

## PDAC 2022 Presentation

10 June 2022

ASX Markets Announcement Office  
Exchange Centre  
20 Bridge Street  
Sydney NSW 2000

### BY ELECTRONIC LODGEMENT

#### Prospectors & Developers Association of Canada (PDAC) Presentation

Please find attached for release to the market, Xanadu Mines Ltd's Presentation to *the Prospectors & Developers Association of Canada (PDAC) 2022 Convention*, being held in Toronto from June 13-15, 2022.

-ENDS-

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#### **About Xanadu Mines Ltd:**

Xanadu is an ASX and TSX listed Exploration company operating in Mongolia. We give investors exposure to globally significant, large-scale copper-gold discoveries and low-cost inventory growth. Xanadu maintains a portfolio of exploration projects and remains one of the few junior explorers on the ASX or TSX who control a globally significant copper-gold deposit in our flagship Kharmagtai project. For information on Xanadu visit: [www.xanadumines.com](http://www.xanadumines.com).

This Announcement was authorised for release by Xanadu's Executive Chairman and Managing Director.

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XANADU MINES

# Funded & Accelerating Copper-Gold Projects

**Mongolia @PDAC | 13 JUNE 2022**

Prospectors & Developers  
Association of Canada (PDAC)

ASX:**XAM** | TSX:**XAM**



# About Xanadu Mines

ASX & TSX listed exploration & development company operating in Mongolia

## Discover

**Kharmagtai (76.5%)<sup>1</sup>**  
Flagship project; development stage

**Red Mountain (100%)**  
Early stage exploration

**New Project Generation**



## Define (Kharmagtai)

**Mineral Resource Estimate<sup>2</sup>**  
1.1Bt with 3Mt Cu & 8Moz Au  
>100Mt higher grade zone

**Scoping Study<sup>3</sup>**  
US\$630M NPV (405-850); 20% IRR  
(16-25%); 4 year payback (4-7)



## Develop (Kharmagtai)

**Funded to Decision to Construct** by strategic partnership with Zijin Mining

**Pre-Feasibility Study (PFS)**  
Commencing 2nd half of 2022

## Capital Structure

**A\$0.026**

Share Price as at 3/6/2022

**1,412M**

Share on issue as at 3/6/2022

**A\$36M**

Market Cap at A\$0.034/share

**A\$7M**

Cash Balance reported as at 31/3/2022, plus funds received from Phase 1 Placement with Zijin Mining<sup>4</sup>

**A\$41M**

Enterprise Value

## 53% Top 20 Shareholders

**INSTITUTIONAL SHAREHOLDERS**

ACA 16% Zijin 10% Others 21%

**BOARD AND MANAGEMENT**

7% - (on a fully diluted basis, includes 37m shares & 47m performance options)

<sup>1</sup> Will become 38.25% upon completion of 50-50 Joint Venture with Zijin Mining Group

<sup>2</sup> ASX/TSX Announcement 8 December 2021 – Kharmagtai Resource Grows to 1.1Bt containing 3Mt Cu and 8Moz Au

<sup>3</sup> ASX/TSX Announcement 6 April 2022 – Scoping Study Kharmagtai Copper-Gold Project

<sup>4</sup> ASX/TSX Announcement 19 April 2022 – Strategic Partnership with Zijin Mining

# Led by Highly Experienced Directors & Management

XANADU MINES

Track record of discovering & developing successful porphyry copper-gold mines

## BOARD



**GANBAYAR  
LKHAGVASUREN**

COUNTRY MANAGER & EXECUTIVE DIRECTOR



**COLIN  
MOORHEAD**

EXECUTIVE CHAIRMAN &  
MANAGING DIRECTOR



**MICHELE  
MUSCILLO**

NON-EXECUTIVE DIRECTOR



**TONY  
PEARSON**

NON-EXECUTIVE DIRECTOR



**MUNKHSAIKHAN  
DAMBIINYAM**

CHIEF OPERATING OFFICER



**ANDREW  
STEWART**

VICE PRESIDENT EXPLORATION



**MAT  
BROWN**

CHIEF GEOLOGIST



**SPENCER  
COLE**

CHIEF DEVELOPMENT OFFICER  
CHIEF FINANCIAL OFFICER

MONGOLIA EXPERTISE

DEEP EXPLORATION SKILLS

COMMERCIAL CAPABILITY

# Investing in Mongolia

Responsible development for mutual benefit

**US\$36M<sup>1</sup>**

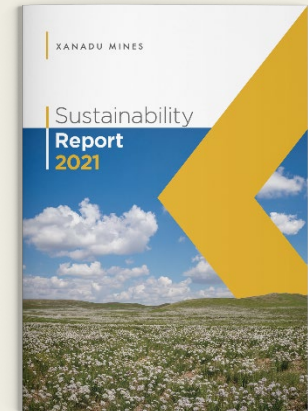
Invested in Mongolia  
Through 2021

**US\$41M<sup>2</sup>**

Planned Over Next  
12-18 Months

## Environment, Social & Governance

- Protecting the Environment
- Supporting Communities in the South Gobi
- Employing a Mongolian Workforce
- Governing to High Standards
- Operating Safely



2005

2014

2021

2022

## Xanadu Mines History

Formed as  
Mongolian  
coal explorer

Acquired Kharmagtai  
& Red Mountain  
copper projects

Upgraded Kharmagtai  
Resource to 1.1Bt<sup>3</sup>

Published first  
Sustainability Report

Published Kharmagtai  
Scoping Study

Announced strategic  
partnership with Zijin  
Mining

Planning to commence  
Pre-Feasibility Study to  
develop Kharmagtai  
into a mine

<sup>1</sup> Xanadu 2021 Annual Report, Total Deferred Exploration Expenditure, converted to USD at 1.4 AUD:USD exchange rate

<sup>2</sup> ASX/TSX Announcement 19 April 2022 – Strategic Partnership with Zijin Mining, includes US\$35M JV investment plus 75% of A\$11m equity placement at 1.4 AUD:USD exchange rate

<sup>3</sup> ASX/TSX Announcement 8 December 2021 – Kharmagtai Resource Grows to 1.1 Billion Tonnes

# Kharmagtai Positioned for Development

Funded to accelerate Kharmagtai to FID & reinvigorate exploration

Moving forward into 2022:

- Kharmagtai PFS starts in 2022; **Maiden Ore Reserve** and **Decision to Mine** in 2023
- Explore Kharmagtai **high-grade extension & new discovery**
- Explore Red Mountain following up recent **shallow, high-grade bornite** intercepts
- **7 rigs** parked up, and drilling teams ready to get started

Objectives delivered in 2021:

1. **Resource** expanded to 1.1Bt containing 3Mt Cu & 8Moz Au, including >100Mt higher-grade core.
2. **Scoping Study**<sup>1</sup> delivers 30-year life; US\$630M NPV; 4-year payback and 20% IRR, producing **30-50ktpa Cu** and **100-115kozpa Au**.
3. **Funded** via strategic partnership with Zijin Mining Group<sup>2</sup> delivering US\$43M (A\$58M<sup>3</sup>).

## Kharmagtai Project Camp



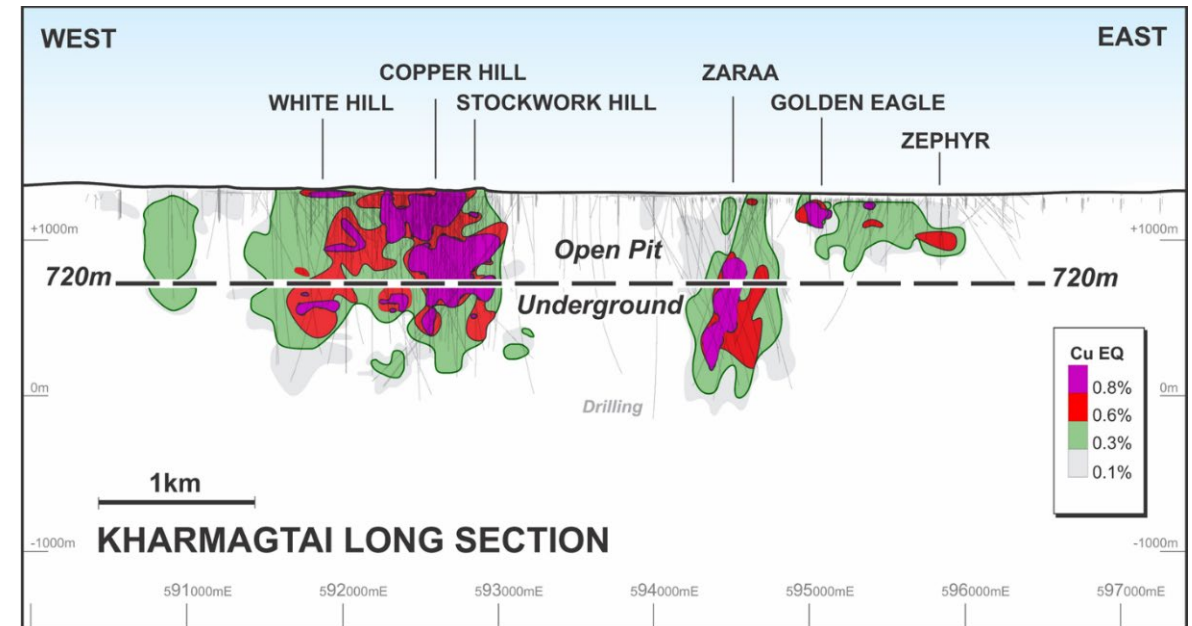
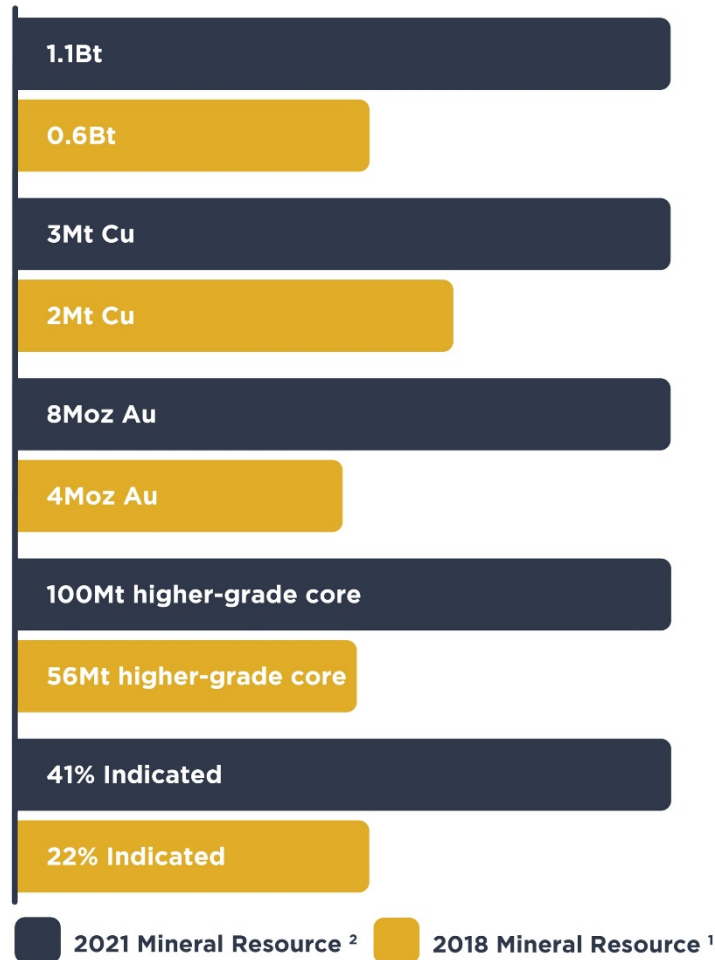
<sup>1</sup> ASX/TSX Announcement 6 April 2022 – Scoping Study – Kharmagtai Copper-Gold Project; includes appropriate economic ranges

<sup>2</sup> ASX/TSX Announcement 19 April 2022 – Strategic Partnership with Zijin Mining

<sup>3</sup> Conversion based on AUD:USD = 0.7387 as at 19 Apr 2022 close (transaction announcement date)

# Continued Upgrades to Kharmagtai Resource

Doubled higher-grade zones with strong potential for continued growth



## 2022-2023 Drilling

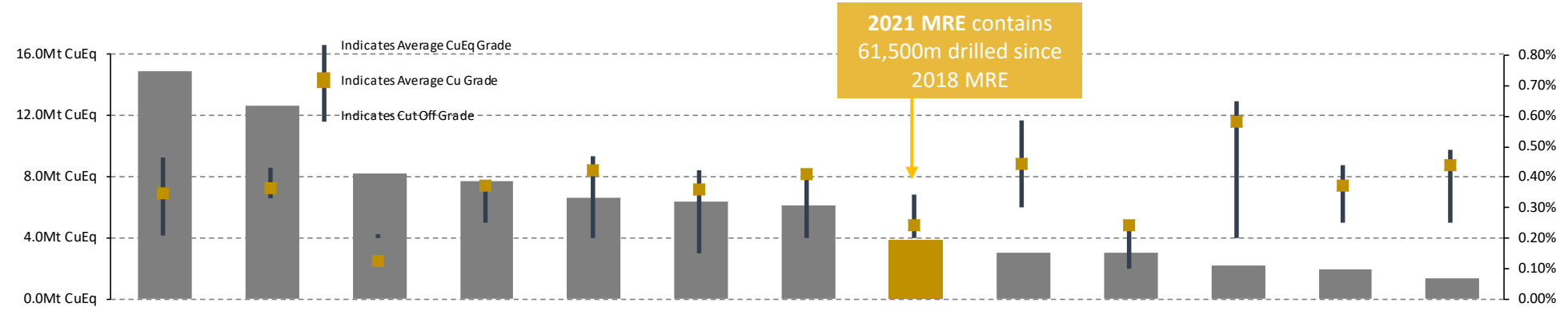
- Approximately 30,000 metres of infill drilling targeted during Pre-Feasibility
- Reinvigorated exploration and expansion drill program being planned, with rigs ready to go

<sup>1</sup> ASX/TSX Announcement 18 December 2018 – Technical Report to support Kharmagtai Mineral Resource

<sup>2</sup> ASX/TSX Announcement 28 February 2022 – Kharmagtai Technical Report and ASX/TSX Announcement 8 December 2021 – Kharmagtai Resource Grows to 1.1 Billion Tonnes

# Resource Moves Kharmagtai Up the Global Ranks

One of the largest undeveloped Cu-Au resources controlled by a junior



Project Name	Cascabel	Los Helados	Casino	Vizcachitas	Altar	Canariaco Norte	Warintza	Kharmagtai	Antakori	NorthMet	Hillside	Cortadera	Productora
Location	Ecuador	Chile	Canada	Chile	Argentina	Peru	Ecuador	Mongolia	Peru	USA	Australia	Chile	Chile
Stage	PFS	PEA	PEA	PEA	PEA	PEA	PEA	PEA	PEA	PEA	FS	PFS	PFS
Resource (Mt CuEq)	14.9Mt CuEq	12.7Mt CuEq	8.2Mt CuEq	7.7Mt CuEq	6.6Mt CuEq	6.4Mt CuEq	6.1Mt CuEq	3.8Mt CuEq	3.02Mt CuEq	3.0Mt CuEq	2.2Mt CuEq	2.0Mt CuEq	1.3Mt CuEq
Operator	SoIGold	NGEx Minerals	Western Copper	Los Andes Copper	Aldebaran Res.	Candente Copper	Solaris Resources Inc	Xanadu Mines	Regulus Resources	PolyMet Mining	Rex Minerals	Hot Chilli	Hot Chilli
Exchange Listing	LSE & TSX	TSX-V	TSX	TSX-V	TSX-V	TSX	TSX-V	ASX & TSX	TSX-V	TSX	ASX	ASX	ASX
EV (US\$m)	869.1	336.3	224.9	301.6	51.1	31.4	938.1	22.6	79.0	275.2	45.3	73.9	73.9
EV / Resource (US\$/Mt CuEq)	58.3	26.6	27.3	39.0	7.7	4.9	153.1	5.9	26.1	91.3	20.7	37.5	55.0
Project CAPEX (US\$m)	2,746	4,301	3,250	1,880	2,000	1,348	NA	1,310	NA	1,204	410	725	725
Capex Intensity (US\$/Mt CuEq)	184	340	394	243	303	212		341		399	188	368	539
Key Shareholder(s)	BHP Group, Newcrest	Lundin Family	Rio Tinto Canada, FMR LLC, Dale Corman	Turnbrook Corporation, Resource Capital Fund	Route One Investment Corp	Fortescue	Richard Warke, Equinox Gold	Zijin, ACA	Route One Investment Corp	Glencore	Ellerston Capital, United Super	CDS & Co, Glencore, KAS & Blue Spec Group	CDS & Co, Glencore, KAS & Blue Spec Group
Average CuEq Grade (%)	0.46%	0.43%	0.21%	0.37%	0.47%	0.42%	0.42%	0.34%	0.58%	0.26%	0.65%	0.44%	0.49%
Cut-off Grade (%)	0.21%	0.33%	0.20%	0.25%	0.20%	0.15%	0.20%	0.20%	0.30%	0.10%	0.20%	0.25%	0.25%
Average Cu Grade (%)	0.35%	0.36%	0.13%	0.37%	0.42%	0.36%	0.41%	0.24%	0.44%	0.24%	0.58%	0.37%	0.44%

Source: S&P Market Intelligence, Company Disclosure, EV in USD as at 13/5/2022  
 CuEq calculations and benchmarking data in Appendix, slide 19  
 Capex Intensity calculated as Project Capex / Resource



# Positioning as the Cadia Hill of Mongolia

Kharmagtai stacks up well on strip ratio, scale and copper grade

## First 5yrs of production<sup>2</sup>:

		Kharmagtai (KH) Scoping Study	Cadia Hill (CH) Actuals
<b>Material Mined</b>	Mt	210	298
<b>Ore Mined<sup>1</sup></b>	Mt	110	79
<b>Ore Processed</b>	Mt	70	79
<b>Strip Ratio</b>		0.9	2.8
<b>Ore Processing rate</b>	Mtpa	15	16
<b>Avg Milled Grade:</b>			
<b>Copper</b>	%	0.29	0.19
<b>Gold</b>	g/t	0.30	0.77
<b>Avg Metal Recovery:</b>			
<b>Copper</b>	%	90	81
<b>Gold</b>	%	78	74
<b>Metal Produced:</b>			
<b>Avg Copper</b>	ktpa	37	24
<b>Avg Gold</b>	kozpa	110	288
<b>Copper</b>	Mt	0.20	0.12
<b>Gold</b>	Moz	0.50	1.44



Cadia Hill



Kharmagtai

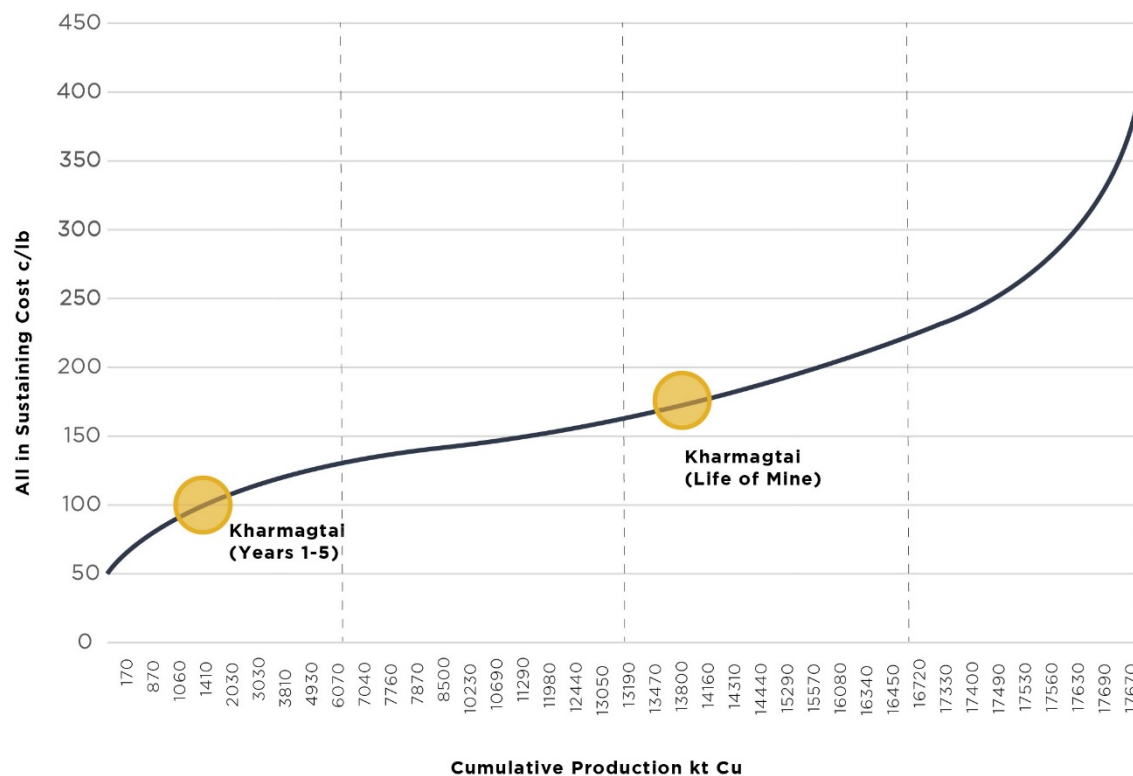
<sup>1</sup> Cadia Hill ore mined not reported, assumed ore mined = ore processed

<sup>2</sup> Sources: Kharmagtai Copper-Gold project Scoping Study; Cadia Valley Operations Technical Report, 2 Mar 2012

# Two Stage Operation, Low Quartile Cost Producer

Low quartile production enabled by gold by-product credits

## Xanadu's Position on the Cost Curve

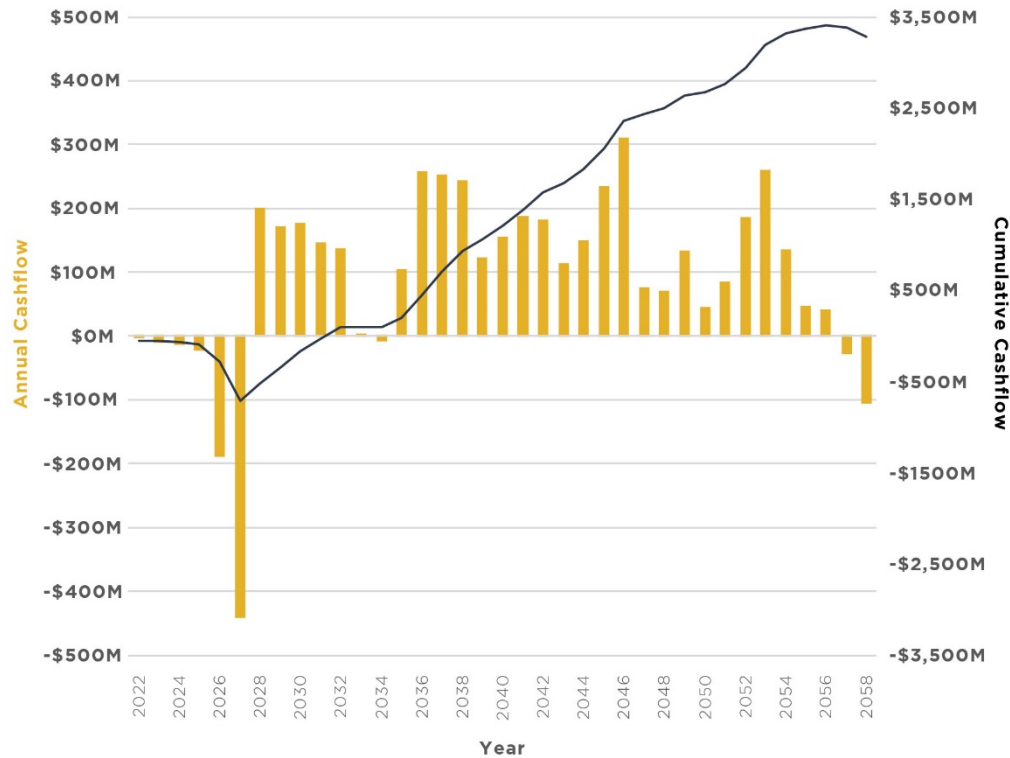


Area	Measure	Unit	Stage 1 Initial	Stage 2 Expansion	LOM
Production	Period	Years	5	25	30
	Ore process rate	Mtpa	15	30	15-30
	Feed from Indicated Resource	%	100%	50%	55%
	Ore processed	Mt	70	690	760
	Average copper grade	%	0.29	0.21	0.21
	Average gold grade	g/t	0.30	0.16	0.18
	Copper produced	Mt	0.2	1.3	1.5
	Gold produced	Moz	0.5	2.8	3.3
Capital	Project Capital	US\$M	690	620	1,310
	Sustaining Capital	US\$M	40	530	570
Operating Cost	All In Sustaining Costs	US\$/lb	1.02	1.99	1.87
Economic Assumptions	Copper Price	US\$/lb	4.00	4.00	4.00
	Gold Price	US\$/oz	1,700	1,700	1,700
Financials (after tax)	Net Present Value (NPV) @ 8%	US\$M			630
	Internal Rate of Return (IRR)	% (real)			20
	Capital Payback	Years	4	1	4
	Free Cash Flow (after tax)	US\$M (real)	155	3,260	3,420

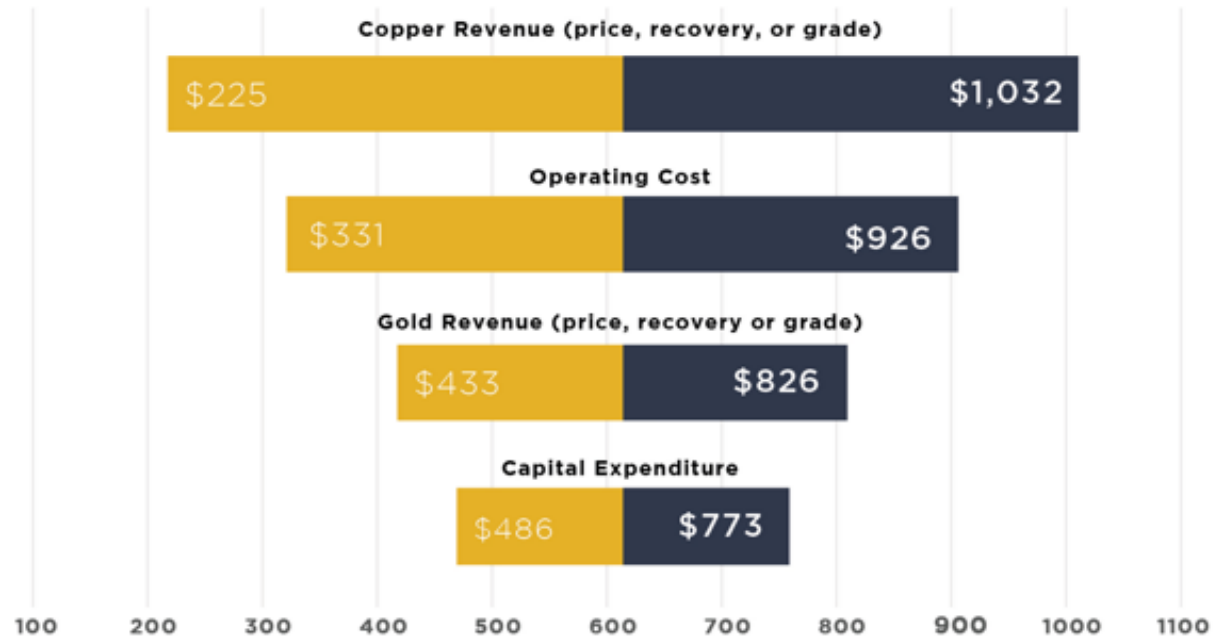
# Robust Cash Flows

Positive cash flow across wide range of scenarios

Annual Cashflow (US\$M)



- Phase 1 cash flows fund the Phase 2 expansion
- Strong earnings across +/- 20% sensitivity analysis range



# Clear Development Pathway

Gated to Pre-Feasibility following robust Scoping Study<sup>1</sup>

## Project Timeline

An indicative summary of key expected milestones is summarised as follows



Short time to production achieved by late 2027

Clear permitting pathway, mapped out by experienced Mongolia development team

## Scoping Study Results



<sup>1</sup> ASX/TSX Announcement 6 April 2022 – Scoping Study Kharmagtai Copper-Gold Project

# Multiple Upside Opportunities

Leverage technology and continue exploration

## Process Oxidised Material at Surface

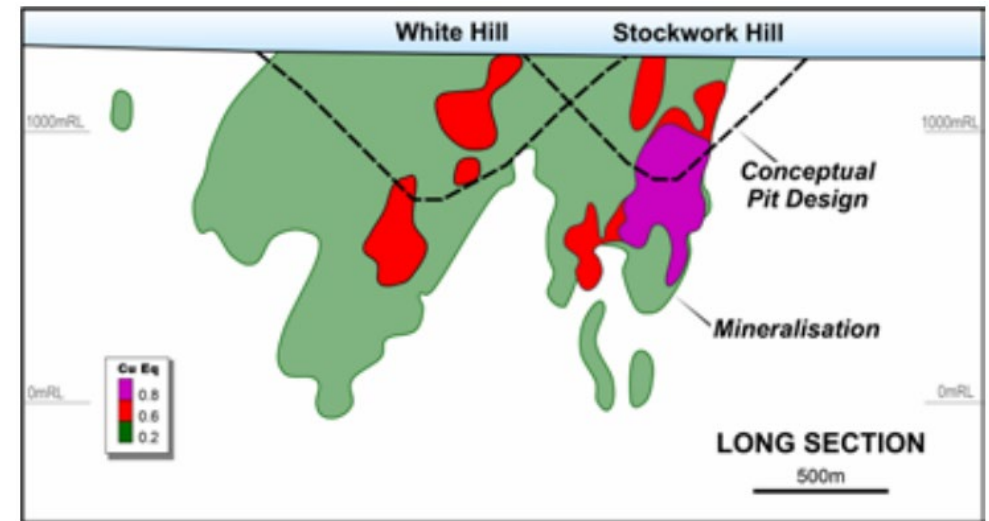
- Scoping Study was based on mining and processing sulphide resource
- 20-30m of outcropping oxidised mineralisation above the sulphide resource
- Processing could boost upfront projects economics; generating early cash flow and offsetting the pre-strip cost

## Technology

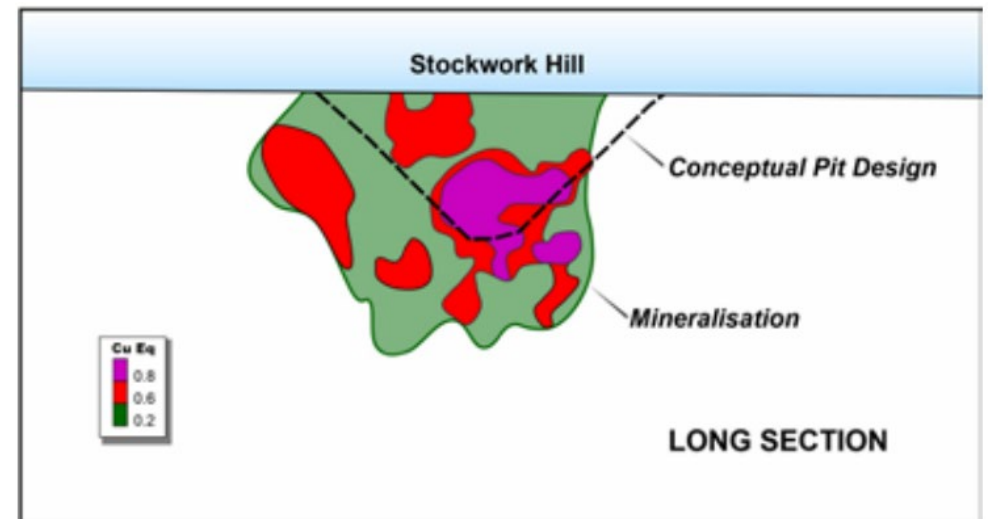
- Scoping Study based on low risk, conventional technology
- Potential beneficiation, coarse particle separation, and ore sorting to optimise mill feed grade & recovery and reduce milling cost
- Potential to use in pit crush and convey to optimize & deepen pits and electrified mining equipment to reduce haulage cost

## Exploration Upside

- Kharmagtai Resource remains open in all directions
- Higher-grade bornite mineralisation continues at depth below current pit, as confirmed by deeper drilling at Stockwork Hill
- Several near surface targets across the tenement warrant follow-up drill testing



Kharmagtai Resource within Open Pit in Long Section

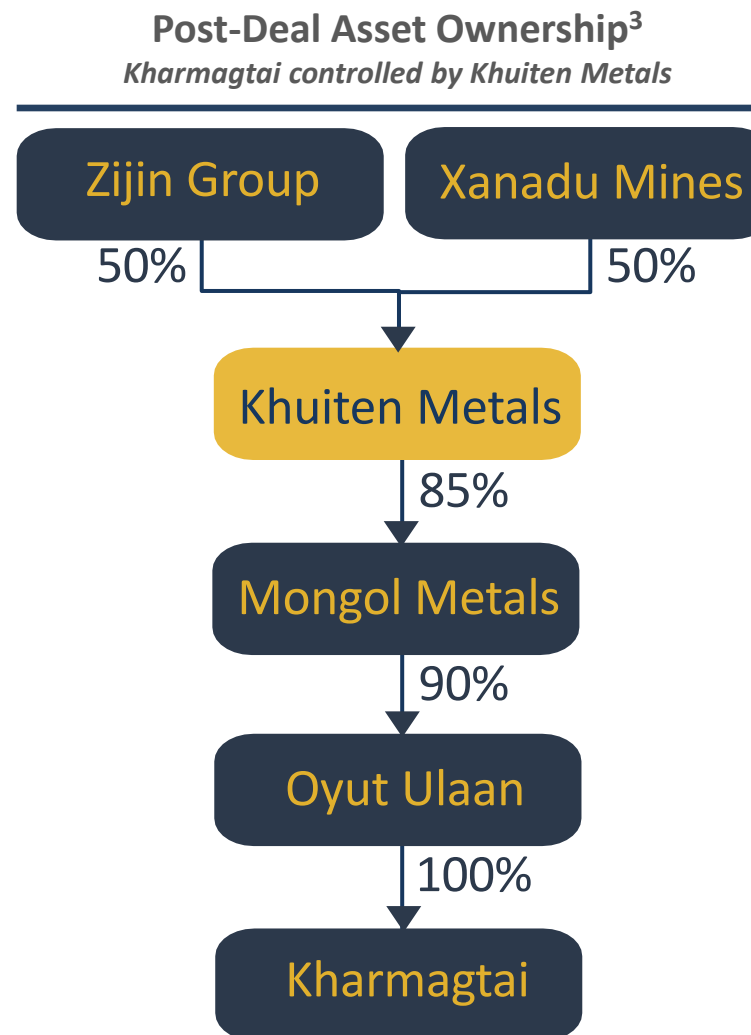


Stockwork Hill Long Section Showing current resource, proposed open pit and high-grade blocks below pit outline which are open along strike and at depth.

# Funded via Zijin Strategic Partnership

Three phases of investment<sup>1</sup> totalling US\$43M<sup>2</sup> (A\$58M<sup>2</sup>)

- Phase 1 (completed) **A\$5.6M cash** at a 38% premium for a 9.9% minority stake in Xanadu
- Phase 2 **A\$5.7M cash** to increase to 19.99% stake in XAM
- Phase 3 **US\$35M cash** into Khuiten Metals, forming a **50-50 JV** in Kharmagtai controlling entity.
  - US\$20M ringfenced to fully fund PFS
  - US\$15M to fund continued exploration at Kharmagtai
- Phase 2-3 subject to regulatory and shareholder approvals



**Post-Deal XAM Shareholders**  
*Top 20 hold 58%*

23%	Top 20 (ex Zijin & ACA)
20%	Zijin
15%	ACA
6%	Management & Board
36%	Other Holders

<sup>1</sup> ASX/TSX Announcement 19 April 2022 – Strategic Partnership with Zijin Mining

<sup>2</sup> Currency conversion based on AUD:USD = 0.7387 as at 19 Apr 2022 close (transaction announcement date)

<sup>3</sup> Effective ownership of Kharmagtai by each of Xanadu and Zijin is 38.25% (= 50% \* 85% \* 90%)

# Zijin Deal Transforms Xanadu

Kharmagtai funded & Xanadu retains control

- Transaction implies 100% value of Kharmagtai is **US\$92M** (**A\$124M<sup>1</sup>** or A\$29/t CuEq MRE)
- Current XAM share price implies a **Post-Transaction Enterprise Value of A\$0M<sup>2</sup>**
- Xanadu **retains control** of Kharmagtai
  - Khuiten Metals controls Kharmagtai
  - 50-50 JV in Khuiten Metals
  - Xanadu remains operator of JV
- Change of control in XAM requires a post-deal offer from Zijin, subject to XAM **shareholder approval**
- Kharmagtai **funded** through Pre-Feasibility (12-18 months); supported by **solid discovery exploration** budget
- Xanadu well-funded to **explore** 100% owned Red Mountain

## Before Zijin Transaction

**A\$37M**

Market Cap at 31/3/22,  
A\$0.029/Share

**76.5%**

XAM ownership of  
Kharmagtai

**A\$1M**

Cash Balance  
as at 31/3/22

**A\$36M**

Enterprise Value  
at 31/3/2022

## After Zijin Transaction

**A\$124M (US\$92M)**

Implied 100% value of  
Kharmagtai<sup>1</sup>

**38.25%**

XAM ownership of  
Kharmagtai<sup>3</sup>

**A\$58M**

Cash Injected<sup>4,5,6</sup>

<sup>1</sup> US\$35M / 38.25% effective ownership = US\$92M

<sup>2</sup> XAM Transaction Enterprise Value = Market Cap (2 June 2022 A\$37M) – Cash (Current \$7M + Phase 2 \$6M + 50% of Phase 3 A\$24M)

<sup>3</sup> 50-50 JV in Khuiten Metals which holds 76.5% of Kharmagtai = 38.25%

<sup>4</sup> Cash Injected = (Zijin A\$11M placement) + (Khuiten Metals JV investment of US\$35M for Kharmagtai development)

<sup>5</sup> Conversion based on AUD:USD = 0.7387 as at 19 Apr 2022 close (transaction announcement date)

<sup>6</sup> ASX/TSX Announcement 19 April 2022 – Strategic Partnership with Zijin Mining

# Who is Zijin Mining Group?

A global copper & gold mining major

- Zijin brings the **capability** and **balance sheet** to build a large-scale copper-gold mine like Kharmagtai
- **US\$51 billion** market capitalization, listed on Hong Kong and Shanghai exchanges
- **Global Top 10 copper producer**, 2021 mining production 584kt copper, 1.68 Moz gold and 396kt zinc
- Vertically integrated: **mining, smelting and refining** assets
- Operating assets across **14 countries** and **5 continents**
- **Experienced Joint Venture partner**, examples are Kamoakakula copper-mine (Ivanhoe) and Porgera gold-silver mine (Barrick)





# Exploration Will Continue

Two active projects, seeking a third

## Kharmagtai (76.5%)<sup>1</sup>

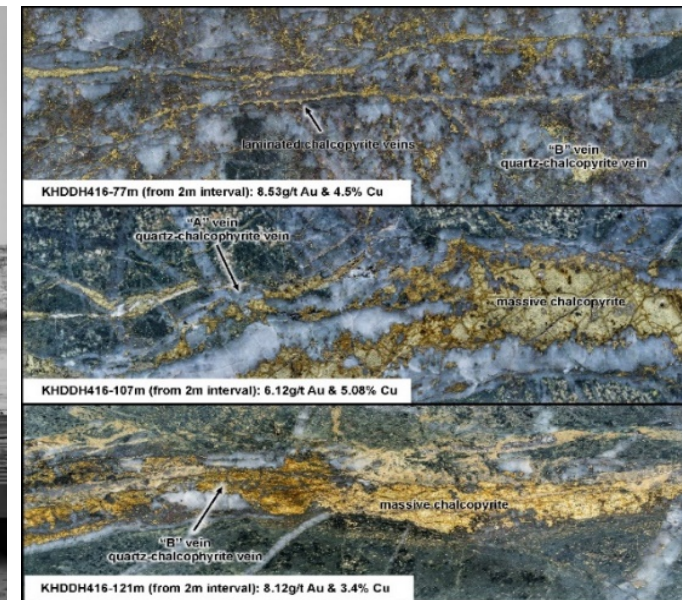
- Porphyry copper-gold
- Open in all directions and across the lease
- Bornite zones expanding at depth
- >20 high priority discovery targets identified for testing

## Red Mountain (100%)

- Drill testing near surface copper-silver skarns and epithermal mineralisation
- Follow-up higher grade bornite and massive bornite intersected in 2021<sup>2</sup>
- Large-scale porphyry system potential at depth remains

## New Project Generation

- Seeking a third project in the South Gobi
- On ground investigation completed to identify potential new projects



<sup>1</sup> Will become 38.25% upon completion of 50-50 Joint Venture with Zijin Mining Group

<sup>2</sup> ASX/TSX Announcement 28 September 2021 – New High-Grade Bornite Intersections at Red Mountain

# Reasons to Invest in Xanadu

Exposure to Funded Copper Gold Development + Future Discoveries

## Quality Projects

### MAJOR COPPER GOLD RESOURCE

Kharmagtai maiden Ore Reserve in 2023.  
 Kharmagtai MRE: 1.1Bt containing 3Mt Cu & 8Moz Au, incl. 100Mt @ >0.8% CuEq.<sup>1</sup>

### FAST TRACKING DEVELOPMENT

Fully-funded for PFS; targeting FID in 2023.  
 First concentrate production in 2027 from processing sulphides; early cashflow potential from partially oxidised material processing.

### FUNDED & WELL POSITIONED

Zijin strategic investment<sup>2</sup>: \$11M in XAM & US\$35M in Kharmagtai.  
 Strengthens funding, technical capability. De-risks concentrate marketing & logistics.

### MONGOLIA JURISDICTION

Stable, well-educated democracy.  
 Mining-driven economy with low ESG risk & established infrastructure.  
 Seeking to encourage foreign investment.

## Measured Approach

### EXCELLENT LEADERSHIP

Management & Board track record of discovery, development and M&A.  
 Supported by World-class Advisory Team.

### AMBITIOUS EXPLORATION

Funded for future discoveries at both Kharmagtai (untested depth & lateral potential) & Red Mountain (up to 16% Cu).

### GROWTH POTENTIAL

Kharmagtai open in all directions, with strong depth potential.  
 Highly prospective Red Mountain  
 New project generation.

### ESG FOCUS

Operating to highest ESG standards, with strong community engagement.  
 Sustainability Report available on website<sup>3</sup>

<sup>1</sup> ASX/TSX Announcement 8 December 2021 – Kharmagtai Resource Grows to 1.1Bt containing 3Mt Cu and 8Moz Au

<sup>2</sup> ASX/TSX Announcement 19 April 2022 – Strategic Partnership with Zijin Mining

<sup>3</sup> ASX/TSX Announcement 1 November 2021 – Sustainability Report 2020

# Thank you

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Keep up to date with us



ASX: XAM | TSX: XAM

# APPENDIX

XANADU MINES

# Competent Person's Statement

The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code 2012') sets out minimum standards, recommendations and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves. The Information contained in this announcement has been presented in accordance with the JORC Code 2012.

**Mineral Resources:** The information in this announcement that relates to Mineral Resources is based on information compiled by Mr. Robert Spiers who is responsible for the Mineral Resource estimate. Mr Spiers is a full-time Principal Geologist employed by Spiers Geological Consultants (SGC) and is a Member of the Australian Institute of Geoscientists with sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as the "Qualified Person" as defined in the CIM Guidelines and National Instrument 43-101. Mr Spiers consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

**Exploration Results:** The information in this announcement that relates to Exploration Results is based on information compiled by Dr Andrew Stewart who is responsible for the exploration data, comments on exploration target sizes, QA/QC and geological interpretation and information. Dr Stewart, who is an employee of Xanadu and is a Member of the Australasian Institute of Geoscientists, has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as the "Competent Person" as defined in the 2012 Edition of the "Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves" and the National Instrument 43-101. Dr Stewart consents to the inclusion in the report of the matters based on this information in the form and context in which it appears

# Copper equivalent benchmarking

Global Project	Resource Date	Resource Mt				Au g/t			Cu %			Au Moz			Cu Mt			CuEq	
		Meas	Ind	Inf	Total	Meas	Ind	Inf	Meas	Ind	Inf	Meas	Ind	Inf	Meas	Ind	Inf	%	Mt
Altar	22/03/21	638	580	190	1,409	0.11	0.07	0.07	0.43%	0.41%	0.42%	2.2	1.4	0.4	2.8	2.4	0.8	0.47%	6.6
AntaKori	31/01/19	0	250	267	517	0.00	0.29	0.26	0.00%	0.48%	0.41%	0.0	2.3	2.2	0.0	1.2	1.1	0.58%	3.0
Canariaco Norte	15/03/22	423	671	411	1,505	0.07	0.05	0.04	0.48%	0.39%	0.32%	0.9	1.1	0.5	2.0	2.6	1.3	0.42%	6.4
Cascabel	20/04/22	1,192	1,470	544	3,206	0.39	0.14	0.11	0.48%	0.28%	0.24%	14.9	6.7	1.9	5.7	4.1	1.3	0.46%	14.9
Casino	3/07/20	183	2,208	1,461	3,852	0.41	0.17	0.14	0.25%	0.14%	0.10%	2.4	12.0	6.5	0.5	3.0	1.4	0.21%	8.2
Cortadera	19/02/16	0	183	267	450	0.00	0.15	0.12	0.00%	0.40%	0.35%	0.0	0.9	1.0	0.0	0.7	0.9	0.44%	2.0
Hillside	May 2015	72	151	114	337	0.16	0.13	0.10	0.55%	0.59%	0.60%	0.4	0.6	0.4	0.4	0.9	0.7	0.65%	2.2
Kharmagtai	28/02/22	0	455	664	1,119	0.00	0.20	0.20	0.00%	0.30%	0.20%	0.0	2.9	4.2	0.0	1.4	1.3	0.34%	3.8
Warintza	18/04/22	0	579	887	1,466	0.00	0.03	0.01	0.59%	0.47%	0.37%	0.0	0.6	0.3	0.0	2.7	3.3	0.42%	6.1
Los Helados	26/04/19	0	2,099	827	2,926	0.00	0.15	0.10	0.00%	0.38%	0.32%	0.0	10.1	2.6	0.0	8.0	2.6	0.43%	12.7
NorthMet	26/03/18	237	412	509	1,158	0.04	0.03	0.04	0.27%	0.23%	0.24%	0.3	0.4	0.6	0.6	0.9	1.2	0.26%	3.0
Productora	19/02/16	0	208	67	275	0.00	0.10	0.08	0.00%	0.46%	0.38%	0.0	0.7	0.2	0.0	1.0	0.3	0.49%	1.3
Vizcachitas	10/05/19	254	1,030	789	2,073	0.00	0.00	0.00	0.44%	0.39%	0.34%	0.0	0.0	0.0	1.1	4.0	2.7	0.37%	7.7

Mineral Resource used in benchmarking include Inferred, Indicated, and Measured classifications. Resource tonnes and grades are as reported by each company.

Copper equivalent grades were calculated by Xanadu Mines using the formula:

$$\text{CuEq} = \text{Cu} + \text{Au} * 0.60049 * 0.86667$$

Where :

- Cu = copper grade (%)
- Au = gold grade (grams per tonne (g/t))
- 0.60049 = conversion factor (Au to Cu); and
- 0.86667 = relative recovery of Au to Cu (86.67%)

These equivalent formulas were based on the following parameters (prices in USD):

- Cu price = 3.4 \$/lb
- Au price = 1,400 \$/oz
- Cu recovery = 90%
- Au recovery = 78%; and
- Relative recovery of Au to Cu = 78%/90% = 86.67%

Metals prices, Au-Cu conversion factor, and Au-Cu relative recovery factors are as defined in the 2021 Xanadu Mineral Resource Upgrade<sup>1</sup>

# Kharmagtai Resource 2021 vs 2018

Larger, more tightly domained, and significantly more gold

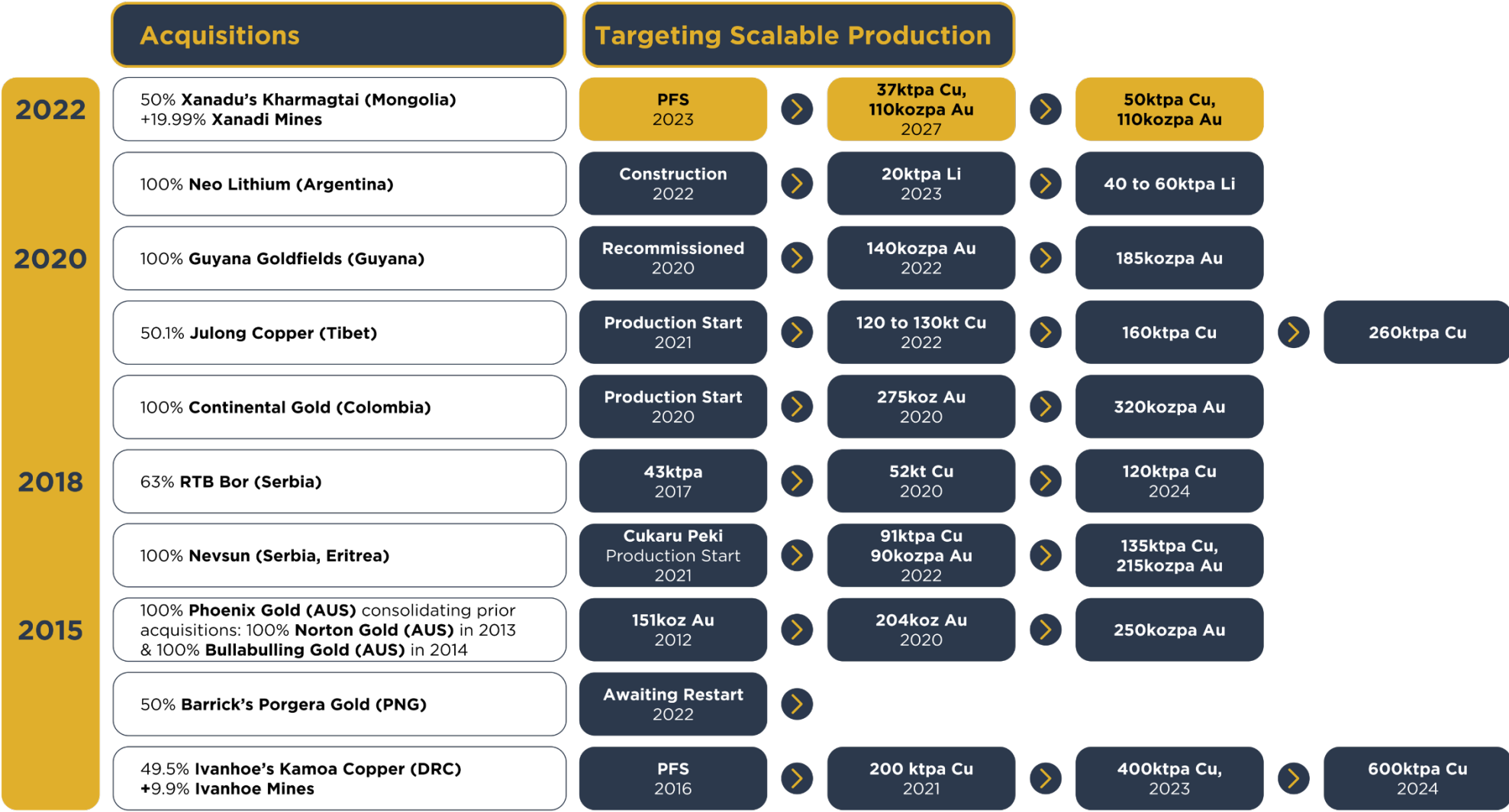
Resource	Cutoff (% CuEq)	Classification	Tonnes (Mt)	Grades			Contained Metal			
				CuEq (%)	Cu (%)	Au (g/t)	CuEq (Mlbs)	CuEq (kt)	Cu (kt)	Au (koz)
2021 <sup>1</sup>	0.2(OC) 0.3(UG)	Indicated	455	0.4	0.3	0.2	4,078	1,850	1,250	3,700
		Inferred	664	0.3	0.2	0.2	5,140	2,330	1,680	4,100
2018 <sup>2</sup>	0.3(OC) 0.5(UG)	Indicated	131	0.5	0.4	0.4	1,570	710	480	1,500
		Inferred	477	0.4	0.3	0.2	4,350	1,970	1,500	2,930

<sup>1</sup> ASX/TSX Announcement 28 February 2022 – Kharmagtai Technical Report, ASX/TSX Announcement 8 December 2021 – Kharmagtai Resource Grows to 1.1Bt containing 3Mt Cu and 8Moz Au

<sup>2</sup> ASX/TSX Announcement 18 December 2018 – Technical Report to Support Kharmagtai Mineral Resource Upgrade

# Zijin strategy is to acquire, control and scale-up

Aligns to Kharmagtai 2-stage expansion



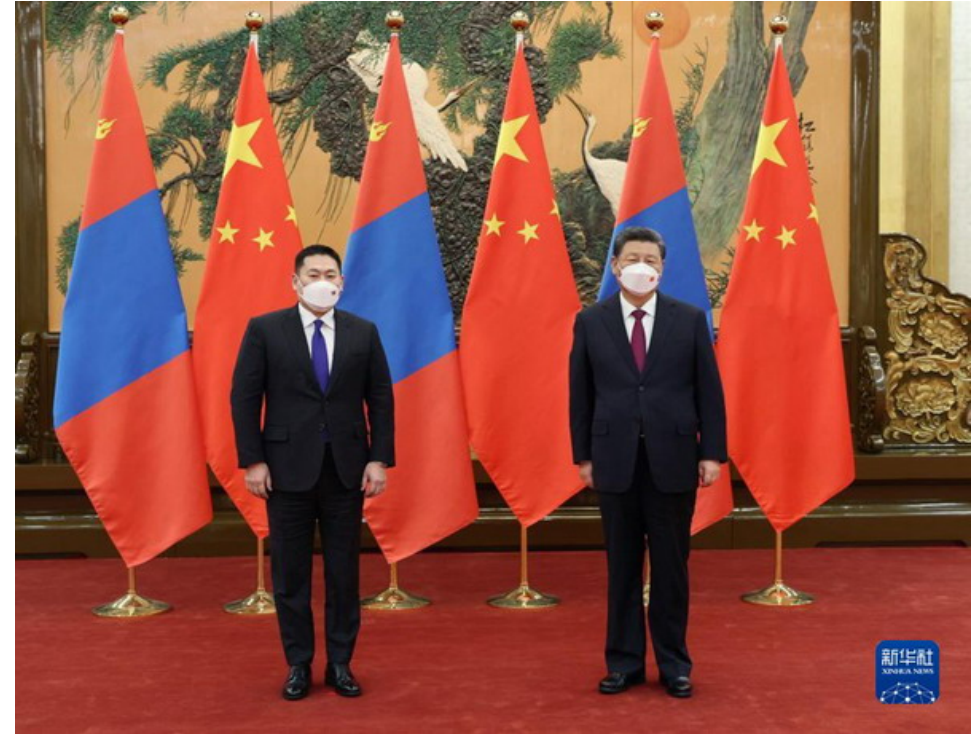
<sup>1</sup> 100% basis  
Source: zijinmining.com



# Mongolia-China Growing Strategic Partnership

Zijin transaction echoes strengthening relationship

- Recent heads of state engagement confirms alignment of Mongolia **New Revival Policy** with **China Belt and Road Initiative** and Five-Year Plan <sup>1</sup>
- Mongolia confirmed this bilateral relationship as the model for other global relationships
- Zijin strategic partnership with Xanadu demonstrates this growing inter-country engagement
- Xanadu transaction aligns with the Zijin 2022 Strategy<sup>2</sup>, targeting:
  - Large projects with best-in-class resources delivering sustainable growth
  - Responsible, green, high-tech mining
  - Good upside potential and strong synergies
  - Merger and acquisition to accelerate growth



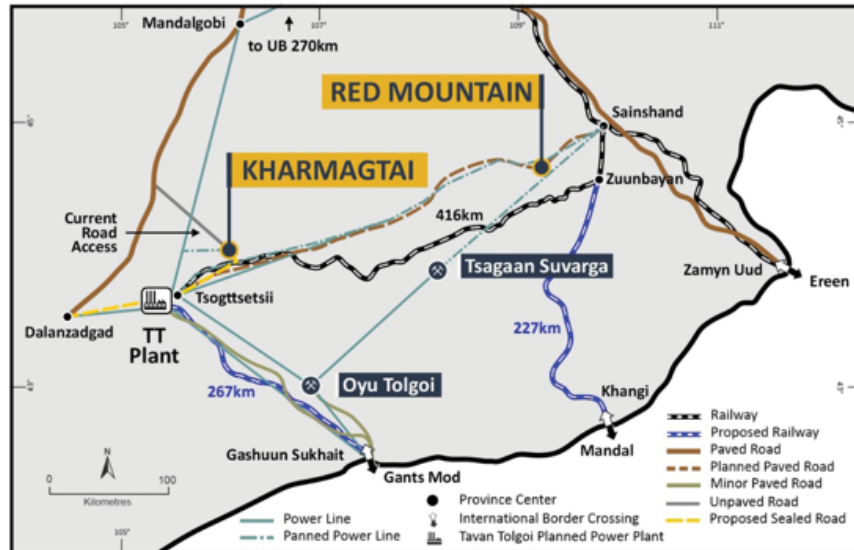
<sup>1</sup> Ministry of Foreign Affairs of the People's Republic of China 6 February 2022 – Xi Jinping Meets with Mongolia Primer Minister Luvsannamsrai Oyun-Erdene; [www.fmprc.gov.cn/mfa\\_eng/zxxx\\_662805/202202/t20220207\\_10639712.html](http://www.fmprc.gov.cn/mfa_eng/zxxx_662805/202202/t20220207_10639712.html)

<sup>2</sup> Source: Zijinmining.com

# New Regional Infrastructure

Mongolia investing to develop mining in the South Gobi

## South Gobi Regional Infrastructure



Train using South Gobi railway

## Rail and Road Infrastructure

- New rail line commissioned between Sainshand and Tsogttsetsii linking to trans-Mongolia railway
- New sealed road follows rail line
- Further rail currently under construction south to China from Zuunbayan and Tsogttsetsii

## Power Infrastructure

- New Tavan Tolgoi power plant being constructed
- Additional power lines linking region to Tavan Tolgoi

## Smelter Infrastructure<sup>1</sup>

- Mongolian government is planning to build copper smelter at Erdenet mine by 2025-2026
- Another copper smelter at Oyu Tolgoi mine is under discussion

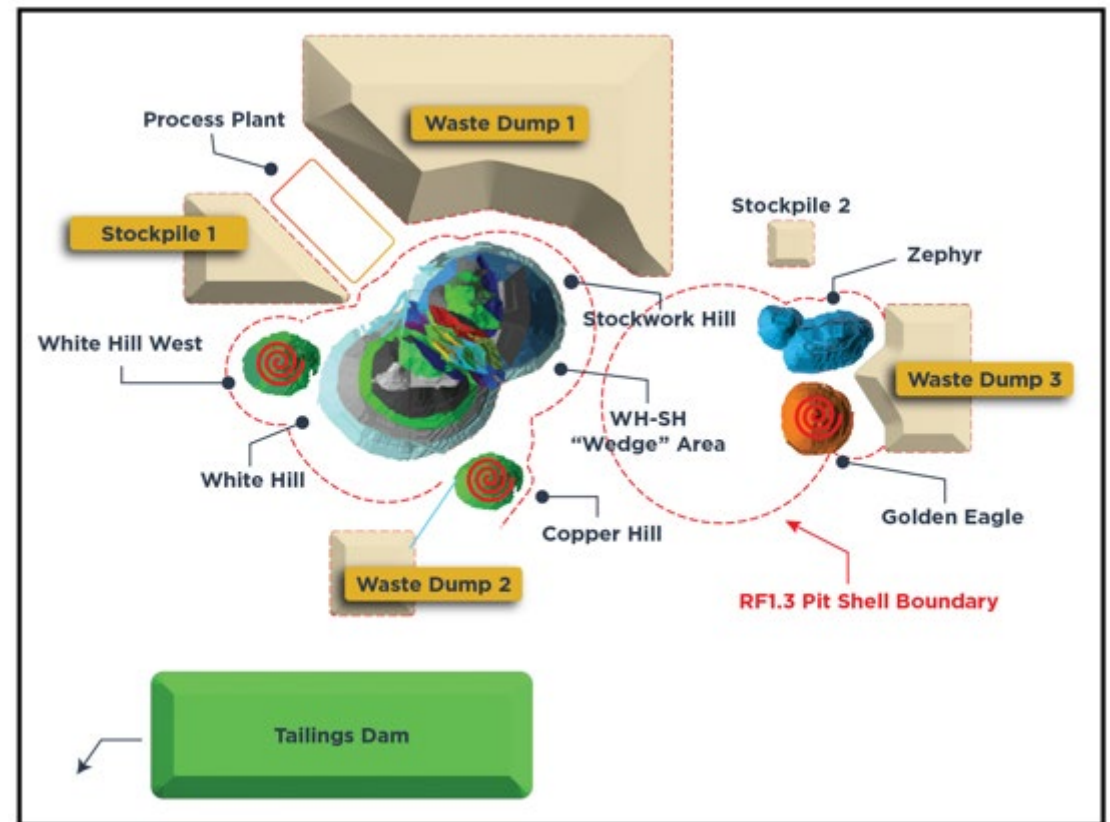
<sup>1</sup> <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/metals/041222-interview-mongolia-eyes-ramp-up-of-coking-coal-copper-exports-to-china-in-2022-minister>

# Simple Site Layout

Plans ahead for future growth

- Low complexity, minimising haul distance
- Tailings dam offsite to south using land features
- Stand off maintained for potential future pit expansion leveraging in pit crush and convey
- To be finalised in PFS

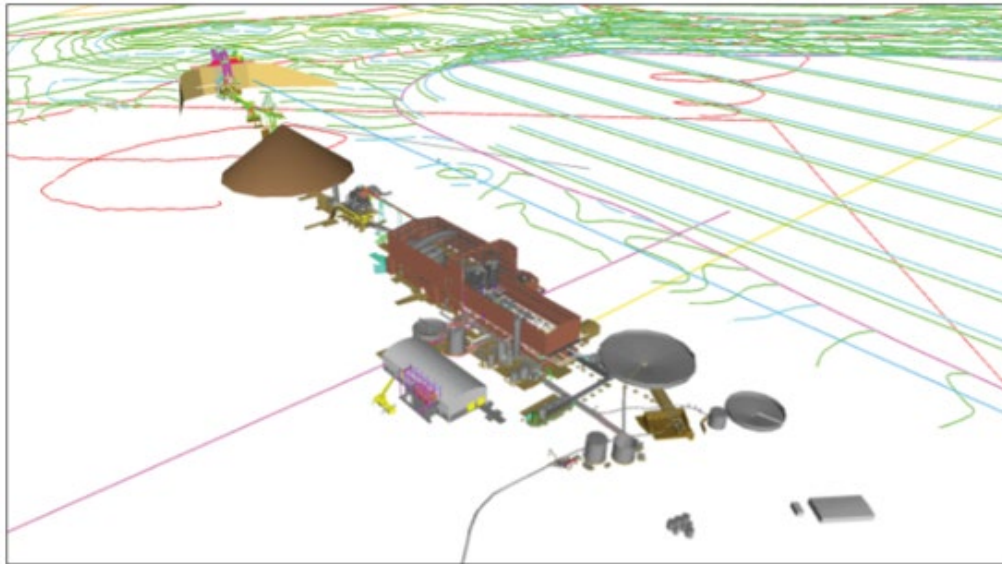
Project Layout



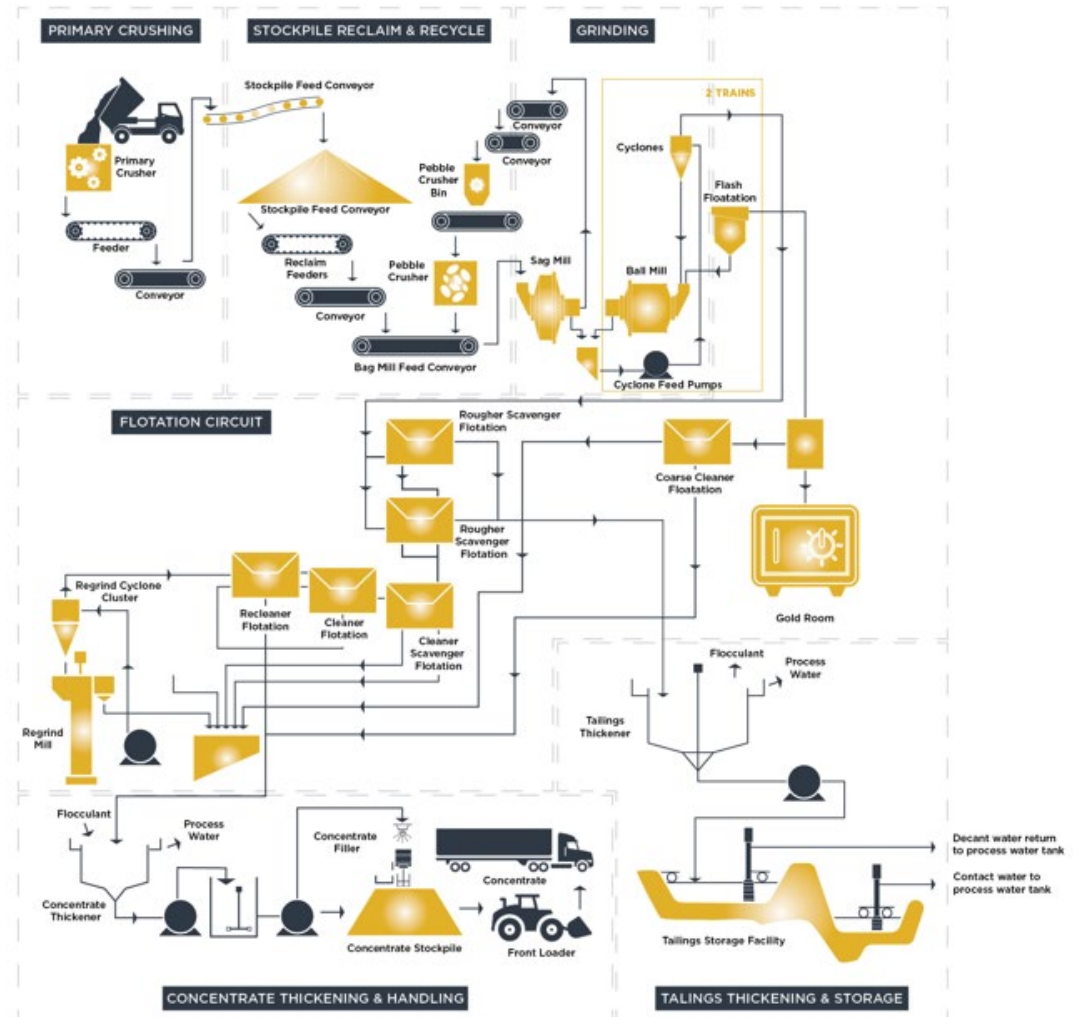
# Sulphide Flotation Process Plant

Conventional, low risk process flow and plant design

Process Plant Layout



Process Flow Diagram



# Favourable ESG Environment

Mongolia is an established and growing mining-driven economy

- ▶ **Pro-mining jurisdiction** - in 2020, mining accounted for 23% of Mongolia’s GDP & 70% of export revenues<sup>1</sup>
- ▶ **Significant mining region** - tops Investment Monitor's 2021 Mining Vulnerability Index<sup>1</sup>, followed by Zambia & Australia
- ▶ **Stable democratic system** – 30-yr history of democratic elections
- ▶ **Social License to Operate** – enables shorter lead times to production
- ▶ **Excellent infrastructure** - leverage rail, power and water for low-capex intensity development
- ▶ **Ideal location** – flat ground, sparse population, proximate to customers

## On the doorstep of the world’s biggest consumer

>60% of Mongolia’s external trade comes from China

China accounts for ~53% refined copper consumption globally in 2020

China consumption of refined copper up 17% yoy to 3.2Mt in Q1 2021



<sup>1</sup><https://investmentmonitor.ai/business-activities/extractive-industries/mongolia-and-australia-among-countries-that-will-suffer-the-most-in-a-mining-downturn>

<sup>2</sup>Turquoise Hill Resources Ltd. Oyu Tolgoi 2020 Technical Report <https://mrdata.usgs.gov/sir20105090z/show-sir20105090z.php?id=456>

<sup>3</sup> ASX/TSX Announcement 31 October 2018 – Major Increase in Kharmagtai Open-Cut Resource to 1.9Mt Cu & 4.3Moz Au

# Kharmagtai – Our Flagship Project

A significant resource in a world class copper district

Granted mining licence with 30 yrs tenure & option to extend another 40 yrs

## Mineral Resource Estimate

- ▶ 1.1Bt MRE, containing 3Mt Cu & 8Moz Au<sup>1,2</sup>, including higher grade zone 100Mt @ 0.8% CuEq<sup>1</sup>

## Scoping Study

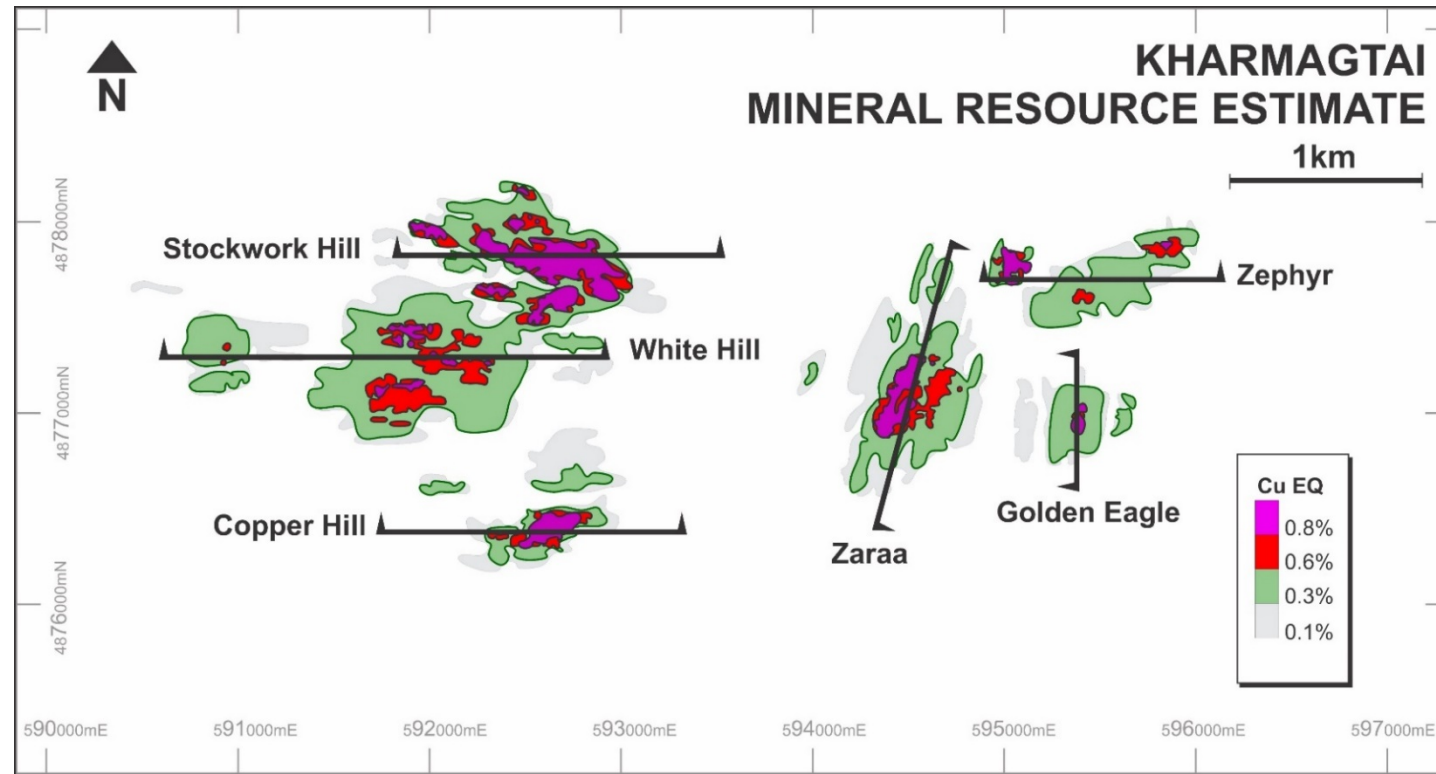
- ▶ 30-year life; producing 30-50ktpa Cu and 100-115kozpa Au; 0.9:1 strip ratio
- ▶ 20% IRR (16-25%); US\$630M NPV (405-850); and 4-year payback (4-7)

## Pre-Feasibility Study

- ▶ Fully funded by Zijin strategic partnership

## Future Exploration Potential

- ▶ Limited drilling below 400m is untapped opportunity
- ▶ Potential to link porphyry deposits at depth



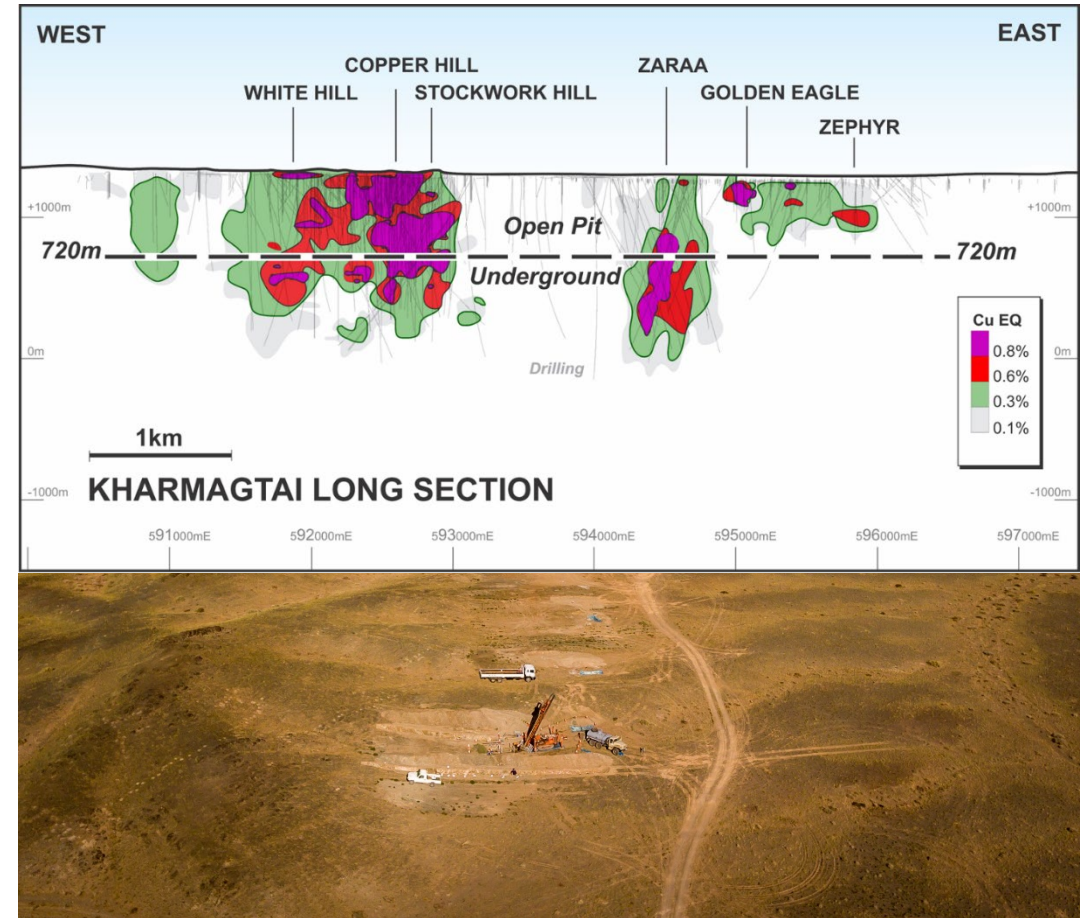
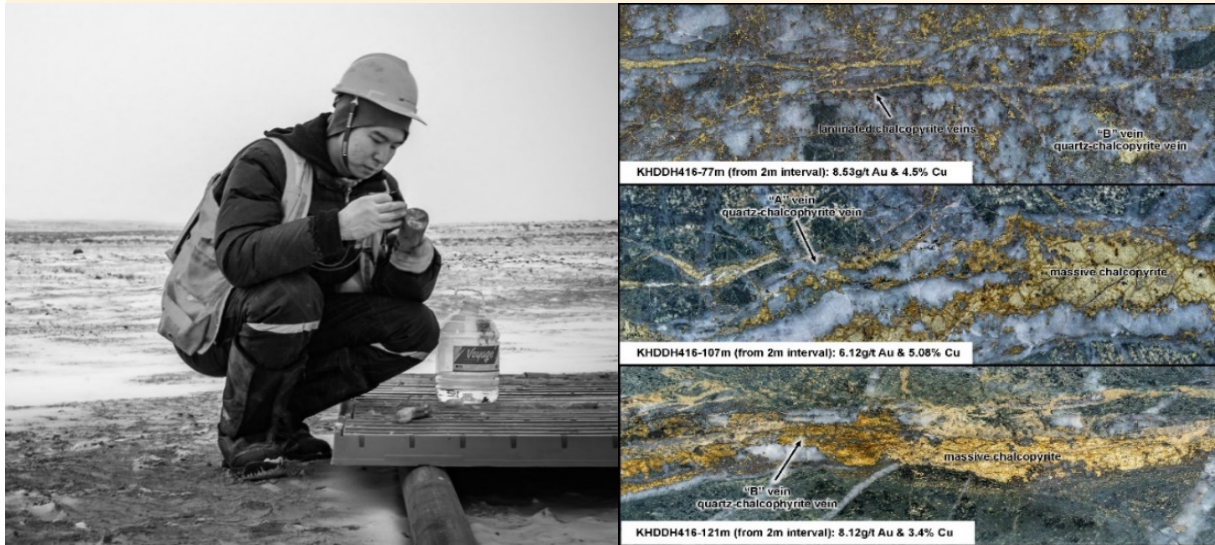
<sup>1</sup> ASX/TSX Announcement 28 February 2022 – Kharmagtai Technical Report, ASX/TSX Announcement 8 December 2021 – Kharmagtai Resource Grows to 1.1Bt containing 3Mt Cu and 8Moz Au

<sup>2</sup> Global Resource is 42% Indicated and 58% Inferred by tonnes, see Appendix 1 – Kharmagtai Resource

# Continued Exploration Targets High-Grade Growth

## Strong Growth Upside Beneath Current Bornite Zones

- ▶ Mineralised intrusive indicates still in shallow levels of system
- ▶ Deposits open in all directions, with significant upside at depth<sup>1</sup>
- ▶ Bornite zones starting to be uncovered
- ▶ Stockwork Hill – significant expansion upside along edges with high grade blocks still open
- ▶ Zephyr – along strike potential with highest-grade blocks positioned at either end still open



<sup>1</sup> ASX/TSX Announcement 8 December 2021 – Kharmagtai Resource Grows to 1.1Bt containing 3Mt Cu and 8Moz Au

# Kharmagtai Prospective for New Discovery

New systems continue to be unlocked

## EXPLORATION SCORECARD

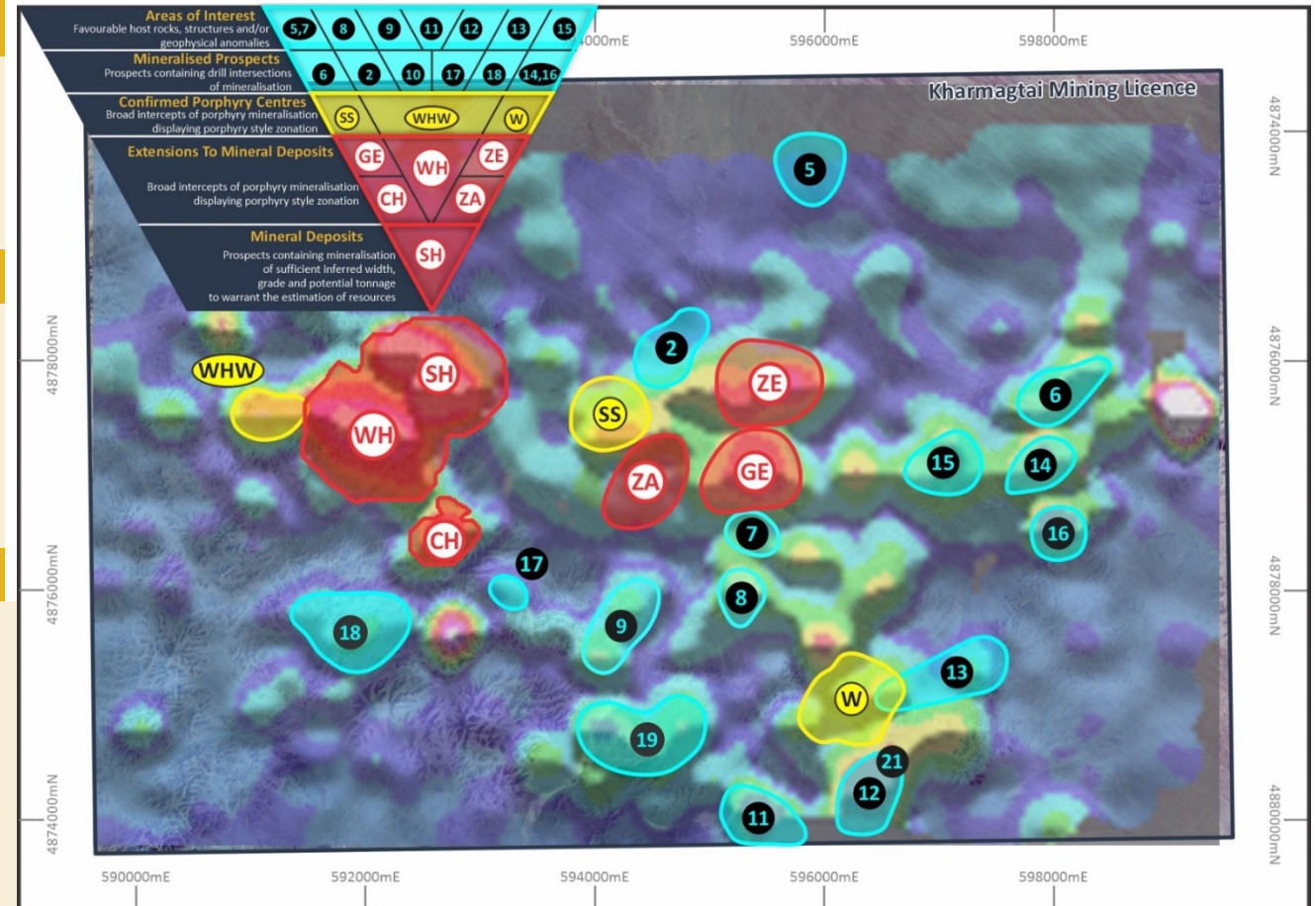
- 5 subsurface discoveries out of 10 prospects drilled
- <\$0.01/lb CuEq discovery cost vs ~\$0.07/lb industry avg<sup>1</sup>

## DISTRICT CONTINUES TO OPEN UP

- Multiple copper-gold porphyry intrusions
- Mineralised structures linked to faulting
- Increasing grade at depth

## PORPHYRY DEPOSITS ARE MADE NOT FOUND

- Continued exploration for new systems & new high grade
- Link existing systems at depth
- Highly prospective for new discovery
- Several priority targets drilled in 2021
- >20 targets to be drilled over next 12 months



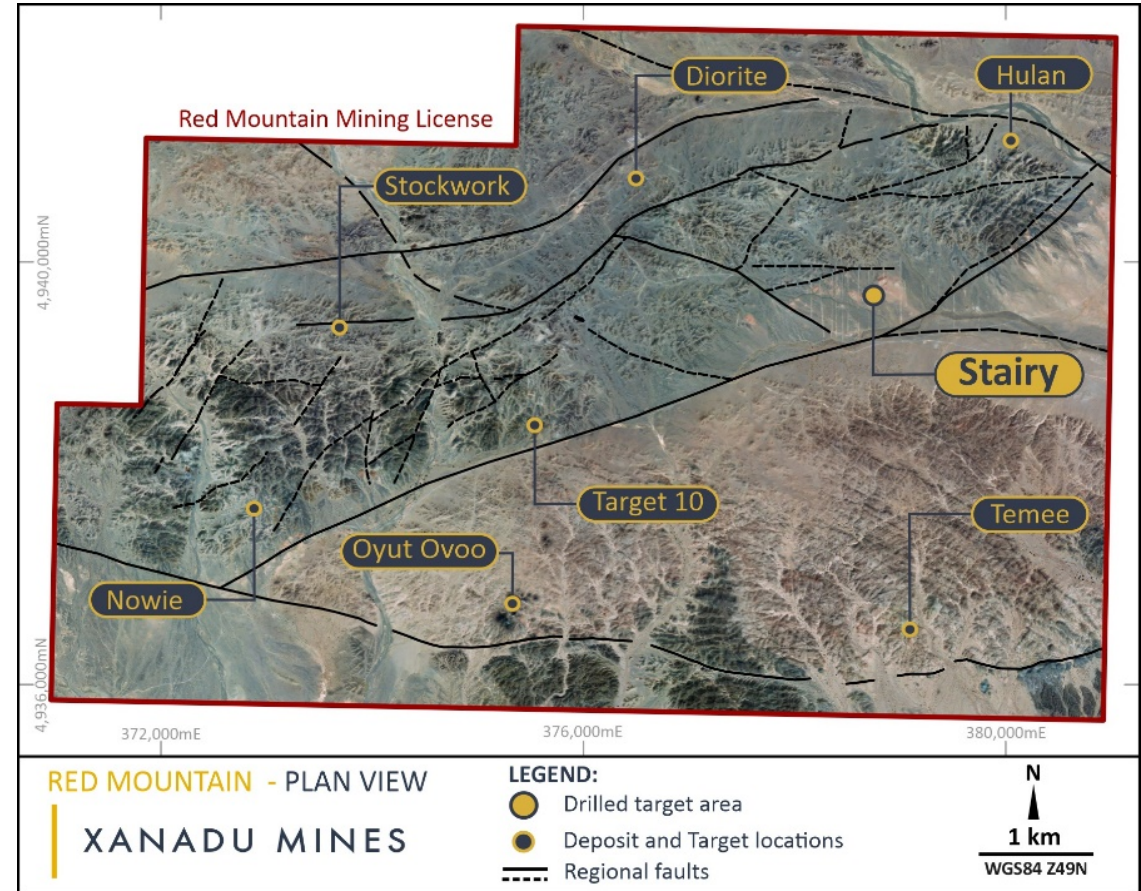
<sup>1</sup> Minexconsulting <https://minexconsulting.com/recent-trends-in-copper-exploration-are-we-finding-enough-2/>



# Red Mountain Early Stage & Highly Prospective

Already delivering exciting results

- ▶ Advanced exploration with multiple known targets:
  - Outcropping sulphides at surface, up to 184m width
  - 4 mineralised Cu-Au systems
  - 2 epithermal Au-Ag systems
  - High-grade diamond drill assays, up to 16% Cu
- ▶ Located 265km east of Kharmagtai
- ▶ Already has a 30-year extendable mining license
- ▶ Consolidated to 100% ownership in 2021<sup>1</sup>
- ▶ Updated exploration strategy to commence in 2022



<sup>1</sup> ASX/TSX Announcement 27 October 2021 – Xanadu Consolidates 100% Ownership of Red Mountain