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# DEVELOPING THE HIGH-GRADE KHUNDII MINERALS DISTRICT

Unlocking treasures - sharing benefits

Beaver Creek Conference September 2023



www.erdene.com

## 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 timing and completion of the three stages of the Strategic Alliance and the future plans and objectives for Erdene Mongol LLC and the Khundii Minerals District under the Strategic Alliance, 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 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 and which may prove to be incorrect. 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.

Readers are cautioned that forward-looking information and statements are not guarantees of future performance. There can be no assurance that such information and statements will prove to be accurate and actual results and future events could differ materially from those presented in such information and statements. Forward-looking information and statements is subject to a variety of risks and uncertainties which could cause actual events or results to differ from those reflected in the forward-looking information and statements. Such risks include, but are not limited to, the volatility of the price of gold, uncertainty of mineral resources, exploration potential, mineral grades and mineral recovery estimates, delays in exploration and development plans, insufficient capital to complete development and exploration plans, risks inherent with mineral acquisitions, delays in obtaining government approvals or permits, financing of additional capital requirements, commercial viability of mineral deposits, cost of exploration and development programs, risks associated with competition in the mining industry, risks associated with the ability to retain key executives and personnel, title disputes and other claims, changes in governmental and environmental regulation that results in increased costs, cost of environmental expenditures and potential environmental liabilities, accidents and labour disputes. Should one or more of these risks and uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in forward-looking information and statements. Please see the Company's Annual Information Form dated March 22, 2023 available on the Company's website at www.erdene.com or on the Company's SEDAR profile at www.sedar.com, for details of other risks facing the Company. The Company disclaims any intention or obligation to update or revise any forward-looking information and statements whether as a result of new information, future events or otherwise

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 Highlights

- First Mover in an Unexplored Portion of One of the World's Great Mineral Belts – Unparalleled Discovery Potential for Large, High Grade, Gold & Copper Deposits
- SV Strategic Alliance Uniting Mongolia's Pre-Eminent Explorer and Leading Miner
- Bayan Khundii Gold Project High-Grade Gold Development Moving Rapidly to First Gold



Multi-Million Ounce Potential – High-grade Gold Discoveries Adjacent to the Bayan Khundii Gold Project and Significant Exploration Potential in District

- Zuun Mod Molybdenum-Copper Porphyry Complex A Sleeping Giant
- People A Growing Team of Mongolian Leaders,
   Strong Social license to Operate and Supportive Shareholders



	CAD	USD
Share price	\$0.32	\$0.23
52-Wk range	\$0.25-\$0.45	\$0.19-\$0.34
Market cap	\$110.2M	\$79.6M
Shares O/S		344M
Options		21M / Proceeds: CAD\$7M
Warrants		25M / Proceeds: CAD\$11M
DSU		7 <i>M</i>
Shares F/D		397M

Capital Structure – Q3 2023 (as of Sept 6)

### Supportive Shareholder Base

Cornerstone Investor - Eric Sprott

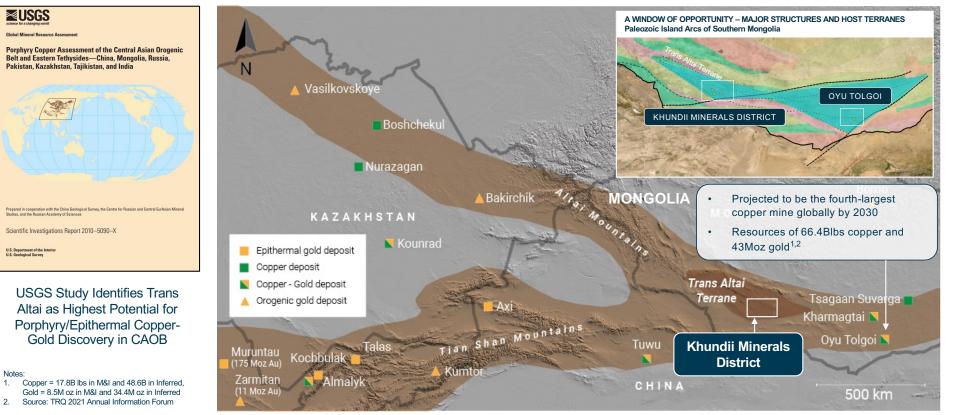
Institutional & Family Office	
Aegis Financial Corp Konwaye AG	30%
Lion Select Group Donald Smith	007
Eric Sprott	18%
European Bank for Reconstruction and Development	8%
Management & Directors	7%
Mongolian Shareholders	4%



1. Erdene was the subject of a University of British Columbia research project that investigated how exploration companies could maximize the benefits of resource development for host nations and affected communities

### FOCUSED ON A WORLD CLASS GOLD-COPPER BELT The Underexplored Trans Altai Terrane in Southwestern Mongolia





### MAJOR GOLD-COPPER DEPOSITS OF THE EASTERN CENTRAL ASIAN OROGENIC BELT

ERDENE

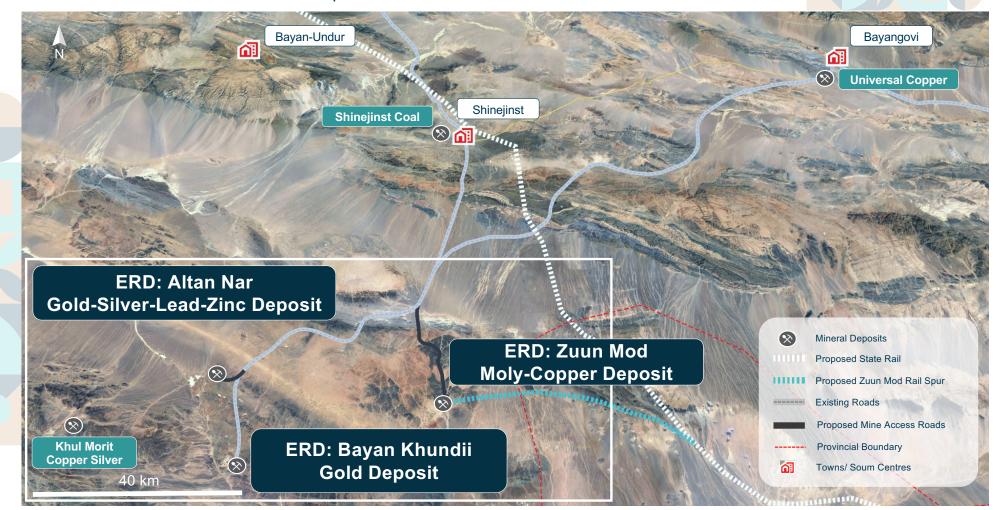
1.

### **IMPROVED INFRASTRUCTURE IN A GROWING MINING JURISDICTION** Less than 200km from China





### KHUNDII MINERALS DISTRICT Planned Mine and Infrastructure Development



### STRATEGIC ALLIANCE WITH MONGOLIAN MINING CORPORATION

Mongolia's Largest Independent Miner

### • MMC is Mongolia's largest publicly traded miner

Listed on the Hong Kong Stock Exchange main board (HKEX: 0975) MCS Group, a Mongolian conglomerate with operations in Engineering, Construction, Utilities and Real Estate is MMC's largest shareholder

### MMC's vision is to build a diversified mining company

Owns and operates the Ukhaa Khudag (UHG) and Baruun Naran (BN) high-quality coking coal mines in Umnugovi province Investment in Erdene expands operations to precious and base metals

### Key Operating Statistics

14-year operating history Approximately 2,000 employees Strong safety culture – 3 LTI from 6.9 million man-hours in 2022 Property, plant and equipment investments of US\$1.5 billion Major contributor to the local economy procuring US\$4.6 million from provincial suppliers and almost 40% of employees hired locally







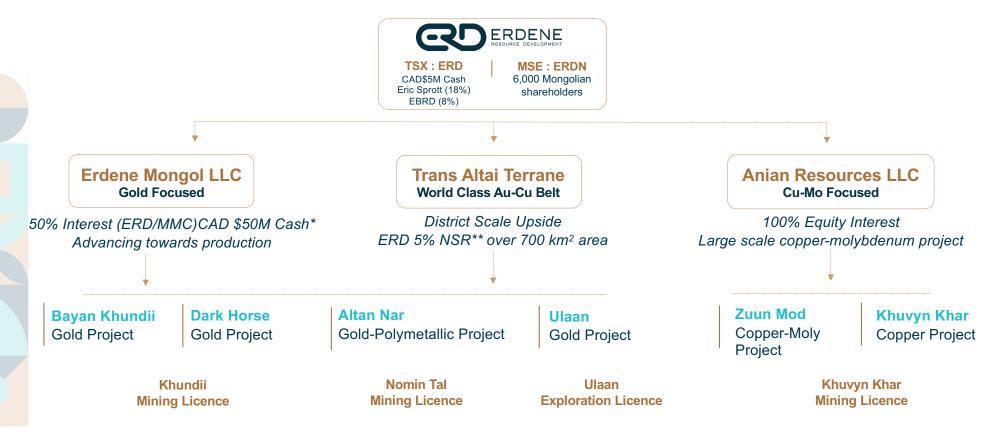


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### EXPOSURE TO MONGOLIAN PRECIOUS AND BASE METALS

Khundii Minerals District holds Gold, Copper and Molybdenum Resources





Note: Upon completion of Strategic Alliance, Mongolian Mining Corporation will own 50% equity interest in Erdene Mongol LLC \* Cash

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\*\* (after initial 400,000oz Au production)

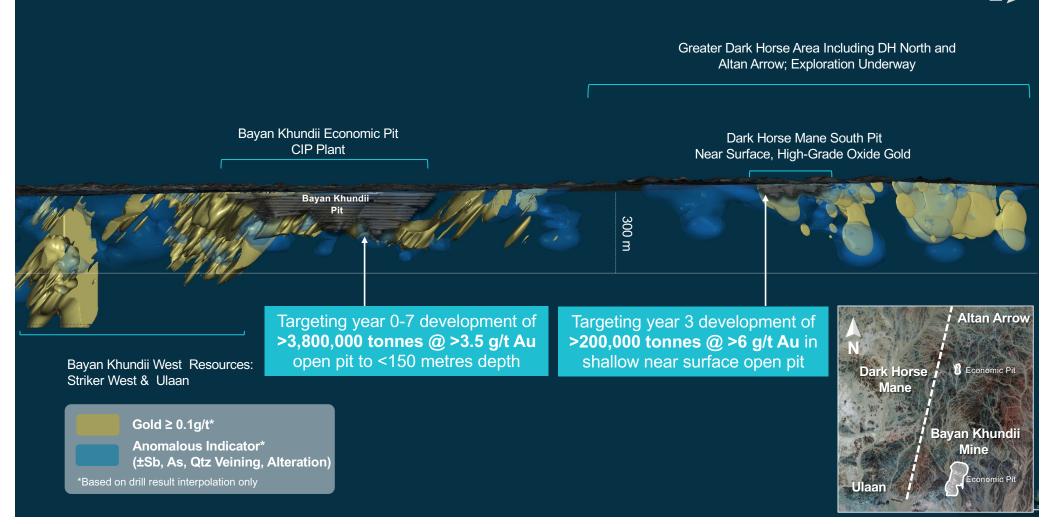
### BAYAN KHUNDII DEPOSIT – LARGE, HIGH-GRADE, EPITHERMAL GOLD SYSTEM

Multiple High-Grade Gold Targets – Over 10km of Mineralized Structures with Limited Exploration Below 150m

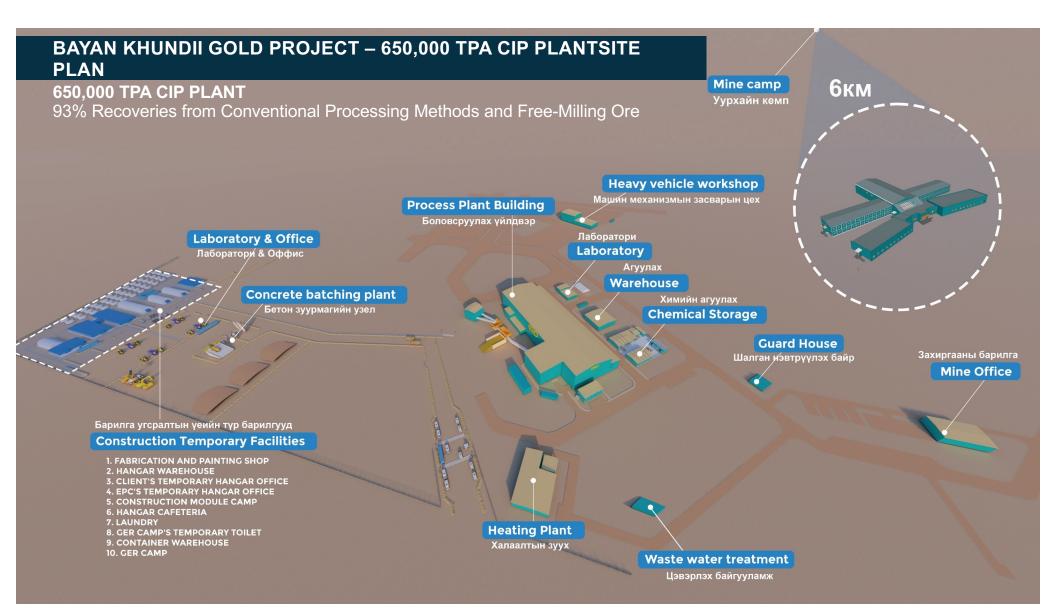


## **BAYAN KHUNDII GOLD PROJECT – RESOURCES IN FEASIBILITY STUDY UPDATE**

Bayan Khundii & Dark Horse Mane South ~ 650,000oz Averaging over 2 g/t Au Measured and Indicated



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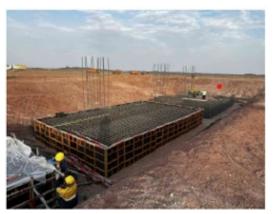




## BAYAN KHUNDII GOLD PROJECT Process Plant Early Works Construction



Process Plant Footings



Formwork for Foundations





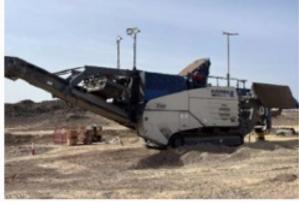
Foundation Rebar Installation



Blinding Concrete



Footing Compaction



Crushing Plant



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# BAYAN KHUNDII GOLD PROJECT

Earthworks and Temporary Construction Infrastructure



Site Leveling



Temporary Fuel Station







Aggregate Production



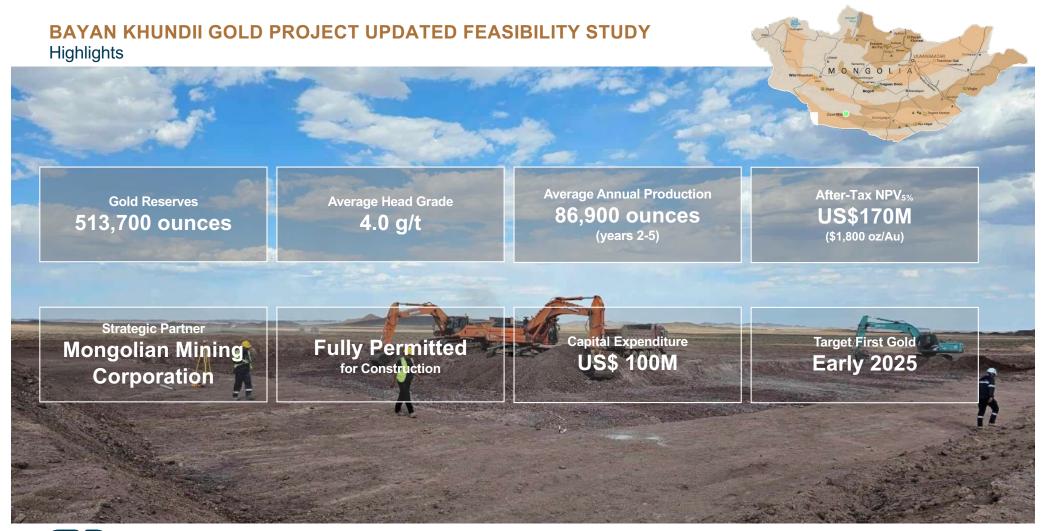
Site Roadworks



Ger Camp & Construction Power



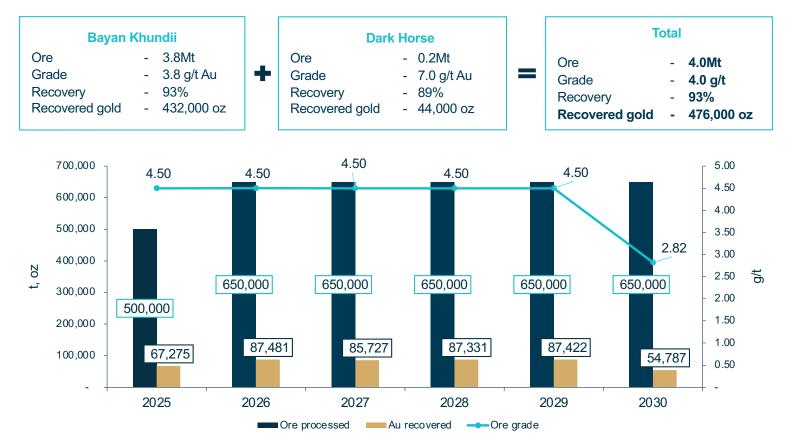
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## **BAYAN KHUNDII GOLD PROJECT UPDATED FEASIBILITY STUDY**

25% Increase in Recovered Gold Compared to 2020 Study

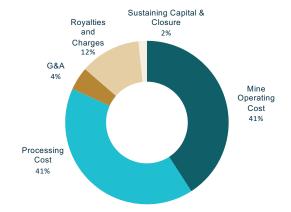




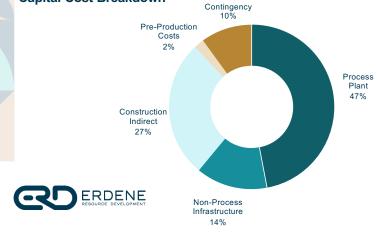
# BAYAN KHUNDII GOLD PROJECT UPDATED FEASIBILITY STUDY

Operating in a Lower Cost Jurisdiction

### **Operating Cost Breakdown**



**Capital Cost Breakdown** 

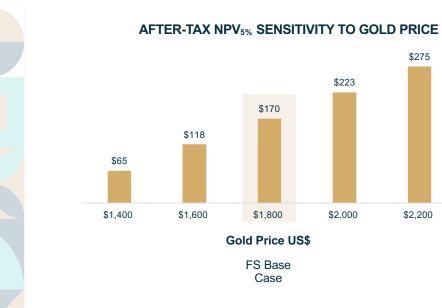


Operating Costs	LOM US\$ million	US\$/oz	US\$/t		
Mine Operating Cost	\$165	\$347	\$41		
Processing Cost	\$166	\$349	\$41		
G&A	\$20	\$43	\$5		
Total Site Operating Costs	\$352	\$739	\$88		
Royalties and Charges	\$51	\$108	\$13		
Sustaining Capital & Closure	\$10	\$22	\$3		
All-in Sustaining Cost	\$414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

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

# **BAYAN KHUNDII GOLD PROJECT UPDATED FEASIBILITY STUDY** Exposure to Higher Gold Prices and Resilience to Increased Costs





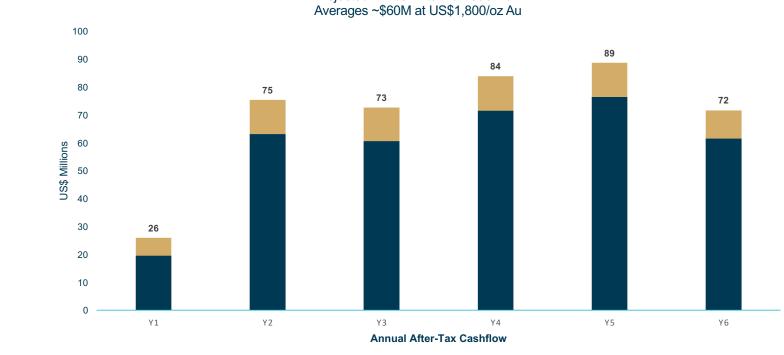
AFTER-TAX IRR SENSITIVITY TO GOLD PRICE



FS Base Case



# **BAYAN KHUNDII GOLD PROJECT UPDATED FEASIBILITY STUDY** Averaging \$60M of Free Cash Flow Per Annum Under Base Case and ~\$80M at \$2,000/oz Au



Projected Annual After-Tax Cashflow

■ US\$2,000/oz Au ■ US\$1,800/oz Au



# BAYAN KHUNDII GOLD PROJECT CONSTRUCTION TIMETABLE Targeting First Gold in 2025



Milestone		2023			2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Approval And Permits To Proceed To Construction												
Construction Readiness & Camp Establishment			$\bigcirc$									
Detailed Engineering and Procurement			$\bigcirc$									
Earthworks and Civils				Ø								
Process Plant Structure, Equipment Delivery and Construction					1							
Non-Process Infrastructure Construction												
State Commission Approvals												
First Ore Processed									<b>S</b>			
First Gold Production									•			

Completion date



### **BAYAN KHUNDII GOLD PROJECT FINANCE STRATEGY** Backing of Leading International and Domestic Institutions



### Mongolian Mining Corporation

- US\$40M equity investment in Erdene's subsidiary
- · Assignment of engineering and development staff to support project



# **Export Development Canada**

- Mandate Letter signed for senior secured debt facility
- Due diligence underway on updated Feasibility Study by SLR Consulting
- EDC is a debt provider to Oyu Tolgoi, Mongolia's largest mining operation •

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

- Major shareholder (8%) following loan conversion in Q4 2020
- Largest foreign direct investor in Mongolia with €2.2B invested, including senior lender to Oyu Tolgoi



Reconstruction and Development

### 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

## **Eric Sprott**



**Eric Sprott** 

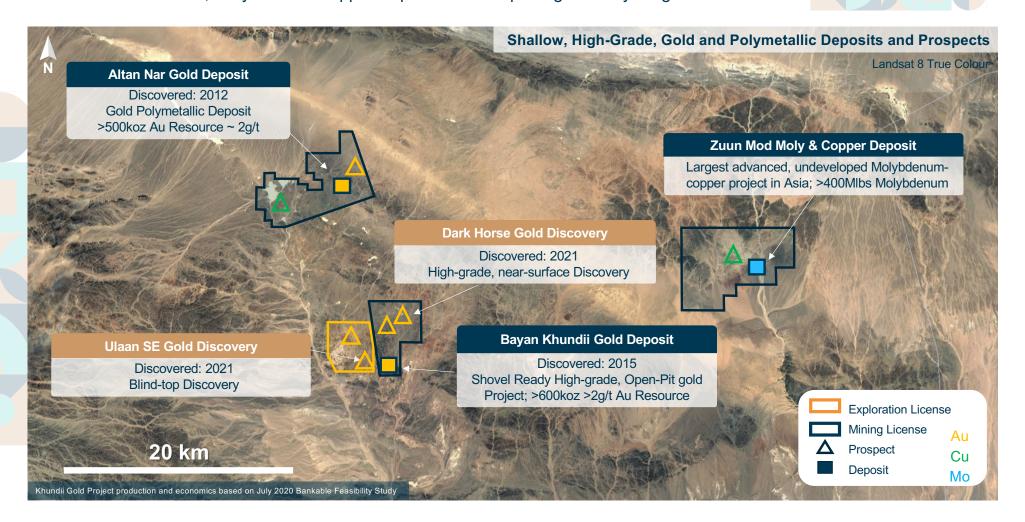
### Mongolian Stock Exchange

Erdene's largest shareholder (18%)

- · Sharing Benefits with more than 6,000 Mongolian shareholders
- · Erdene is first company cross-listed on both Mongolia and Toronto Stock Exchanges

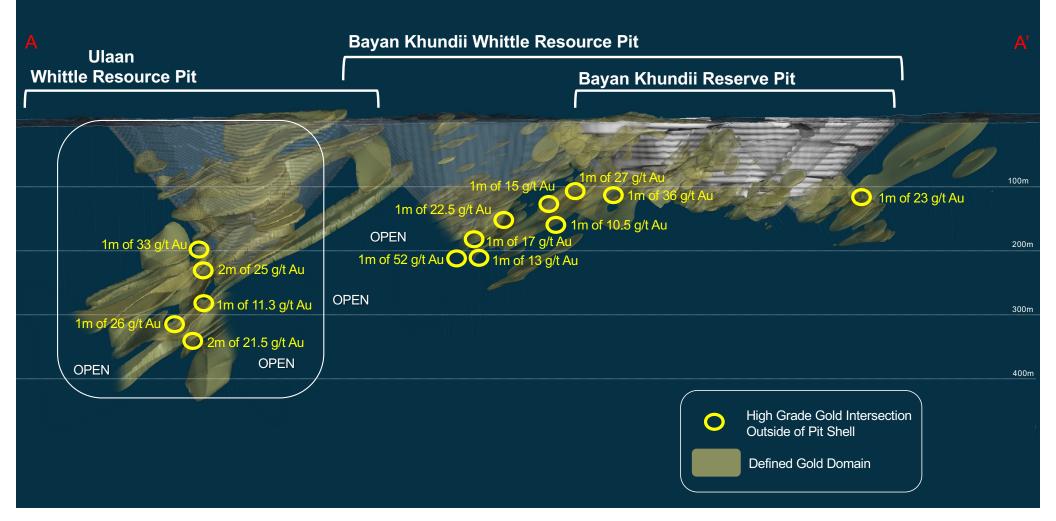


### **THE KHUNDII MINERALS DISTRICT – MULTI-MILLION OUNCE POTENTIAL** Four Gold Discoveries, Molybdenum-Copper Deposit and Multiple High-Priority Targets



### **BAYAN KHUNDII DEPOSIT – CONCEPTUAL DEVELOPMENT STAGES**

**Extended Resources** 



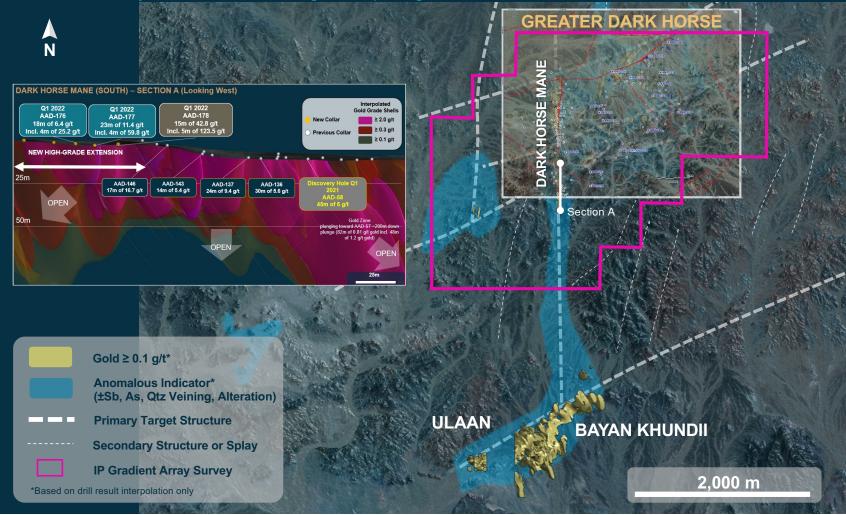
### **ULAAN SE DEPOSIT**

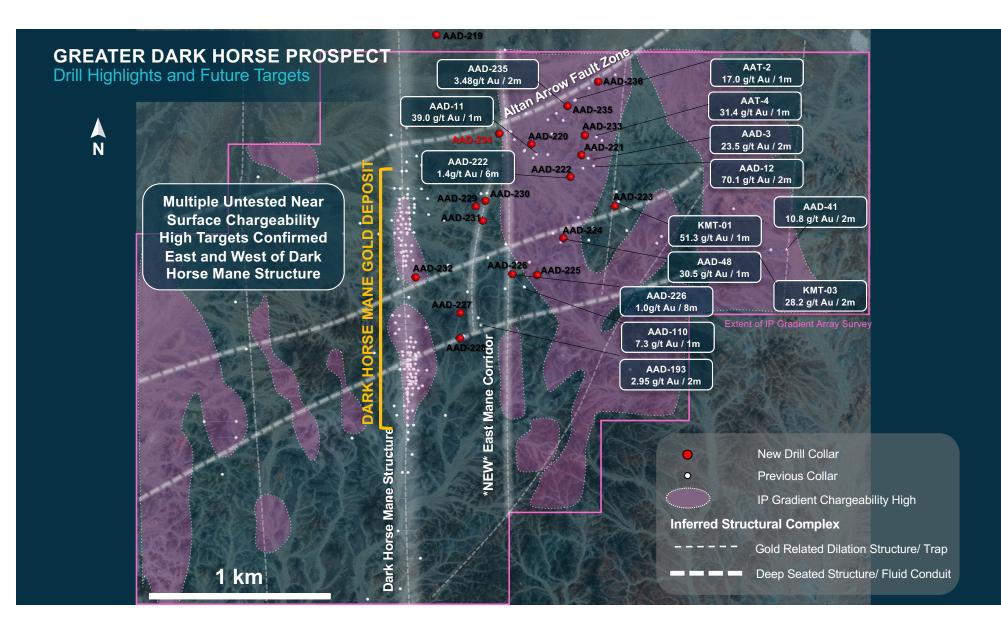
High-Grade Structure 300 metres west of Bayan Khundii – Discovered in 2021

### В B' UDH-53 **UDH-52** Section B Looking ENE Highlighted Average Grade Intervals **UDH-21** BUDH-53 UDH-20 OPEN 115m of 1.1 g/t Gold **UDH-14** Incl 1m of 157 g/t Gold 216m of 1.07 g/t Gold Ending in Mineralization **UDH-17** Ending in Mineralization UDH-14 0 100m UDH-35 **UDH-35 OPEN** 41m of 8.1 g/t Gold **UDH-52** UDH-15 **UDH-21** • 0 Incl 23m of 13.7 g/t Gold 189m of 0.8g/t Gold Incl 3m of 68 g/t Gold **Ending in Mineralization** UDH-36 UDH-52 Ending in Mineralization **UDH-22 UDH-18 UDH-10 UDH-28** 0 **UDH-36** 200m UDH-19 UDH-31 0 179m of 1.2 g/t Gold **UDH-53 UDH-34** OPEN Ending in Mineralization 89m of 1.4 g/t Gold UDH-16 B' Ending in Mineralization H-32 UDH-19 UDH-38 UDH-30 UDH-07 300m UDH-37 0UDH-33 Drill Collar (Gram x Meter) Interpolated Grade Shell **UDH-27 Reported Hole** 0.3 g/t Au ● ≥ 200 ○ ≥ 10 0 < 5 UDH-08 UDH-13 50m 0 1.0 g/t Au O ≥ 50 ○ ≥ 5 • Q3-22 Proposed UDH Previous Hole ≥ 2.0 g/t Au

## **GREATER DARK HORSE DRILLING – 2023**

Gradient Array and Shallow Drill Program Exploring for Near-Surface, Gold Enriched Oxide Zones





### ALTAN NAR – NEAR SURFACE, HIGH-GRADE, 5.6KM MINERALIZED SYSTEM Strong Potential for Resource Expansion Along Strike and at Depth

Au Oz Pb lbs Ag Oz Zn lbs 2019 Resource Category (~10g/t) (~0.6%) (~0.6%) (1.9g/t) 2,350,000 69,520,000 Indicated 318,000 63,800,000 Altan Nar 0.7g/t AuEq cut-off 186,000 866,000 49,060,000 52,140,000 Inferred **Carbonate Base** Altan Nar: 16km north of the Bayan Khundii Deposit on all season road Over 20 Intermediate Sulphidation Gold-polymetallic targets **Metal-Intermediate** Sulphidation deposit ..... N similar to some of Untested the world's largest: **Drill Target** ALTAN NAR Porgera Au+Ag+Pb+Zn Deposit (>25 Moz Au) Kelian **Union North** (5.7 Moz Au) 1430ppt 5.6km Gold I tend Amatok Soil (10 Moz Au) Gold in **Discovery Zone**  Montana Tunnels (36 Moz Ag) Ulaan Fruta del Norte Cu-Au (6.7 Moz Au) Bayan Khundii Rosia Montanna **Gold Deposit** (17 Moz Au) 20 km Landsat 8 True Colour ERDENE

# ZUUN MOD – MOLY-COPPER PROJECT

One of Asia's Largest Undeveloped Molybdenum-Copper Deposits



ZUUN MOD PROJECT LOCATED ON DOORSTEP OF WORLDS LARGEST STEEL PRODUCER AND LARGEST MOLYBDENUM CONSUMER

Asian Molybdenum Supply & Demand

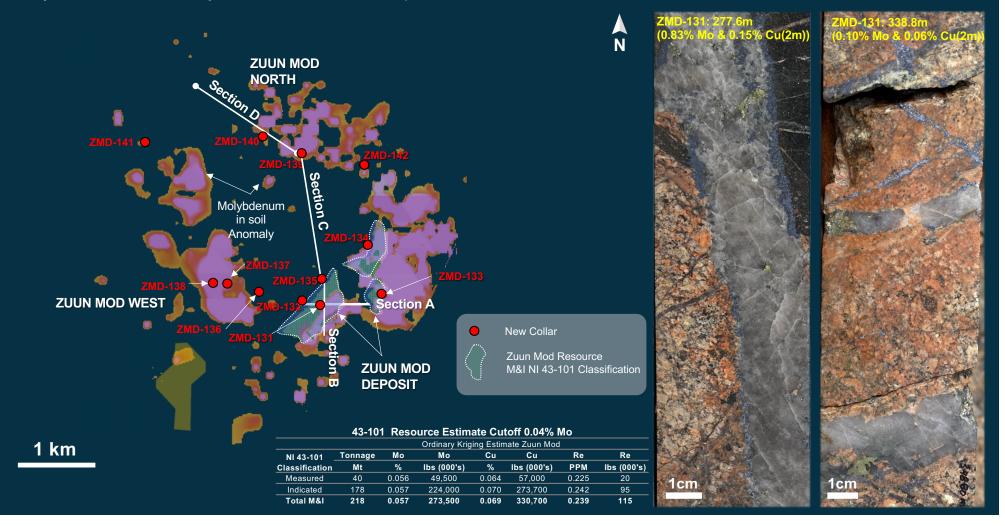


Sandbox Royalties Corp. holds a 1.5% net smelter return royalty on the Zuun Mod License, subject to a buy-down provision. NI 43-101 Technical Report, Zuun Mod Porphyry Molybdenum-Copper Project, Minarco-MineConsult, June 2011



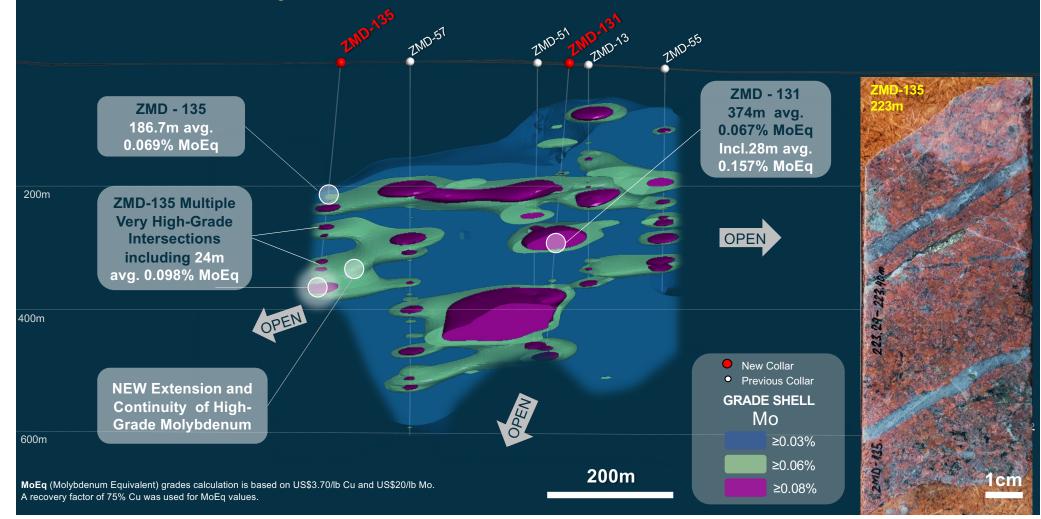
### ZUUN MOD PORPHYRY MO-CU PROJECT PLAN MAP

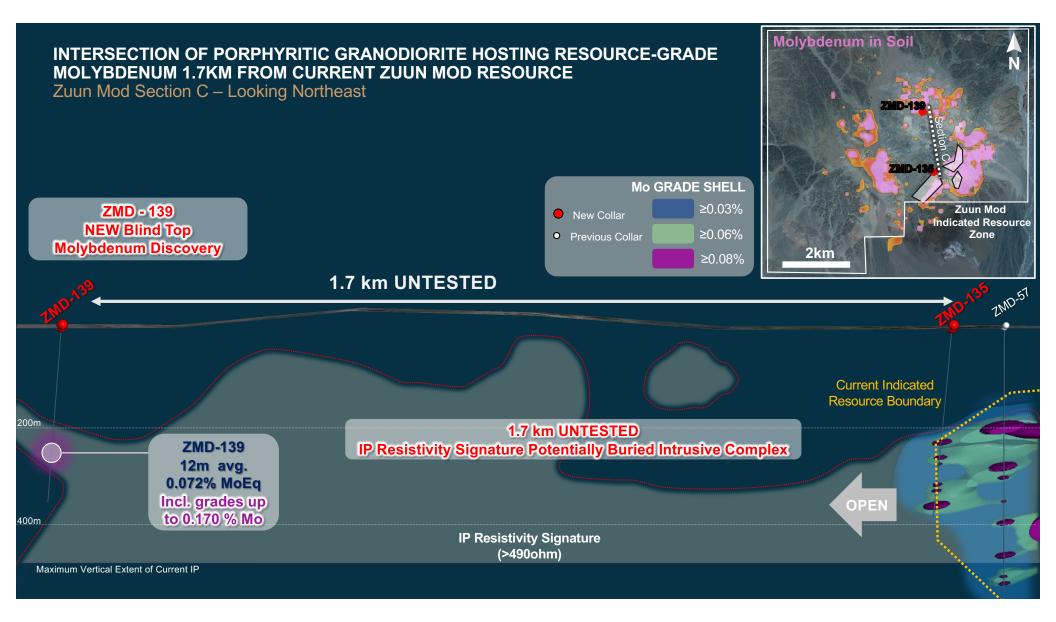
Molybdenum Soil Anomaly & Q2 2023 Drill Plan Map



### STEP-OUT EXTENSION AND CONTINUITY OF HIGH-GRADE MOLYBDENUM

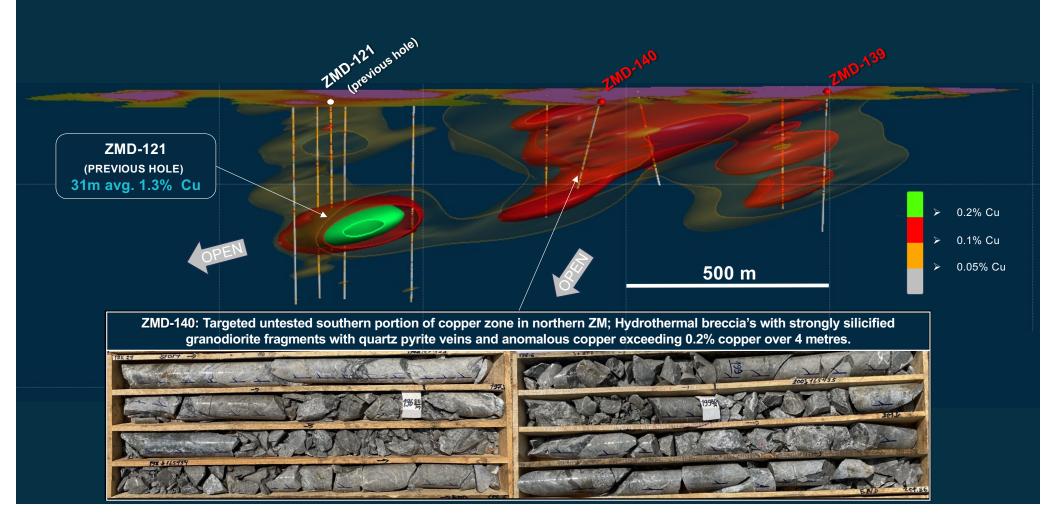
Zuun Mod Section B – Looking East





### **NORTHERN ZUUN MOD COPPER ZONE – POTENTIAL EXPANSION OPPORTUNITIES**

Zuun Mod North Section D – Looking North



## **OYU TOLGOI – A WORLD CLASS COPPER-GOLD DISTRICT** One of the World's Largest Copper-Gold Mines in Southern Mongolia

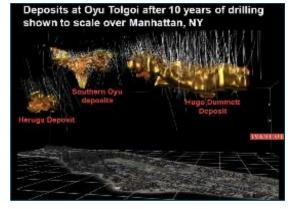




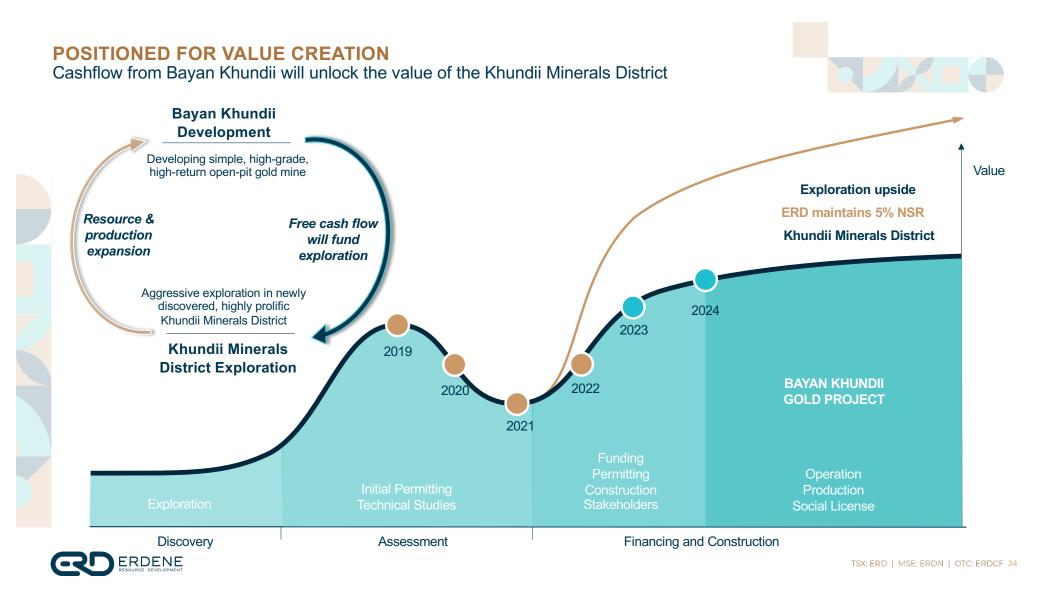












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D Erdene Resource Development Corp.



# Appendices

www.erdene.com





### MCS GROUP Mongolia's Leading Diversified Business

### • MCS is one of Mongolia's largest conglomerates

30-year history operating in Mongolia Businesses in mining, engineering, energy, communications, property, consumer goods, healthcare and hospitality

 MCS Group's businesses employ over 10,000 staff in Mongolia Contribute approximately US\$500 million to the Mongolian economy annually

One of Mongolia's largest taxpayers

 MCS is committed to developing and enriching the Mongolian economy through its pursuit of responsible corporate excellence and progressive technology

MCS strives to ensure its operations benefit the communities in which it operates

The Group provides transparent sustainability reporting

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









### **MCS PROPERTY – CONSTRUCTION CONTRACTOR** Bayan Khundii Development - Engineering, Procurement and Construction

# **XMCS**property



OYU TOLGOI UNDERGROUND DECLINE CONVEYOR TO SURFACE

LOCATION:	OT MINE SITE, UMNUGOBI PROVINCE
CLIENT:	OYU TOLGOI LLC
DESIGN:	WORLEY LLC
FACILITIES:	6.7KM OF CONVEYORS TO SURFACE TO CONCENTRATOR FACILITY
COMMENCEMENT DATE:	23.APR.2022
COMPLETION DATE:	06.MAR.2024
PROJECT SCOPE:	MINE DRY FACILITY AT C2S UNDERGROUND DRIVE STATIONS SURFACE DRIVE STATIONS TRANSFER STATIONS CONVEYORS (CVB-2020, CVB-2021, CVB-2022)





### UHAA KHUDAG COAL MINE

LOCATION:	UMNUGOVI, MONGOLIA
CLIENT:	ENERGY RESOURCES LLC
ENGINEER:	SEDGMAN ENGINEERING TECHNOLOGY
GFA (M2):	16,237 M <sup>2</sup>
COMMENCEMENT:	MAY 2008
COMPLETION DATE:	DECEMBER 2011
PROJECT SCOPE:	COAL HANDLING & PREPARATION PLAN MINERS CAMP

NT (CIVIL) MINERS CAMP WASTE-WATER TREATMENT FACILITY GUEST HOUSE MINE OFFICE HEAVY EQUIPMENT WORKSHOP KINDERGARTEN & SCHOOL APARTMENT DISTRICT



Coyu Tolgoi Worley

OYU TOLGOI UNDERGROUND

CONSTRUCTION

OYU TOLGOI LLC

16.AUG.2017

21.JULY.2019

JACOBS ENGINEERING SH-2 OBE CRUSHING & CONVEYING SYSTEM

OT MINE SITE, UMNUGOBI PROVINCE

ALL UNDERGROUND PERMANENT FACILITIES

BULKHEAD STRUCTURAL STEEL AND SLAB AT -1202M LEVEL

DOE BIN-11 RING BEAMS AND WALLS ORE BIN-11 RING BEAMS AND WALLS JAW CRUSHER AND HOPPER AT -1146M LEVEL APRON FEEDER AND LOAD OUT CONVEYOR AT -1202M LEVEL UNDERGROUND MINE DEWATERING SYSTEM

LOCATION:

CLIENT:

DESIGN:

FACILITIES:

COMMENCEMENT DATE: COMPLETION DATE:

PROJECT SCOPE:









## **ERDENE & MMC CEO VISIT – BAYANKHONGOR – APRIL 2023**

Office Opening in Provincial Centre (Bayankhongor) and Open House in Sub-Province Centre (Shinejinst)







### **OYU TOLGOI – A WORLD CLASS COPPER-GOLD DISTRICT** One of the World's Largest Copper-Gold Mines in Southern Mongolia

- Projected to be the fourth-largest copper mine globally by 2030
- Capable of producing one billion pounds of copper and 330,000oz of gold for at least 35 years: >US\$4B in Revenues Annually
- High/Grade/Low Cost/Long Life
- · One of the most modern, safe and sustainable operations in the world
- Resources of 66.4Blbs copper and 43Moz gold<sup>1,2</sup>
  - Over 3.3Blbs of copper and almost 3Moz gold extracted since commissioning<sup>3</sup>
- Underground production of block cave commenced February 2022







Notes:

- Copper = 17.8B lbs in M&I and 48.6B in Inferred, Gold = 8.5M oz in M&I and 34.4M oz in Inferred
- 2. Source: TRQ 2021 Annual Information Forum
- 3. Source: TRQ annual reports

