineralized corridor
- +20 mineralized target areas along trend
- Extremely shallow 90% of resources are within 150 meters of surface with system open at depth



#### **ALTAN NAR DEPOSIT – DISCOVERY ZONE**

Deposit remains open at depth with multiple holes ending in mineralization

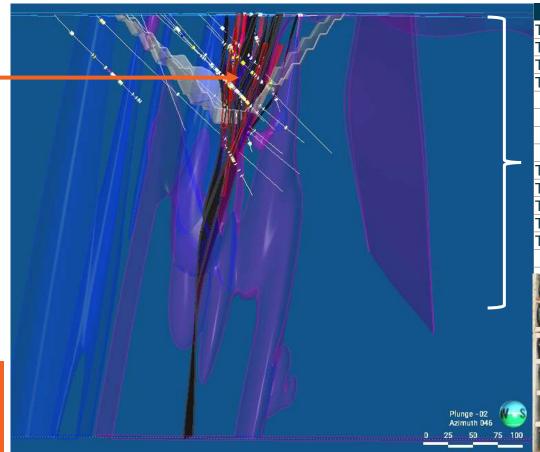
## **High Grade Discovery Zone**

TND-101: 4m of 104 g/t Au, 108 g/t Ag, 3.7% Pb and 5.9% Zn

TND-135:

7m of 45.7 g/t Au, 93 g/t Ag, 1.5% Pb, 3.4% Zn

Discovery Zone mineralization is formed at the contact of a volcanic breccia and andesite



#### 100M THICK SECTION-Looking NE

	From	To	Width	Au g/t	Au Eq g/t
TND-69	47	91	44	2.3	3.2
TND-90	91	131	40	2	2.8
TND-91	78	81	3	0.92	1.8
TND-101	39	82	43	4.6	5.70
incl.	76	78	2	56.3	59.8
and	94	140	46	17.5	19.2
incl.	96	111	15	52.3	56.9
and	158	170	12	2.8	3.3
TND-104	126	163	37	2.2	2.50
TND-105	100	114	14	7.9	10.20
TND-110	97	117	20	10.3	11.80
TND-134	101	111	10	12.2	13.4
TND-135	97	120	23	17	18.8
incl.	105	112	7	45.7	49.70



Mineralized epithermal and hydrothermal breccia (black/red) surrounded by phyllic alteration utilizing the contact between volcanic breccia and andesite



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#### **ALTAN NAR REGIONAL TARGETS** Exploration Trenching and Drilling **Nomin Tal Cu-Au Occurrence Drill Collar** Minimal drilling completed Defined Resource Zone 3.2 g/t **Exploration Target** Scout Drilling Only 11.9 g/t Gold in Rock chip Target ANT-19 TND-02 4m of 1.4g/t Gold 1m of 4.2 g/t ANT-18 3m of 6.4 g/t and 3.4% Copper 1m of 3.0 g/t Copper in Rock chip Target 3.3 g/t 5.2 g/t 2.0 g/t **Oyut Khundii** 1m of 2.8 g/t **Copper Prospect** 2.1 g/t 1m of 1.8 a/t (NOT DRILL TESTED) 3.8 g/t 3km ANT-28 4m of 3.0 g/t 1.2 g/t Currently Identified 34 untested, near surface gold potential targets which reside outside of the Altan Nar resource Highly anomalous copper in rock chip within intense phyllic alteration zone OBJECTIVE: Identify an additional 300K oz of AuEg outside the area of the Cu Porphyry Targets up to 14%Cu current resource; Targeting +1M oz AuEg in Indicated and Measured

#### **ZUUN MOD – ONE OF ASIA'S LARGEST UNDEVELOPED MO-CU DEPOSITS**

Moly market set to enter deficit – prices reached all time highs in 2023

#### **OWNERSHIP**

- 100% owned by Erdene
- 30+ year Mining License secured

#### **LOCATION**

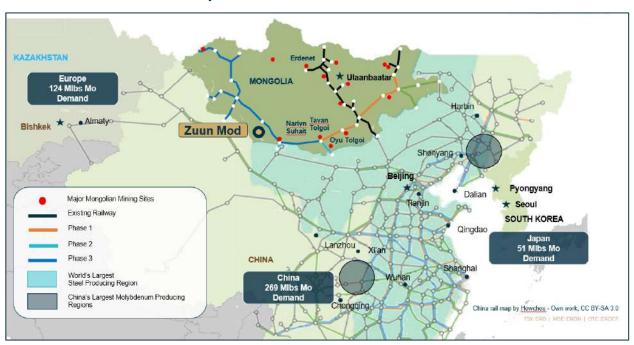
- 180km from China, the world's largest stainless steel producer and biggest consumer of the metal
- 30km east of the Bayan Khundii Gold Project

## MOLYBDENUM MARKET

- Molybdenum prices are elevated due to depleting supply and increased demand from renewable power on top of stainless steel
- US\$20-\$40/lb price range in the past two years, equivalent to 5-10x current copper prices – higher than Cobalt

# ZUUN MOD IS LOCATED ON THE DOORSTEP OF ONE OF THE WORLDS LARGEST STEEL PRODUCER AND MOLYBDENUM CONSUMER

In 2022, China alone ran a molybdenum deficit of 20Mlbs

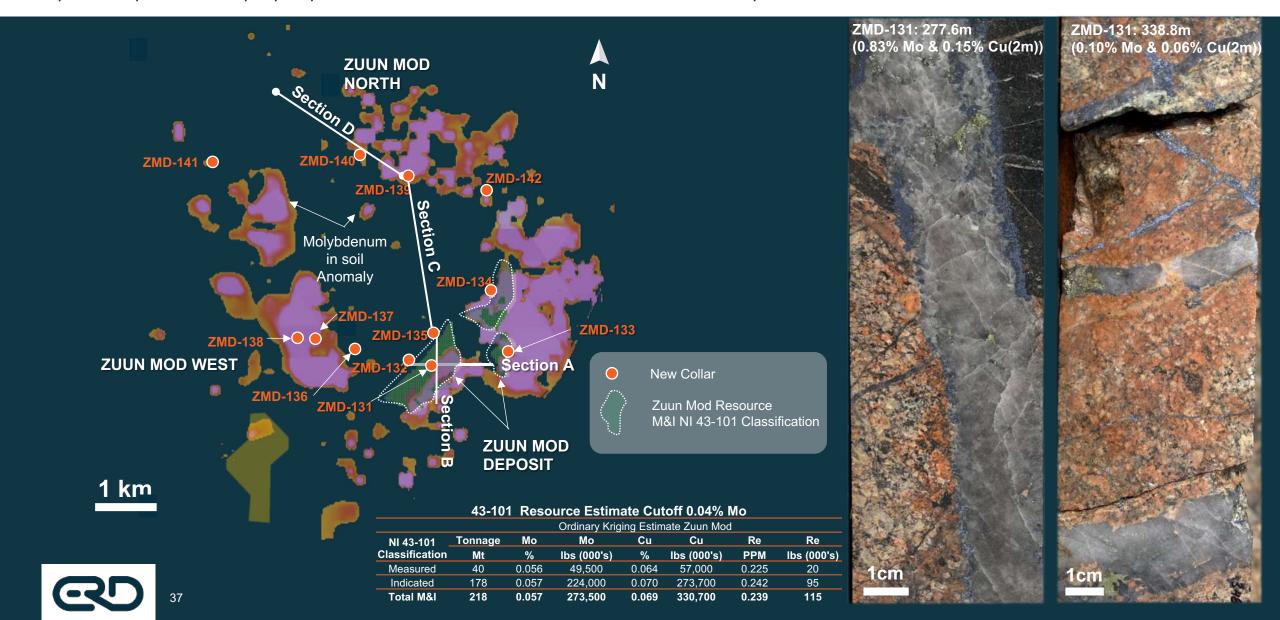


Sandbox Royalties Corp. holds a 1.5% net smelter return royalty on the Zuun Mod License, subject to a buy-down provision. NI 43-101 Technical Report, Zuun Mod Porphyry Molybdenum-Copper Project, Minarco-MineConsult, June 2011

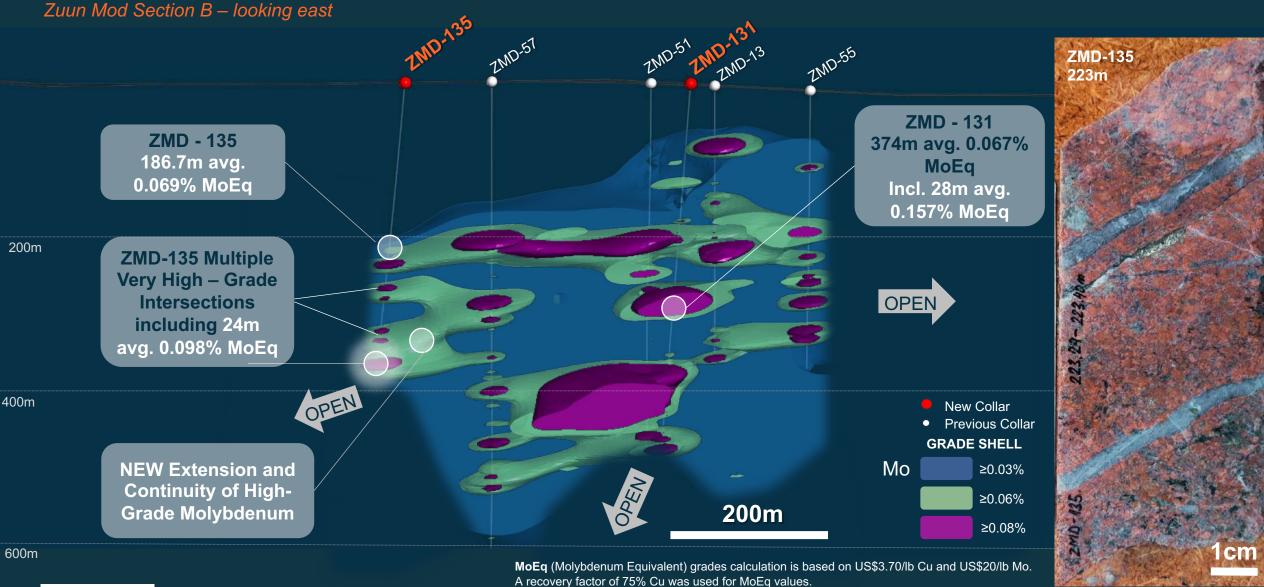


## **ZUUN MOD – GEOCHEMICAL COPPER FOOTPRINT 16KM IN CIRCUMFERENCE**

Open at depth with multiple prospects within and outside of current mineralized envelope

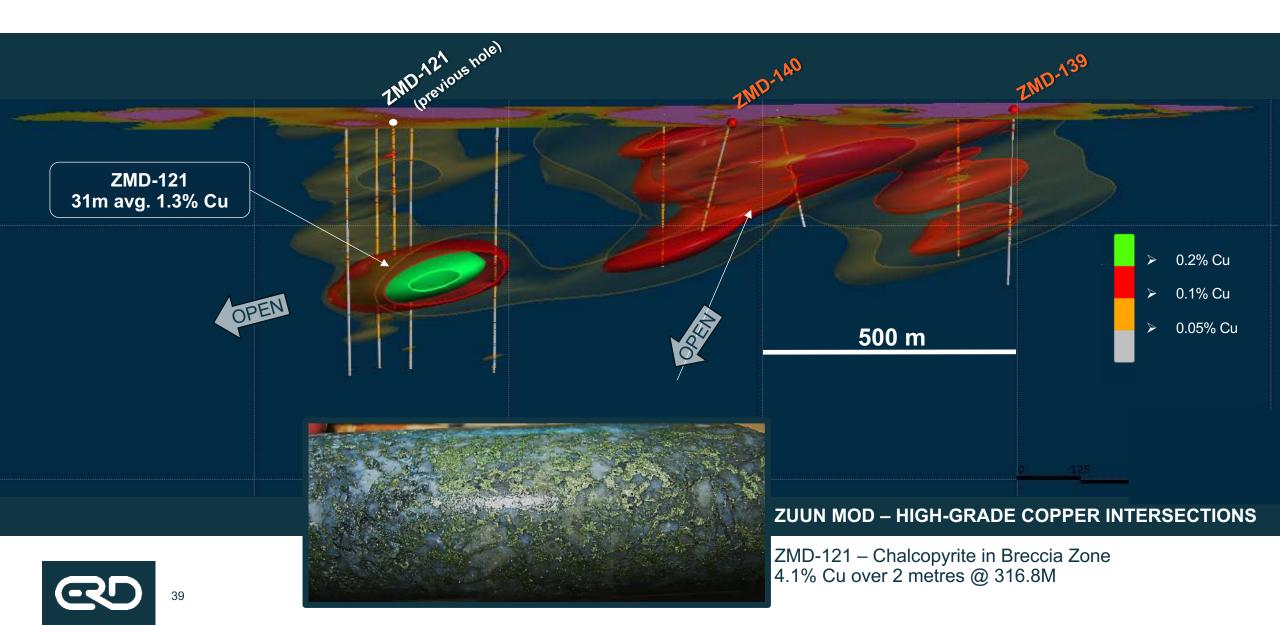


## **ZUUN MOD – EXTENSION AND CONTINUITY OF HIGH-GRADE MOLYBDENUM**



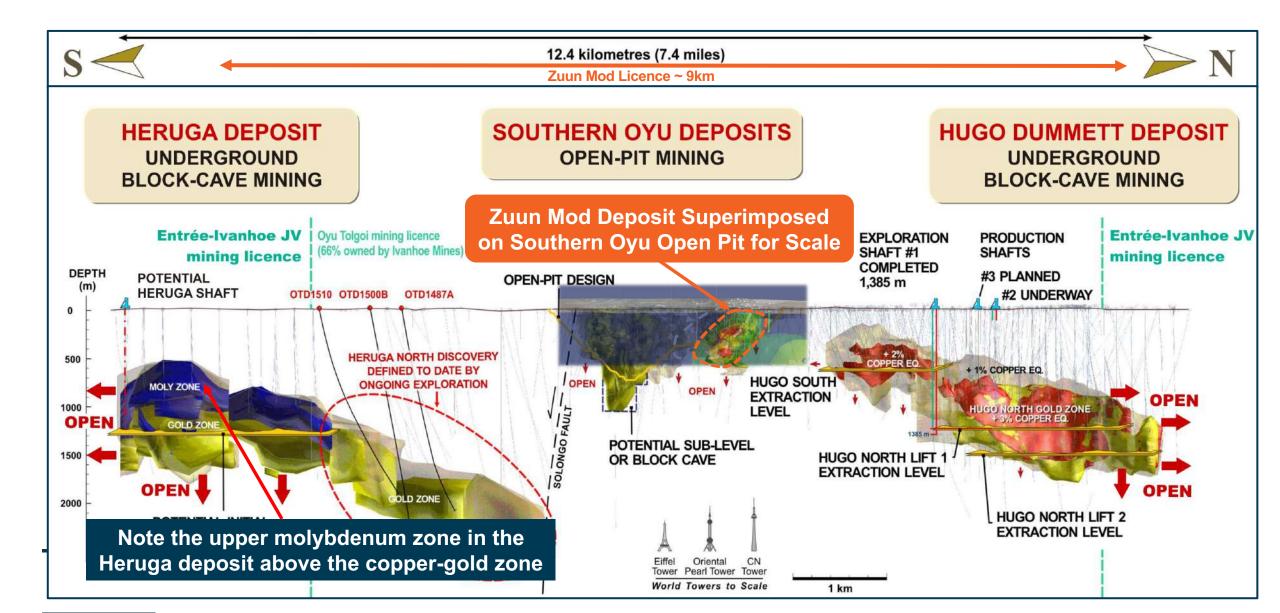
## NORTHERN ZUUN MOD COPPER ZONE – EXPANSION OPPORTUNITIES

Zuun Mod North Section D – looking north



#### **ZUUN MOD COMPARED TO OYU TOLGOI**

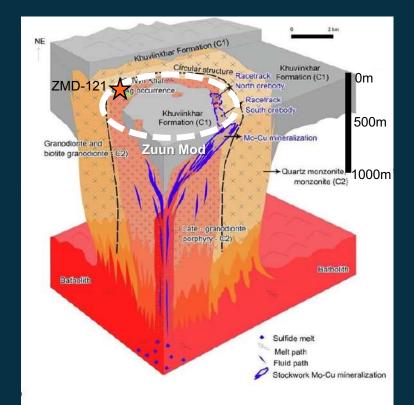
Land package remains largely untested outside the Zuun Mod deposit



# ZMD-121 Copper mineralization Khyvun Khar UST Quart **ZMD-121** 34m of 1.3% copper\_ 9.2g/t Silver 5km **Zuun Mod Mo Deposit** ZMD-121 Khyvun Khar UST Quart Sulphide infill mineralization of miarolitic cavities Drill Collar KK Scout Hole (>0.2% Cu) UST-Silica Cap ZM Resource

## **ZUUN MOD COPPER PORPHYRY POTENTIAL**

- Strong evidence of an undiscovered copper porphyry
- Multiple occurrence of UST (Unidirectional Solidification Textures), silica cap outcrops and miarolitic cavity textures indicating a cupola environment near the top of a fertile porphyry system.
- Robust, 5km circular feature highlighted by copper in soil anomaly
- Highly anomalous copper intersected in majority of northern Khuvyn Khar scout exploration drilling.
- Porphyry deposits typically occur proximally in clusters. Zuun Mod likely not an isolated deposit

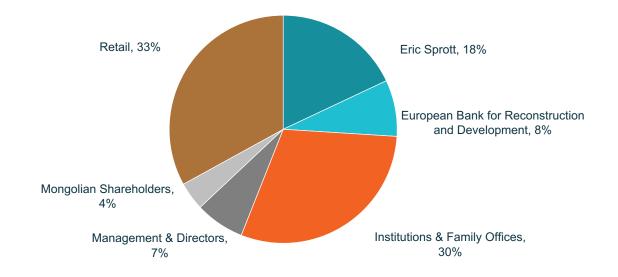


## STRONG SHAREHOLDER BASE

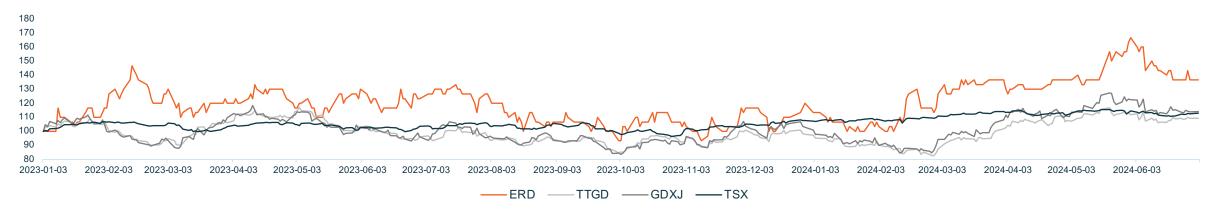
Majority of shares held by institutions, banks and accredited investors

CAPITAL STRUCTURE	
Shares issued and outstanding	348 M
Options	23 M
Warrants	24 M
DSUs	10 M
Fully diluted	405 M
Market capitalization (C\$M)	142 M
52-week range	0.27-0.52
Average daily trading volume (3 month)	122,962

Note: as of July 3, 2024

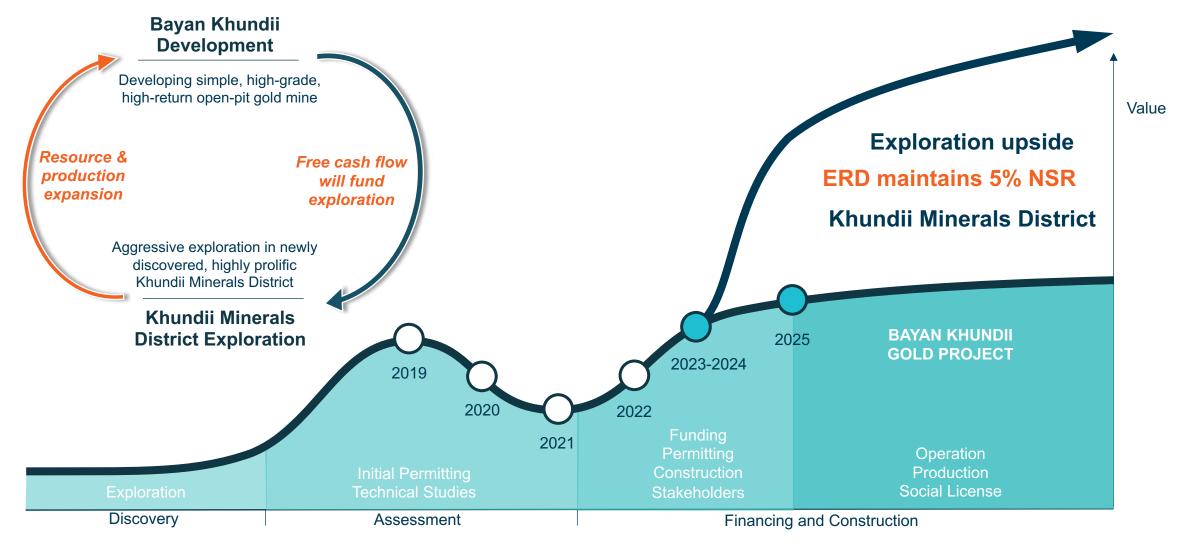


#### **RELATIVE SHAREHOLDER RETURNS**



#### POISED FOR GROWTH

Cashflow from the Bayan Khundii Gold Project will unlock the value of the Khundii Minerals District



## ON A TRAJECTORY TO RERATE

Opportunity for Erdene to rerate as Bayan Khundii Gold Project enters production











Source: CapIQ; July 2024

C\$5.96

#### **COMMITTED TO MONGOLIA**

Our Home for 25 Years



- We have been supporting our host communities for +10 years before the construction decision
- We have invested ~US\$100M in Mongolia since inception
- The Bayan Khundii Gold Project is forecasted to contribute over \$100M in direct taxes & royalties to the Mongolian Government over 6 years and support 400 direct jobs¹
- We have longstanding, deep-rooted relationships at all levels of government and are well respected within the Mongolian business community
  - Peter Akerley awarded the Order of the Polar Star (highest civilian award Mongolia can present to a foreign citizen) in 2019
- Erdene is the first cross listed company on the Mongolian and Toronto Stock Exchanges
- 70% of the executive team reside in Mongolia and we have ~7,000 Mongolian shareholders

#### COMMITTED TO GIVING BACK

Holding ourself accountable to the communities we impact





# Erdene invests directly in Shinejinst / Bayankhongor community

- Erdene signed a Local Cooperation Agreement ("LCA") in 2020 to share benefits with communities
- During feasibility, readiness, and construction (2020-2024), we committed to providing ~US\$2.2M (~7B MNT) in public health and infrastructure investments through the LCA

#### Erdene prioritizes local hiring and capacity building

- We committed to training and employing local residents in at least 30% of permanent mine jobs as we reach production
- In 2023 alone, we employed over 50 local residents on the project and trained another 80 to become mine equipment operators; the population of Shinejinst is ~2,500



## Erdene is sensitive to the unique needs of our community

- We established a water treatment facility in Shinejinst enabling clean water access for the first time in soum history
- We refurbished sanitation facilities at the public kindergarten and school
- We have cumulatively provided 100 undergraduate scholarships to Bayankhongor youth in fields essential to the local economy
- We support local herders by providing supplemental animal feed and fodder
- We collaborated with University of British Columbia ("UBC") / MITACS to research shared value in the mining sector; UBC highlighted Erdene as a leader in community development

#### **COMMITTED TO SUSTAINABILITY**

Respecting the environment

#### Erdene is committed to the highest environmental standards

We are using an enclosed Carbon in Pulp leach process in combination with tailings filtration and dry stacking to maximize water recycling and efficiency; 85% of the water will be recycled. Our mine footprint is only ~200ha

#### Erdene works directly to protect the local ecosystem

Erdene established a two-hectare nursery at site to cultivate endemic plants and trees (including rare and very rare species), sowing over 10,000 seedlings to date to be used for reclamation and landscape improvement. The company committed to planting one million trees by 2030 as part of Mongolia's "Billion Trees" campaign; we proactively monitor local habitats and train local staff in monitoring and evaluation

#### Erdene holds itself accountable to international best practices

Erdene signed a Voluntary Code of Practice for water management facilitated by the International Finance Corporation. The initiative is supported by the Government of Canada, the 2030 Water Resources Group, the European Bank for Reconstruction and Development, and the International Council on Mining and Metals. We are compliant with local / international environmental codes, guidelines, standards and requirements









#### **EXECUTIVE & MANAGEMENT TEAM**

Experienced in Mongolian Exploration and Development

#### Geology



Peter Akerley
President & CEO; Director

Mining executive and geologist with 30 years experience in exploration, corporate finance, project development & management of public resource companies.



Michael X. Gillis Vice President, Operations

Geologist with over 30 years of experience in the mineral exploration industry in increasingly senior project and corporate management positions.



G.Bat-Erdene Senior Geologist

Respected Mongolian geologist with over 25 years experience in the Country's resource exploration industry.

#### **Mining Operations**



Paul Korpi Senior Technical Advisor

Metallurgical Engineer & Mining Consultant with over 40 years experience including role as President and Executive Director of the Boroo Gold Mine in Mongolia.



Jon M.L.Lyons Vice President, CDO of Erdene Mongol LLC

Executive with over 15 years experience in sustainability development, community relations and corporate responsibility in Mongolia.





#### Finance / Administrative



Robert Jenkins
Chief Financial Officer

Chartered Professional Accountant with 20 years experience working with public companies focused on corporate finance, operations and project management.



B.Bayarmaa
Chief Administrative Officer

Administrative executive with over 15 years experience in the Mongolian resources industry.



Bilguun Ankhbayar Vice President, CEO of Erdene Mongol LLC

Mining finance professional with over 15 years experience advising TSX and ASX listed companies and working for a Canadian investment bank.



#### **UNIQUELY QUALIFIED BOARD & MANAGEMENT**

Pioneers in Mongolia's Modern Mining Era

#### **MONGOLIA**



Dr. Anna Biolik <sup>1,3</sup> Director

Diplomat with over 30 years of experience including acting as Canada's first Ambassador to Mongolia, Kazakhstan, Kyrgyzstan & Tajikistan.



Layton Croft <sup>1,3,5</sup> Chairman

27 years of leadership experience in Mongolia,16 years of global mining experience with Ivanhoe Mines, Rio Tinto, Peabody Energy and Pancontinental Resources.



Kenneth MacDonald <sup>1,2,5</sup> Director

Chartered Professional Accountant with over 40 years of mining finance experience, including 17 years as Executive VP and CFO of Erdene.



Cameron McRae, <sup>4</sup> Director

Mining executive with 28 years at Rio Tinto, including President of Oyu Tolgoi where he led construction of the US\$6 billion copper-gold mine in southern Mongolia.



- > 50 Years in Mongolia
- > 50 Years in Capital Markets

> 100 Years Mining/Exploration 88% Independent



Peter Akerley <sup>4</sup>
President & CEO; Director

Mining executive and geologist with 30 years experience in exploration, corporate finance, project development & management of public resource companies.



David Mosher <sup>2</sup> Director

Mining executive and geologist with 35 years experience. Former President & CEO of High River Gold Mines where he developed gold mines in Burkina Faso and Russia.



Hedley Widdup <sup>2,4,5</sup>

Geologist and investment manager with 20 years experience in the evaluation and development of mining projects.

#### **TECHNICAL**

- 1. Audit and Risk Management Committee
- 2. Compensation Committee
- 3. Corporate Governance and Disclosure Policy Committee
- 4. Technical Committee
- 5. Special Committee



MONGOLIA

#### MONGOLIA – A MINING FOCUSED ECONOMY

Government focused on economic growth through leveraging the mining sector

#### **Emerging mining region**

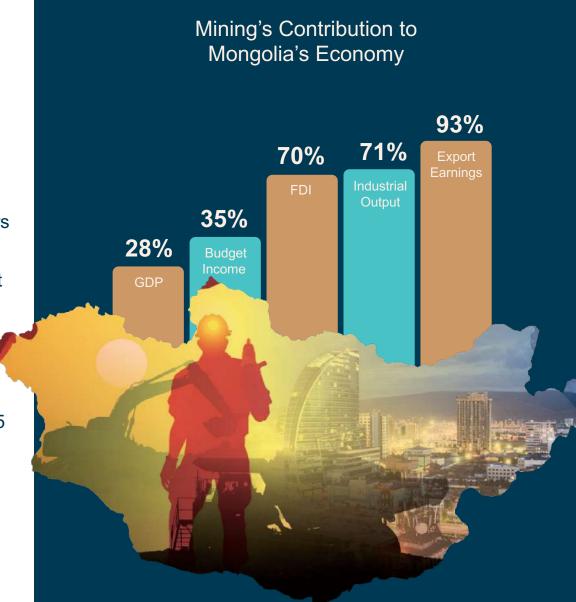
- +60,000 mining employees
- ~ 97% of Oyu Tolgoi's ~19,000 staff are Mongolian
- 70% of the country's land is underexplored
- · Government investing in mining related infrastructure

#### Competitive regulatory regime

- 5% gold royalty rate and 25% corporate income tax
- Stabilization certificates provide certainty of current tax rates for seven years
- Double tax treaty with Canada and ~20 other nations
- Canada-Mongolia Foreign Investment Promotion and Protection Agreement (FIPA)

#### **Growing democracy located on China's doorstep**

- Low population density: Only 3.5M people in the world's 18th largest country; 52% of population have higher education
- World Bank forecasts GDP growth to reach 6.2% in 2024; and 6.4% in 2025
- 30-year history of democratic elections
- Well educated, young population with 98% literacy rate





#### **MONGOLIAN MINERALS PRODUCTION**

Emerging Hard Rock Copper & Gold Mining Industry

#### **BAYAN AIRAG** Bayan Airag LLC



1 Moz open-pit, heap leach. Production started in Q2-2014.

# **ZAAMAR**Placer mining



Alluvial mining along 50 km section of Tuul River.

#### **BOROO** Boroo Pte. Ltd.



Produced 1.5 Moz @ approx. \$500/oz cash cost.

GATSUURT Boroo Pte. Ltd.



1.6 Moz reserve, open-pit development. Permitting stage.

ATO Steppe Gold



0.7 Moz Au (+5 Moz Ag),@ 1.3 g/t Au. Production started in early 2020.

#### TSAGAAN TSAKHIR Naran Mandal



Commenced production in early 2016.

#### **BAYAN KHUNDII & ALTAN NAR**

Erdene Resource Development



Emerging gold district. High-grade, Open-pit Development.

#### BAYANKHONGOR Artisanal mining



Alluvial mining activity.

#### OYU TOLGOI Rio Tinto



53Moz gold resource, open pit / underground.

#### Kharmagtai Xanadu/Zijin



Emerging gold district. High-grade, early stage.



#### OYU TOLGOI – A WORLD CLASS COPPER-GOLD DISTRICT

One of the world's largest copper-gold mines in southeast Mongolia

- Projected to be the fourth-largest copper mine globally by 2030
- Capable of producing 290ktpa of Cu and 260koz of Au per annum for another 30 years (peak average production of ~500ktpa of Cu)
- High grade / low cost / long life first quartile on the cost curve by 2030
- One of the most modern, safe and sustainable operations in the world; 23% of employees are female
- Resources of 39Mt copper and 53Moz gold<sup>1</sup>
  - Over 3.3Blbs of copper and almost 3Moz gold extracted since commissioning
- Underground production of block cave commenced February 2022

#### Notes

 Contained copper = 8.36Mt in M&I & 30.3Mt in Inferred Contained gold = 9.11Moz in M&I & 43.8Moz in Inferred Source: Rio Tinto 2022 Annual Report and Investor Presentation





## OYU TOLGOI – A WORLD CLASS COPPER-GOLD DISTRICT

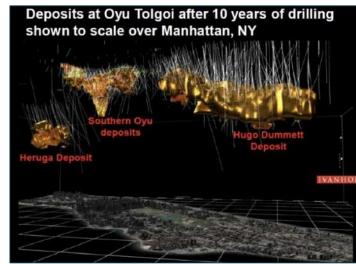
One of the world's largest copper-gold mines in southern Mongolia











## **BAYAN KHUNDII GOLD DEPOSIT RESOURCES & RESERVES**

Low sulfidation epithermal deposit

Resources	Tonnage	Au Grade	Contained Au	Ag Grade	Contained Ag
Classification	(Mt)	(g/t)	(koz)	(g/t)	(koz)
Measured	4.0	3.03	394	1.44	187
Indicated	3.3	2.04	219	1.22	131
M&I	7.4	2.58	613	1.34	319
Inferred	0.2	1.08	6	1.32	8

#### Notes:

- Mineral Resources are as of April 2023.
- 2. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability
- 3. Summation errors may occur due to rounding.
- 4. The effective date of the Mineral Resources is April 20, 2023.
- 5. Open pit mineral resources are reported within an optimized constraining shell.
- 6. Open pit cut-off grade is 0.3 g/t Au based on the following parameters:
  - 1. Gold Price of US\$2,000/oz Au
  - 2. Gold recovery of 95%
  - Mining Costs of US\$3.00/t
  - Milling Costs and G&A of \$22.00/t
  - Capping of gold grades was 200 g/t Au and 50 g/t Ag on 1m composite values.
  - 6. The density varies between 2.58 g/cm3 and 2.66 g/cm3 depending on lithology.

	Reserves	Tonnage	Au Grade	Contained Au	Ag Grade	Contained Ag
	Classification	(Mt)	(g/t)	(koz)	(g/t)	(koz)
	Proven	2.7	4.1	360.2	1.7	159.4
	Probable	1.1	3.0	104.7	1.7	61.1
_	Total	3.8	3.8	464.9	1.7	220.5

#### Notes:

- Mineral Reserves are as of August 2023.
- 2. The Statement of Estimates of Mineral Resources has been compiled under the supervision of Mr. Oyunbat Bat-Ochir who is a full-time employee of RPM and a Member of the Australian Institute of Geoscientists. Mr. Bat-Ochir has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity that he has undertaken to qualify as a Qualified Person as defined in the CIM Standards of Disclosure.
- 3. All Mineral Resources figures reported in the table above represent estimates at November 1, 2022. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
- 4. Mineral Resources are reported on a dry in-situ basis.
- 5. The Mineral Resource is reported using a 0.35 g/t Au cut-off grade in oxide and transition mineralisation and 1.02 g/t Au cut-off in fresh mineralisation and is constrained above conceptual optimised pit shell. Cut-off parameters were selected based on an RPM internal cut-off calculator, assuming an open cut mining method with 5% ore loss and 10% dilution, a gold price of US\$1,723 per ounce, a mining cost of US\$3 per tonne and a processing cost of US\$16 per tonne milled and processing recovery of 90% for oxide, 87% for transitional and 30% for fresh Au mineralisation. The conceptual optimised pit shell was constructed using a gold price of US\$2,000 per ounce, which is 1.4 times the long-term consensus forecast price.
- 6. Mineral Resources referred to above, have not been subject to detailed economic analysis and therefore, have not been demonstrated to have actual economic viability.



## DARK HORSE GOLD DEPOSIT RESOURCES & RESERVES

Epithermal oxide deposit

	Indica	ted Minera	l Resource	Inferr	ed Mineral	Resource
Resources	Tonnage	Au Grade	Contained Au	Tonnage	Au Grade	Contained Au
Classification	(kt)	(g/t)	(koz)	(kt)	(g/t)	(koz)
Oxide	578	3.0	56.2	75	1.1	2.7
Transitional	99	1.5	4.8	109	1.2	4.1
Fresh	5	4.9	0.7			
Total	682	2.8	61.7	184	1.2	6.8

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- The Statement of Estimates of Mineral Resources has been compiled under the supervision of Mr. Oyunbat Bat-Ochir who is a full-time employee of RPM and a Member of the Australian Institute of Geoscientists. Mr. Bat-Ochir has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity that he has undertaken to qualify as a Qualified Person as defined in the CIM Standards of Disclosure.
- 2. All Mineral Resources figures reported in the table above represent estimates at November 1, 2022. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
- 3. Mineral Resources are reported on a dry in-situ basis.
- 1.02 g/t Au cut-off in fresh mineralisation and is constrained above conceptual optimised pit shell. Cut-off parameters were selected based on an RPM internal cut-off calculator, assuming an open cut mining method with 5% ore loss and 10% dilution, a gold price of US\$1,723 per ounce, a mining cost of US\$3 per tonne and a processing cost of US\$16 per tonne milled and processing recovery of 90% for oxide, 87% for transitional and 30% for fresh Au mineralisation. The conceptual optimised pit shell was constructed using a gold price of US\$2,000 per ounce, which is 1.4 times the long-term consensus forecast price.
- Mineral Resources referred to above, have not been subject to detailed economic analysis and therefore, have not been demonstrated to have actual economic viability.

Reserves	Tonnage	Au Grade	Contained Ag
Classification	(Mt)	(g/t)	(koz)
Proven			
Probable	0.2	7.0	48.8
Total	0.2	7.0	48.8

#### Notes

- 1. The effective date of the Mineral Reserve estimate is August 1, 2023. The QP for the estimate is Mr. Julien Lawrence of O2 Mining Limited;
- The Mineral Reserve estimates were prepared with reference to the 2014 Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards (2014 CIM Definition Standards) and the 2003 CIM Best Practice Guidelines:
- Reserves estimated assuming open-pit mining method;
- Waste to ore cut-offs were determined using a NSR for each block in the model. NSR is calculated using prices and process recoveries for each metal accounting for all off-site losses, transportation, smelting and refining charges;
- 5. Reserves are based on a gold price of \$1,816/oz; and
- 6. Mineral Reserves were calculated from a diluted "mining" block model which included average dilution of 10% and losses of 2.5%.

#### **ALTAN NAR RESOURCES**

Intermediate sulfidation epithermal gold-silver-lead-zinc deposit

Indicated	Tonnage	Au	Ag	Zn	Pb	AuEq	Au	Ag	Zn	Pb	AuEq
Classification	(Mt)	(g/t)	(g/t)	(%)	(%)	(g/t)	(koz)	(koz)	(kt)	(kt)	(koz)
Oxide	0.6	2.0	12.7	0.6	1.0	3.1	39.3	244.3	3.8	6.3	59.6
Fresh	4.4	2.0	15.0	0.6	0.5	2.8	278.4	2,105.4	27.8	22.7	393.4
Total	5.0	2.0	14.8	0.6	0.6	2.8	317.7	2,349.7	31.6	29.0	453.0

Inferred	Tonnage	Au	Ag	Zn	Pb	AuEq	Au	Ag	Zn	Pb	AuEq
Classification	(Mt)	(g/t)	(g/t)	(%)	(%)	(g/t)	(koz)	(koz)	(kt)	(kt)	(koz)
Oxide	0.8	1.8	7.5	0.6	0.9	2.6	43.3	183.7	4.3	6.5	64.2
Fresh	2.7	1.7	8.0	0.7	0.6	2.5	142.4	682.1	19.4	15.8	212.8
Total	3.4	1.7	7.9	0.7	0.7	2.5	185.7	865.8	23.7	22.3	277.1

#### Note:

- 1. The Statement of Estimates of Mineral Resources has been compiled under the supervision of Mr. Jeremy Clark who is a full-time employee of RPM and a Member of the Australian Institute of Geoscientists. Mr. Clark has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity that he has undertaken to qualify as a Qualified Person as defined in the CIM Standards of Disclosure.
- 2. All Mineral Resources figures reported in the table above represent estimates based on drilling completed up to 7th May 2018. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
- 3. \*Au Equivalent (AuEq) calculated using long term 2023 2027 "Energy & Metals Concensus Forecasts" March 19, 2018 average of US\$1.310/oz for Au, US\$1.7.91/oz for Ag, US\$1.07/pound for Pb and US\$1.42/pound for Zn. Adjustment has been made for metallurgical recovery and is based company's preliminary testwork results which used flotation to separate concentrates including a pyrite concentrate with credits only for Au and Ag. Based on grades and contained metal for Au, Ag, Pb and Zn, it is assumed that all commodities have reasonable potential to be economically extractable. a. The formula used for Au equivalent grade is: AuEq g/t = Au g/t\*0.0124+Pb%\*0.509+Zn%\*0.578 with metallurgical recovery of 88.8% Au, 80.6% Ag, 80.4% Pb and 69.1% Zn. b. Au equivalent ounces are calculated by mulitplying Mineral Resource tonnage by Au equivalent grade and converting for ounces. The formula used for Au equivalent ounces is: AuEq Oz = [Tonnage x AuEq grade (g/t)]/31.1035.
- Mineral Resources are reported on a dry in-situ basis.
- 5. Reported at a 0.7 g/t AuEq cut-off above pit shelland 1.4g/t AuEq below the pit shell. Cut-off parameters were selected based on an RPM internal cut-off calculator, which indicated that a break-even cut-off grade of 0.7g/t Au Equivalent above pit and 1.4g/t AuEq below pit, assuming a gold price of US\$1310 per ounce, an open mining cost of US\$6 per tonne and a processing cost of US\$20 per tonne milled and processing recovery of 88.8% Au, 80.6% Ag, 80.4% Pb and 69.1% Zn.
- 6. Mineral Resources referred to above, have not been subject to detailed economic analysis and therefore, have not been demonstrated to have actual economic viability



# **ZUUN MOD RESOURCES**

Porphyry complex measuring 16km in circumference

Zuun Mod Resources	Tonnage	Mo Grade	Contained Mo	Cu Grade	Contained Cu
Classification	(Mt)	(%)	(Mlbs)	(%)	(Mlbs)
Measured	40	0.056	49.5	0.064	57.0
Indicated	178	0.057	224.0	0.070	273.7
M&I	218	0.057	273.5	0.069	330.7
Inferred	138	0.052	157.7	0.065	197.7

#### Notes

1. Effective Date: May 2011.

2. Cutoff grade: 0.04% Mo

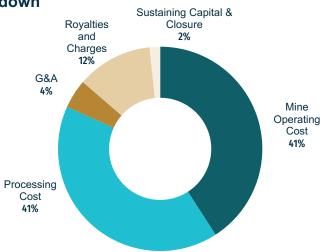
3. 1 tonne = 2204.64 lbs.

4. Estimates are rounded to appropriate significant figures.

## **BAYAN KHUNDII GOLD PROJECT UPDATED FEASIBILITY STUDY**

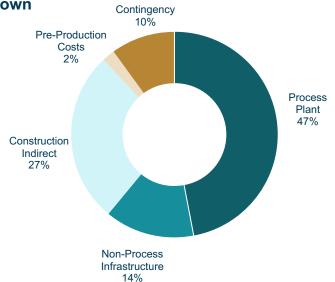
Operating in a lower cost jurisdiction





Operating Costs	LOM US\$ million	US\$/oz	US\$/t
Mine Operating Cost	\$165	\$347	\$41
Processing Cost	\$166	\$349	\$41
G&A	\$20	\$43	\$5
Total Site Operating Costs	\$352	\$739	\$88
Royalties and Charges	\$51	\$108	\$13
Sustaining Capital & Closure	\$10	\$22	\$3
All-in Sustaining Cost	\$414	\$869	\$103

#### **Capital Cost Breakdown**



Capital Costs	US\$ million
Process Plant	\$47
Non-Process Infrastructure	\$14
Construction Indirects	\$27
Construction Costs	\$88
Pre-Production Costs	\$2
Contingency (12%)	\$10
Total Construction Costs	\$100