

GCFF Virtual Conference 2022 Presentation

28 September 2022

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

BY ELECTRONIC LODGEMENT

**Xanadu's Presentation to
Global Chinese Financial Forum ("GCFF") Virtual Conference 2022
Global Resource Investment Conference (Asia Pacific)**

Please find attached for release to the market, Xanadu Mines Ltd's Presentation to the *Global Chinese Financial Forum Virtual Conference 2022 - Global Resource Investment Conference (Asia Pacific)* being held on Thursday, 29 September 2022.

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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.

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

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XANADU MINES

Low cost sustainably produced copper in 5 yrs

Global Chinese Financial Forum (GCFF) |
Global Resource investment Conference (Asia Pacific)
29 September 2022



ASX:XAM | TSX:XAM

Cautionary Statements

The Study has been undertaken to assess viability of developing the Kharmagtai Copper-Gold Project by constructing an open cut mine and processing facility to produce copper concentrate for export. It is a preliminary technical and economic Study of the potential viability of the Kharmagtai Project. It is based on low level technical and economic assessments that are not sufficient to support the estimation of ore reserves. Further exploration and evaluation work and appropriate studies are required before Xanadu will be in a position to estimate any ore reserves or to provide any assurance of an economic development case. The Study is based on the material assumptions in this document. These include assumptions about the availability of funding. While Xanadu considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Study will be achieved. To achieve the range of outcomes indicated in the Study, funding of in the order of US\$700 million will likely be required. Investors should note that there is no certainty that Xanadu will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Xanadu's existing shares. It is also possible that Xanadu could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce Xanadu proportionate ownership of the project. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Study. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised. The Study is based on the December 2021 Mineral Resource Estimate, is based on low-level technical and economic assessments, and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Study will be realised. The Study has been completed to a level of accuracy of +/-35% in line with industry standard accuracy for this stage of development. The Company has reasonable grounds for disclosing a Production Target, given that in the first seven years of production, 100% of the mill feed is scheduled from the Indicated Resource category, which exceeds the economic payback period for the project by 3 years. Approximately 55% of the Life of Mine Production Target is in the Indicated Mineral Resource category, and 45% is in the Inferred Mineral Resource category. There is a lower level of geological confidence associated with Inferred Mineral Resources, and while the Company considers all the material assumptions in this Study to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated will be achieved. The Mineral Resources underpinning the production target in the Study have been prepared by a Competent Person in accordance with the requirements of Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012). The Competent Person's Statement is found in the Geology and Resources section of this Study. For full details of the Mineral Resource Estimate, please refer to Xanadu ASX/TSX Announcement dated 25 February 2022. Xanadu confirms that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that Announcement continue to apply and have not materially changed. Note that unless otherwise stated, all currency in this Study is US dollars.

Forward Looking Statements

Certain statements contained in this Study, including information as to the future financial or operating performance of Xanadu and its projects may also include statements which are 'forward-looking statements' that may include, amongst other things, statements regarding targets, estimates and assumptions in respect of mineral reserves and mineral resources and anticipated grades and recovery rates, production and prices, recovery costs and results, capital expenditures and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions. These 'forward-looking statements' are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Xanadu, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies and involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements. Xanadu disclaims any intent or obligation to update publicly or release any revisions to any forward-looking statements, whether as a result of new information, future events, circumstances or results or otherwise after the date of this Study or to reflect the occurrence of unanticipated events, other than required by the Corporations Act 2001 (Cth) and the Listing Rules of the Australian Securities Exchange (ASX) and Toronto Stock Exchange (TSX). The words 'believe', 'expect', 'anticipate', 'indicate', 'contemplate', 'target', 'plan', 'intends', 'continue', 'budget', 'estimate', 'may', 'will', 'schedule' and similar expressions identify forward-looking statements. All 'forward-looking statements' made in this Study are qualified by the foregoing cautionary statements. Investors are cautioned that 'forward-looking statements' are not a guarantee of future performance and accordingly investors are cautioned not to put undue reliance on 'forward-looking statements' due to the inherent uncertainty therein. Xanadu has concluded that it has a reasonable basis for providing these forward-looking statements and the forecast financial information included in this Study. To achieve the range of Kharmagtai Copper-Gold Project outcomes indicated in the 2022 Study, funding of in the order of an approximately US\$700 million will likely be required by the Company. Based on current market conditions and the results of studies undertaken, there are reasonable grounds to believe the Project can be financed via a combination of equity and debt, as has been done for numerous comparable projects in Mongolia and other jurisdictions in Asia in recent years. Debt may be secured from several sources including Australian banks, international banks, the high yield bond market, resource credit funds, and in conjunction with product sales of offtake agreements. It is also possible the Company may pursue alternative funding options, including undertaking a corporate transaction, seeking a joint venture partner or partial asset sale. There is, however, no certainty that Xanadu will be able to source funding as and when required. Whilst no formal funding discussions have concluded, the Company has engaged with several potential financiers of the Kharmagtai Copper-Gold Project and these financial institutions and corporations have expressed an interest in being involved in funding of the Project. This ASX Study has been prepared in compliance with the current JORC Code (2012) and the ASX Listing Rules. All material assumptions, including sufficient progression of all JORC modifying factors, on which the production target and forecast financial information are based have been included in this ASX Study.

Xanadu Mines Overview

Growth focused Copper/Gold exploration & development, operating in Mongolia

Discover

Kharmagtai (76.5%)⁴

Flagship project; development ready & mineralised complex **open** in all directions

Red Mountain (100%)

Early diamond drill results confirmed prospectivity. Trenching underway for **shallow high-grade**, with **multiple targets prioritised for drilling** soon.

New Project Generation



Define (Kharmagtai)

Mineral Resource Estimate¹

1.1Bt containing **3Mt copper & 8Moz gold**
>100Mt @ 0.8% CuEq higher-grade zone doubled (**open**)

Scoping Study²

30yr mine life producing **200kt Cu & 500koz Au** for first 5 yrs and 1.5Mt Cu & 3.3Moz Au over life of mine (LOM)
 Lowest quartile AISC of **US\$1.02/lb Cu** for first 5yrs
US\$3.4B Free Cashflow (post-tax) over LOM
 Base case (post-tax): US\$630M NPV, 4-yr payback



Develop (Kharmagtai)

Funded to Construction Decision

Strategic partnership with Zijin Mining delivering US\$43M (**A\$58M**) cash³

Pre-Feasibility Study (PFS)

Commencing **Q1'2023**
 Targeting **opex & capex improvements, maximising production** schedule economically.

Copper/Gold Concentrate Production
4Q'2027 target

XAM (ASX, TSX) Capital Structure

A\$0.032

Share Price as @ 21/9/2022

1,412M

Shares on issue as 2 21/9/2022

A\$45M

Market Cap @ A\$0.032/share

A\$4M

Cash Balance reported as @ 30/6/2022

A\$41M

Enterprise Value

(Shown before cash from *Phases 2-3 of Strategic Partnership*³, see slide 16 for post-deal)

55% Top 20 Shareholders⁵

INSTITUTIONAL SHAREHOLDERS

ACA 16% Zijin 10% Others 16%

BOARD & MANAGEMENT

6% on a fully diluted basis
 (includes 37m shares & 47m performance options)

(Shown before cash from *Phases 2-3 of Strategic Partnership*³, see slide 16 for post-deal)

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

² ASX/TSX Announcement 6 April 2022 – Scoping Study Kharmagtai Copper-Gold Project

³ ASX/TSX Announcement 19 April 2022 – Strategic Partnership with Zijin Mining

⁴ Will become 38.25% upon completion of 50-50 Joint Venture with Zijin Mining Group

⁵ Shareholder data as at 30 June 2022

Kharmagtai Positioned for Development

Funded to construction decision & reinvigorate exploration

Moving forward in 2022-24:

- Kharmagtai PFS starts Q1'2023 completed over 12 – 18mths; Maiden Ore Reserve & **Decision to Mine** by mid 2024
- Explore flagship Kharmagtai porphyry copper-gold project for **high-grade extension & new discoveries**
- Explore second project Red Mountain **epithermal & skarn** mineralisation
- **7 rigs** parked up with drilling teams ready to commence

Objectives delivered in 2021-22:

1. Resource expanded to 1.1Bt containing 3Mt Cu & 8Moz Au, including >100Mt **higher-grade zone doubled**
2. Scoping Study¹ delivers 30-yr mine life; US\$630M NPV; 4-yr payback & 20% IRR, producing **50ktpa copper & 110kozpa gold**
3. Funded via strategic partnership with Zijin Mining Group² delivering US\$43M (**A\$58M³**) cash

Kharmagtai Project Camp



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

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

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

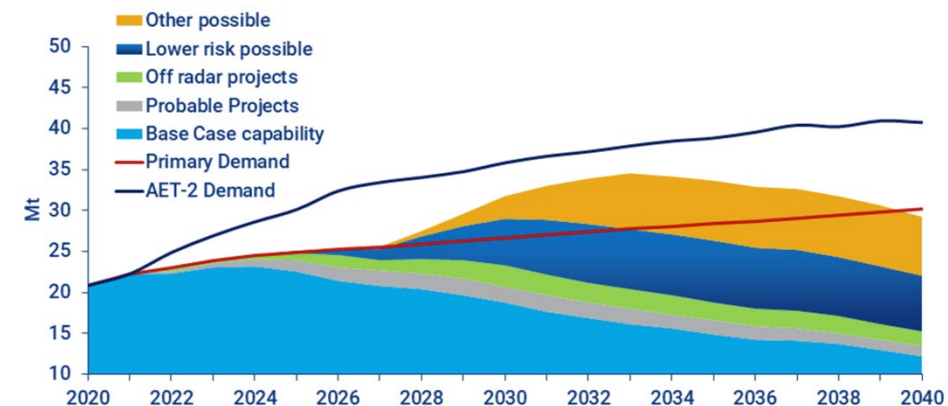
Well Timed to Impact ‘Approaching’ Copper Supply Cliff

Kharmagtai aiming to deliver copper in next 5 years

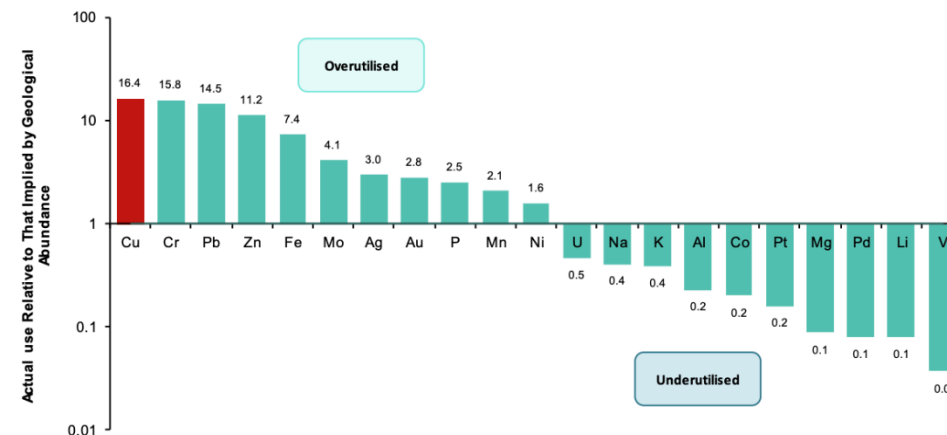
- Relative to consumption driven by the growing decarbonisation of the the economy, **copper over-utilised**
- Global reserve **grades falling** since 1990’s; Halved to ~0.5% Cu¹
- New copper **discoveries insufficient** to replace production; discoveries in 2020s expected to be poorest since 1990²
- Increasing ESG requirements impacting project lead time & risks; currently **>10yrs from Cu discovery to production**³
- Copper supply **deficits inevitable**:
 - Wood Mac est. 6.5Mt deficit by 2027 for AET-2 Demand⁴
 - BMO est. **9Mt deficit by 2030**; with 4Mt new supply growth (capex >\$75bn) as max. practical limit irrespective of Cu price⁵
 - Equivalent to **8x new Escondida mines** over next 8 yrs⁶

XAM’s Kharmagtai positioned to add 1.5Mt Cu production between 2028 to 2057

Copper Supply vs Primary & Accelerated Energy Transition (AET-2) Demand⁴



Copper amongst most over-utilised relative to geological endowment⁷



¹ <http://info.gorozen.com/2021-q1-market-commentary-problems-with-copper>

² <https://www.spglobal.com/marketintelligence/en/news-insights/research/copper-discoveries-declining-trend-continues>

³ <https://www.angloamerican.com/~media/Files/A/Anglo-American-Group/PLC/media/presentations/2022pres/bank-of-america-duncan-wanblad-presentation-2022.pdf>

⁴ <https://www.woodmac.com/news/opinion/will-a-lack-of-supply-growth-come-back-to-bite-the-copper-industry/>

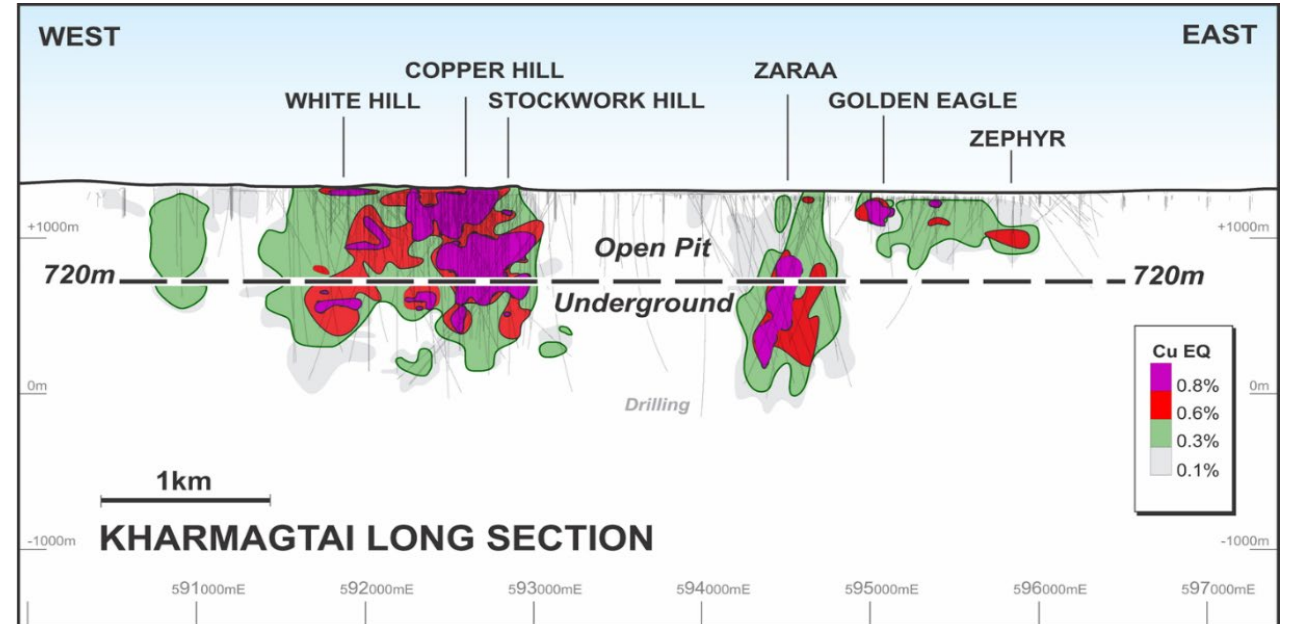
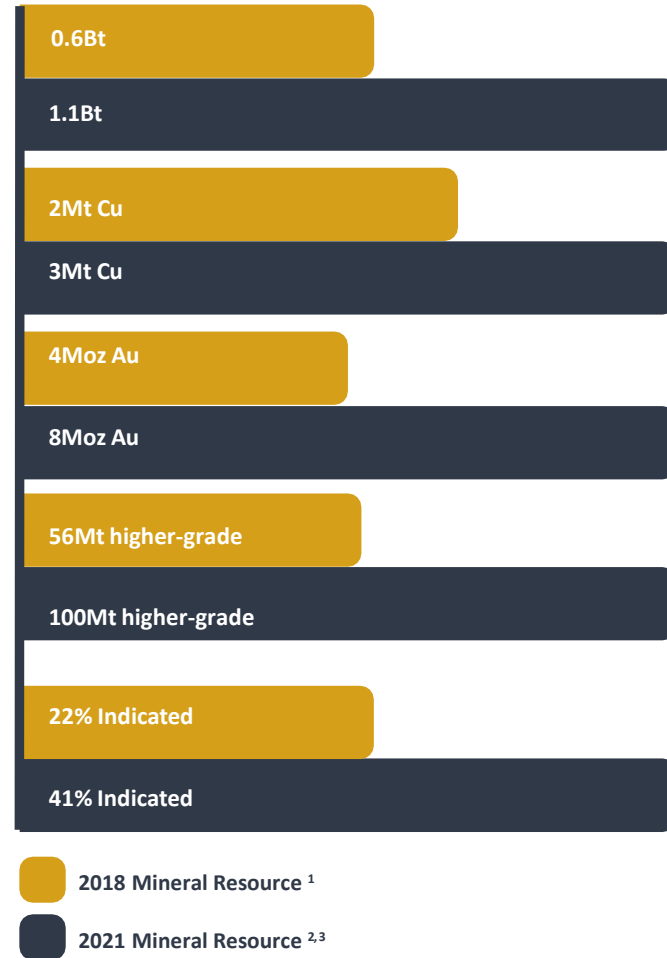
⁵ <https://www.ft.com/content/975b92c0-8f70-48c2-8e50-f615db68228d>

⁶ <https://aheadoftheherd.com/8-escondidas-needed-over-the-next-eight-years/>

⁷ <https://cdn-ceo-ca.s3.amazonaws.com/1g9df18-Global-Metals-Mining-King-Copper-once-and-future-14-September-2020-Bernstein.pdf>

Kharmagtai is a Tier 1 scale, Near Surface Resource

Doubled higher-grade zones (>0.8% CuEq); strong potential for **continued growth**



- Resource **open along strike** & at **depth**
- Additional **high-grade bornite** intercepts have extended mineralisation since the 2021 Resource model⁴

2022-2023 Drilling

- Reinvigorated **discovery exploration** & **high-grade focussed extension** drilling program being planned, with rigs ready to go
- ~30,000 metres infill drilling targeted during PFS

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

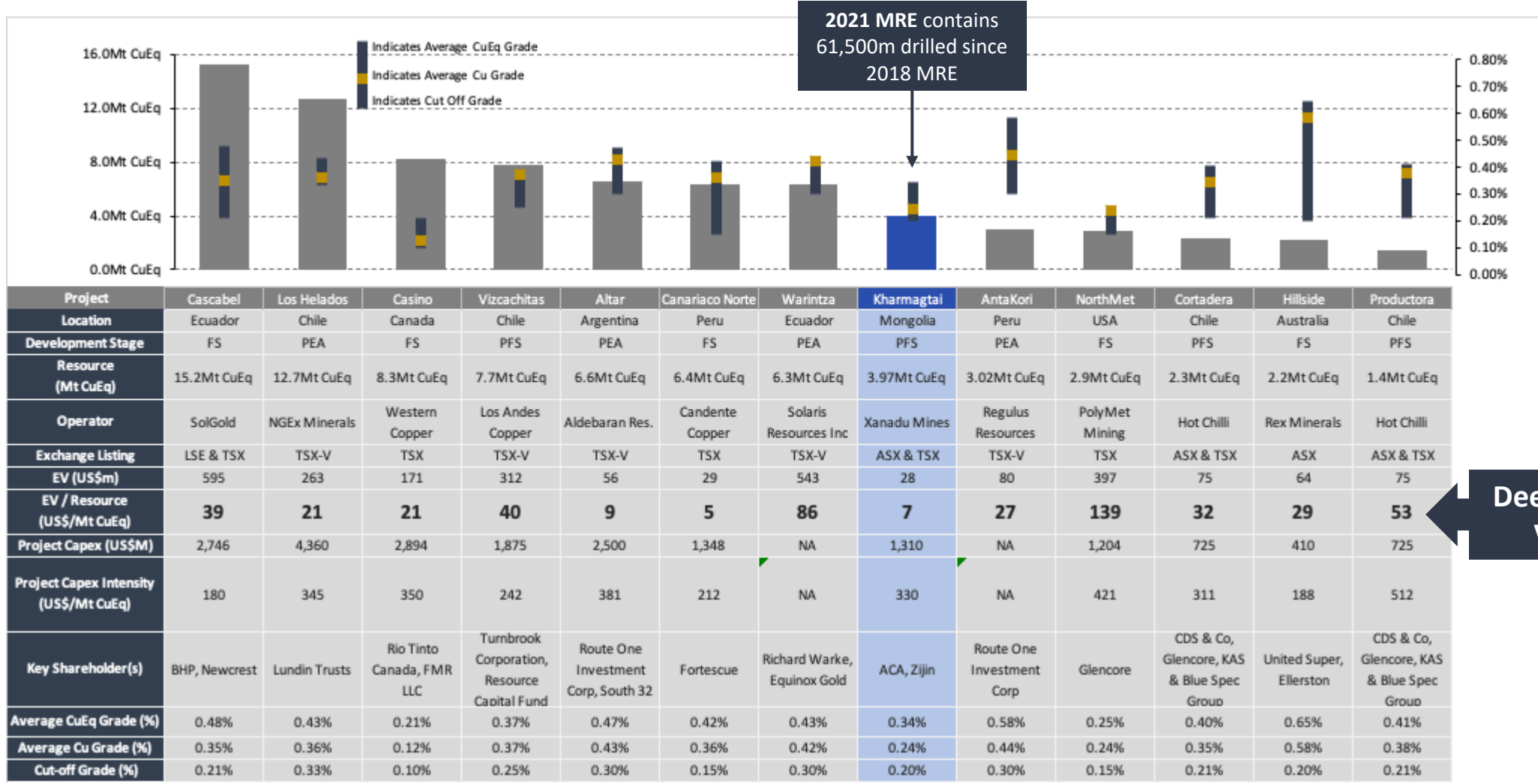
² ASX/TSX Announcement 28 February 2022 – Kharmagtai Technical Report

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

⁴ ASX/TSX Announcement 1 December 2021 – Further Extensions to High Grade Zones at Stockwork Hill

Best Ranked Copper Resource on ASX

Ascending global ranks - one of the largest undeveloped Resources controlled by a junior



Source: Company Disclosure, EV in USD as at 21/9/22
 CuEq calculations and benchmarking data in Appendix, slide 19
 Capex Intensity calculated as Project Capex / Mineral Resource

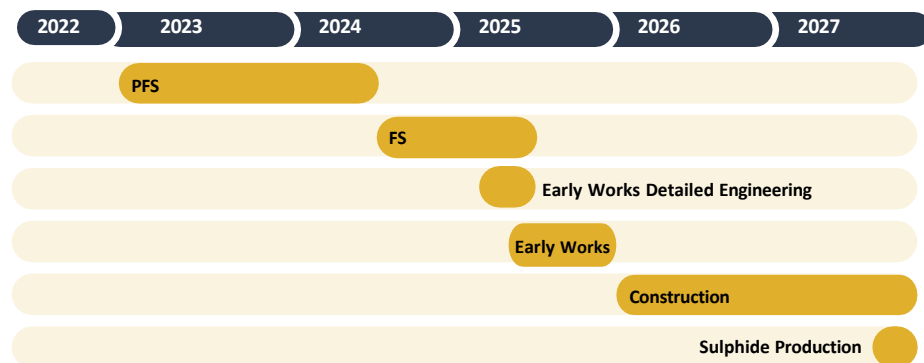
Achievable Pathway to Production

Gated to Pre-Feasibility following robust Scoping Study¹

STRATEGY: develop Kharmagtai 15mtpa starter mine while **FULL EXTENT** of mineral system is being defined. 30mtpa expanded operation to be funded via starter mine cash flow, taking advantage of expected strong Resource growth along the way.

Project Timeline

Key expected milestones :



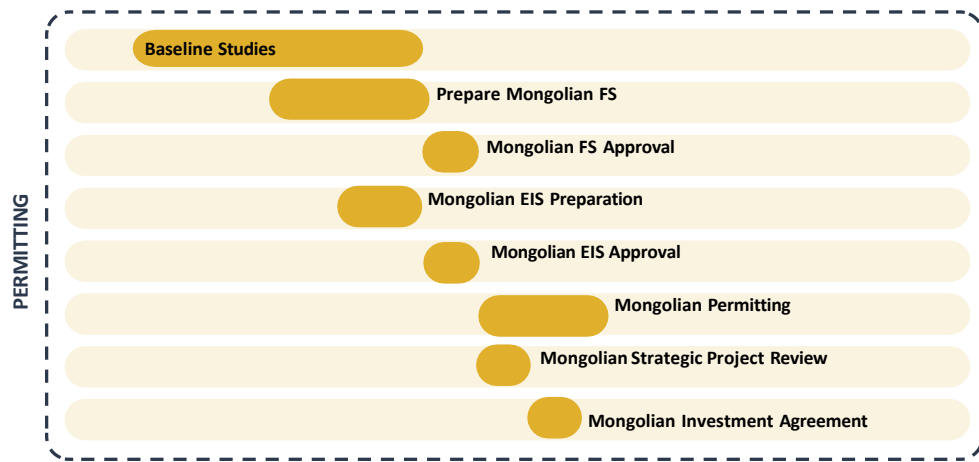
First production by 4Q'2027. Targeting opex & capex improvements, **maximising production** schedule economically.

Clear permitting pathway mapped with **experienced Mongolian development team** ensuring compliance

Scoping Study Financials

Project Financial Summary	Low	Base	High
Net Revenue (US\$M)	15,200	16,100	17,100
EBITDA (US\$M)	5,880	6,770	7,660
Net Cash Flow (US\$M)	2,590	3,420	4,240
NPV (8% discount)	405	630	850
IRR	16%	20%	25%
Capital Payback	7 years	4 years	4 years

Sensitivities	Low	Base	High
Cu price (US\$/lb) (+/-10%)	3.60	4.00	4.40
Au price (US\$/oz) (+/-5%)	1,615	1,700	1,785
Life of Mine Capex (US\$M) (+/-10%)	2,046	1,860	1,674



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

Favourable ESG Environment = Short Time to Production

Mongolia is a **proven & growing** mining-driven economy

- ▶ **Pro-mining jurisdiction** – in 2020, mining accounted for 23% of Mongolia’s GDP & **70% of export revenues**¹
- ▶ **Significant mining region** – tops Investment Monitor's 2021 Mining Vulnerability Index¹, followed by Zambia & Australia
- ▶ **Stable democratic system** – 30-yr history of democratic elections
- ▶ **Social License to Operate** – enabling **short lead times to mine production**
- ▶ **Excellent established infrastructure** – leveraging rail, power & water for **low capex intensity development**
- ▶ **Ideal location** – flat ground, sparse population & proximal to customers **minimises technical, ESG & concentrate marketing risks**

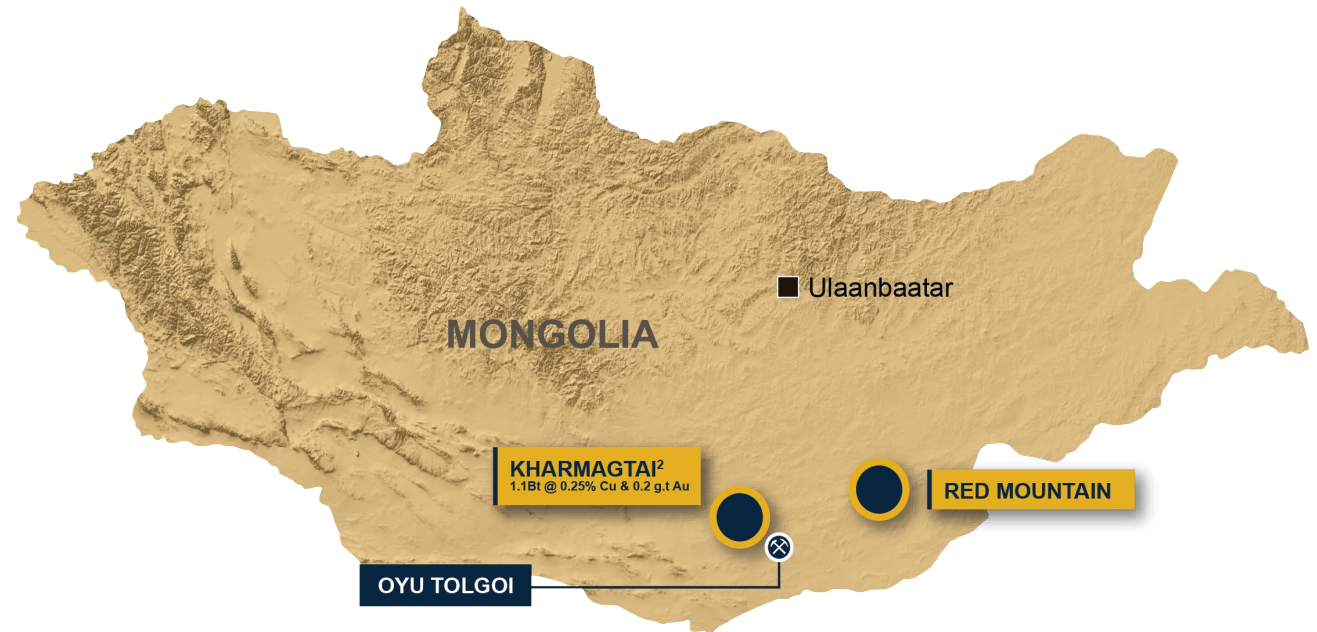
...On the doorstep of world’s largest consumer

77% of Mongolia’s external trade was with China between 2011 – 2021²

Copper (27%) & Coal (27%) accounted for majority of Mongolia’s total exports to China over the same period²

China accounted for ~52% refined copper consumption globally in 2021³

China’s global consumption of refined copper up 4% yoy to 1.87Mt in 1H 2022³



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

² The Current situation for Foreign Trade between Mongolia and China, Future Trend https://www.mongolbank.mn/documents/press_conference/20220621_06.pdf

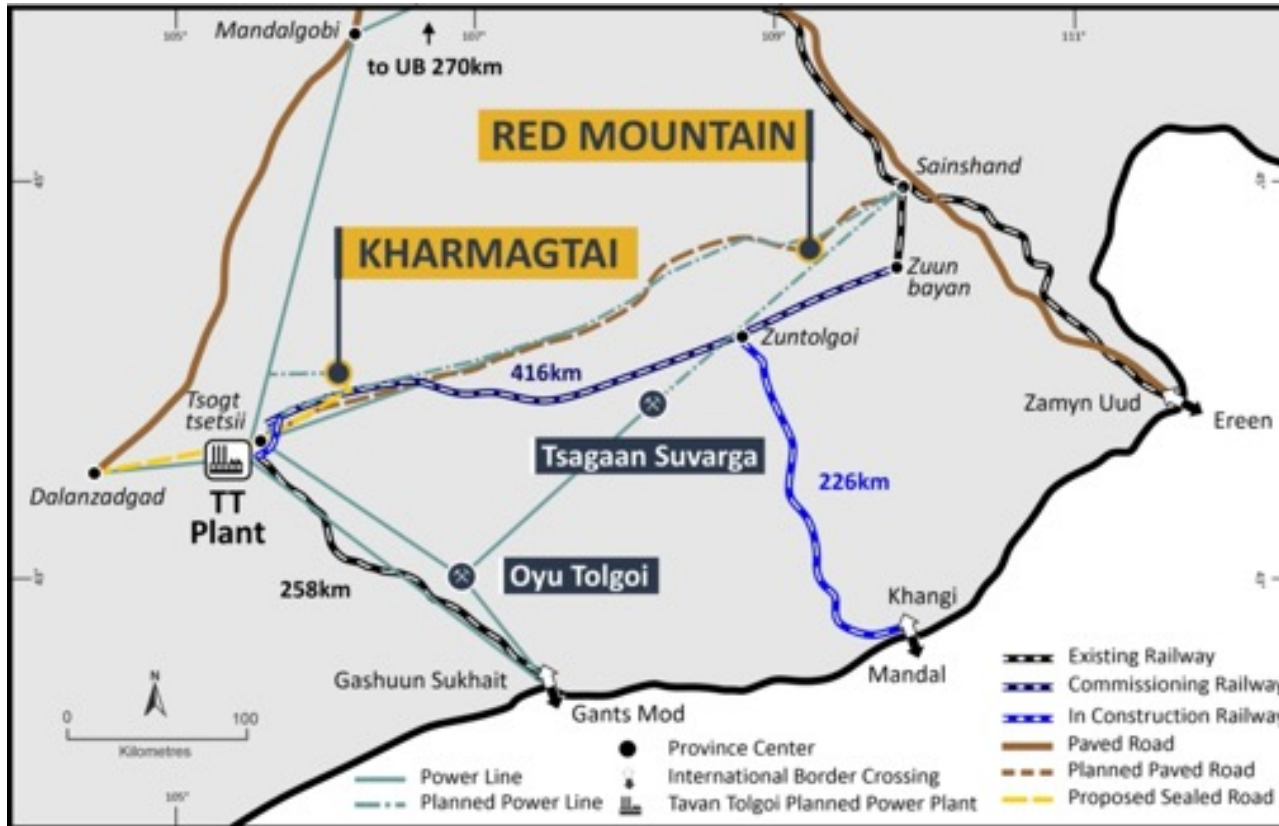
³ Global refined copper consumption distribution 2021, by region <https://www.statista.com/statistics/693466/distribution-of-global-refined-copper-consumption-by-region/>

⁴ China steps up copper imports despite slowdown <https://www.reuters.com/markets/commodities/china-steps-up-copper-imports-despite-renewed-slowdown-andy-home-2022-08-02/>

New Infrastructure Enhances Customer Links

Mongolia investing for more globally competitive South Gobi mining products

South Gobi Regional Infrastructure



Rail & Road

- New rail line commissioning between Zuunbayan & Tsogttsetsii, linking to trans-Mongolia railway. New sealed road follows rail line.
- New rail lines south to China from Tavan Tolgoi (operational) reduces transport cost by 75%¹ & Zuntolgoi (in construction)
- 22km line connecting Gashuun Sukhait & Zuunbayan rail lines in construction, linking mining region to China & wider Mongolian network

Power

- New Tavan Tolgoi power plant construction awaiting tender process
- Additional power lines link region to Tavan Tolgoi



Train operating on South Gobi railway

¹ <https://www.globaltimes.cn/page/202209/1275099.shtml>

Mongolia Policy Reforms to Incentivise Mining

Seeking to **boost investor confidence**; potential to be a miner's destination of choice

Law reform coming soon ^{1, 2, 3}

- Newly appointed **pro business** ministers announced (during quick Cabinet reshuffle) for mining, economy & development, and secretariat chief
- Expected to shape a more investor friendly mining sector; **revisions to Mining Law expected in 2023**. *Law of Mongolia on Minerals (2006)* has been stable for some time now, with no amendments passed since 2019.
- Revisions to Investment Law also on the agenda, including establishment of Investor Protection Council
- Aimed at **boosting investment, the economy & investor confidence**

Aligned with 'New Revival Policy' framework ^{4, 5}

- Framework designed to create favourable business environment, improve foreign & domestic investment climate, as well as **fiscal reform**
- Policy implementation aims to:
 1. **increase mineral export volumes**
 2. improve capacity of border checkpoints, and
 3. accelerate infrastructure & energy construction projects.



XAM board & management catching up with the team, preparing for PFS kick off later this year

¹ <https://thediomat.com/2022/09/mongolia-unveils-new-pro-business-cabinet/>

² <https://montsame.mn/en/read/302312>

³ <https://uk.practicallaw.thomsonreuters.com/w-017-7372?transitionType=Default&contextData=%28sc.Default%29>

⁴ <https://montsame.mn/en/read/285624>

⁵ <https://montsame.mn/en/read/303729>

Multiple Upside Opportunities at Kharmagtai

Leverage **smart mining** technologies & **reignite exploration**

Process Oxidised Material to Minimise Waste

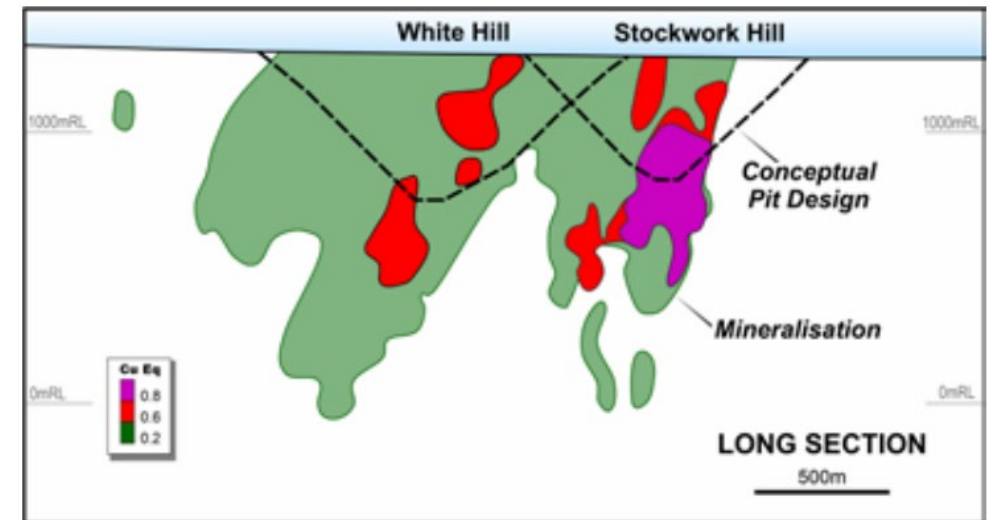
- Scoping Study mines & processes only main underlying sulphide Resource
- Up to 90Mt partially oxidised material in upper 30m
- Processing could lift economics; generate **additional cash flow** & **offset pre-strip cost**

Technology to Expand Footprint Sustainably

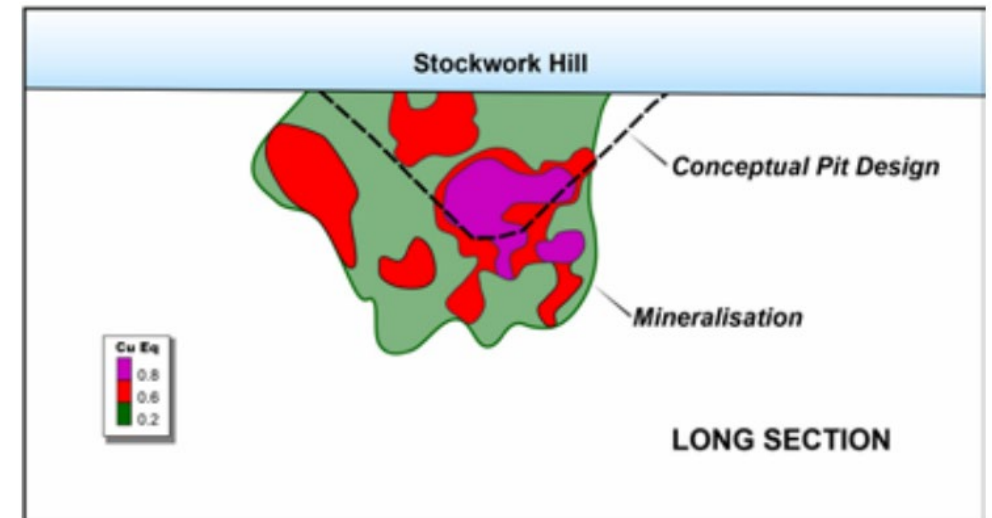
- Bulk ore sorting (BOS) & coarse particle flotation recovery (CPR) to **optimise mill feed grade/recovery, minimise energy/water consumption & reduce milling cost**
- Deepest pits currently defined to ~600m. In pit crush and convey to optimise & deepen pits to **capture greater extent of higher-grade zones.**
- Electrified mining equipment to **reduce emissions & haulage cost**

Exploration Upside focussed on Higher-Grade

- Resource **open in all directions**, representing only ~30% of 8km long Kharmagtai mineralised complex
- **Higher-grade** bornite mineralisation only recently drilled in lower portions of Stockwork Hill, representing **significant upside** to expand existing Resource
- Several **near surface targets** across tenement warrant follow-up drill testing
- **>20** exploration targets across 66.5km² lease ranked & **drill tested over next 12 months**



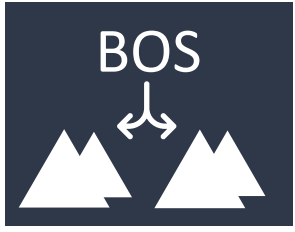
Kharmagtai Resource within Open Pit in Long Section



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

Sustainable Minerals Processing Becoming the Norm

Bulk Ore Sorting (BOS) & Coarse Particle Recovery (CPR) **Reduce Energy & Water Consumption**

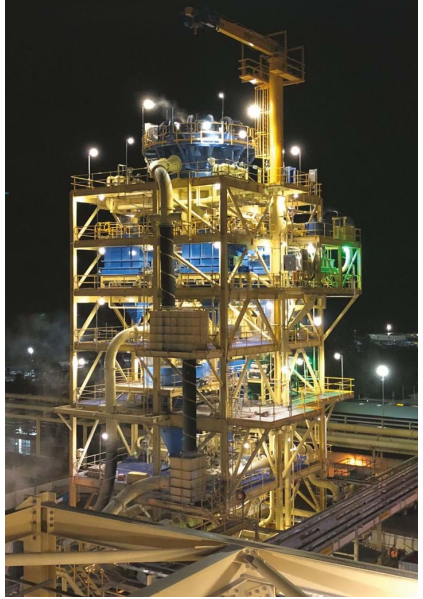


AngloAmerican Bulk Ore Sorter – BOS

Technologies such as BOS and CPR rapidly becoming business as usual for large scale base & precious metal miners to sustainably achieve **low cost production** & generate **fewer wet tailings**.

Examples¹:

- **First Quantum Kansanshi Cu** – world’s largest 2800tph BOS operating since May 2022
- **Newcrest Cadia Cu Au** – first full scale CPR operating since August 2018
- **AngloAmerican multiple mines** – BOS & CPR helping to significantly reduce energy & water consumption, in line with their 2030 Sustainable Mining Plan targets
- **Capstone Pinto Valley Cu Mo** – CPR pilot plant enabled up to 8% increase in Cu recovery, lower grinding costs, less water & energy consumption and better tailings stability



Cadia Coarse Particle (Flotation) Recovery – CPR

BOS & CPR minerals processing technologies will be evaluated for Kharmagtai Cu Au PFS

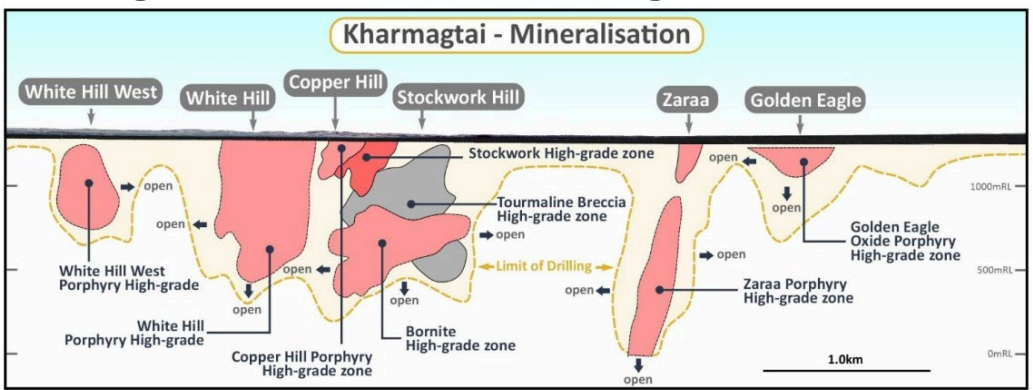
¹ <https://nextore.com.au/worlds-largest-sorting-plant-now-in-operation/>, <https://www.thechemicalengineer.com/features/reducing-the-daily-grind/>, <https://www.angloamerican.com/futuresmart/stories/our-industry/mining-explained/bulk-ore-sorting-and-coarse-particle-recovery-leading-the-way-in-mineral-processing-innovation>, <https://www.mining.com/capstones-pinto-valley-mine-fully-permitted-to-2039/>, <https://skillings.net/capstone-mining-recent-project-developments/>

High Impact Discovery: Not If, But When?

Higher-grade **depth limit untested** – potential for “Hugo North” material growth

- Kharmagtai system edges remain open, including at depth with **limited drilling below 800m**
- Oyu Tolgoi’s highest grade deposit, Hugo Dummett North **starts at 800 – 900m depth**

Kharmagtai Mineralisation – Limits of Drilling



Higher-grade offset structure at depth remains possible; stacked porphyry discovery below Kharmagtai orebody likely

Comparator	Hugo North (HN) ¹	Kharmagtai (KH)	KH vs HN Scorecard
Mineralisation	Quartz stockwork with bornite rich core , zoning out to chalcopyrite & pyrite	Stockwork Hill has bornite rich core , zoning out into chalcopyrite & pyrite	✓
Cu & Au Grades	Starts below 900m and increases to the north, reaches max horizontal thickness at 1,160m depth	Starts at surface and increases with depth	✓
Au : Cu Ratio ²	<ul style="list-style-type: none"> • Up to 1:10 in south • Up to 1:1 in north • Best Au grades associated with bornite 	<ul style="list-style-type: none"> • Up to 2:1 at surface • Up to 5:1 at depth • Higher Au grades (avg 3:1) in bornite zone 	<div style="border: 1px solid red; padding: 2px; display: inline-block;">✗</div>
Depth	Starts at 800 – 900m	Limited drilling below 800m	

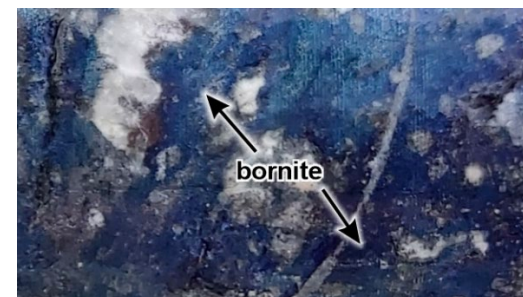
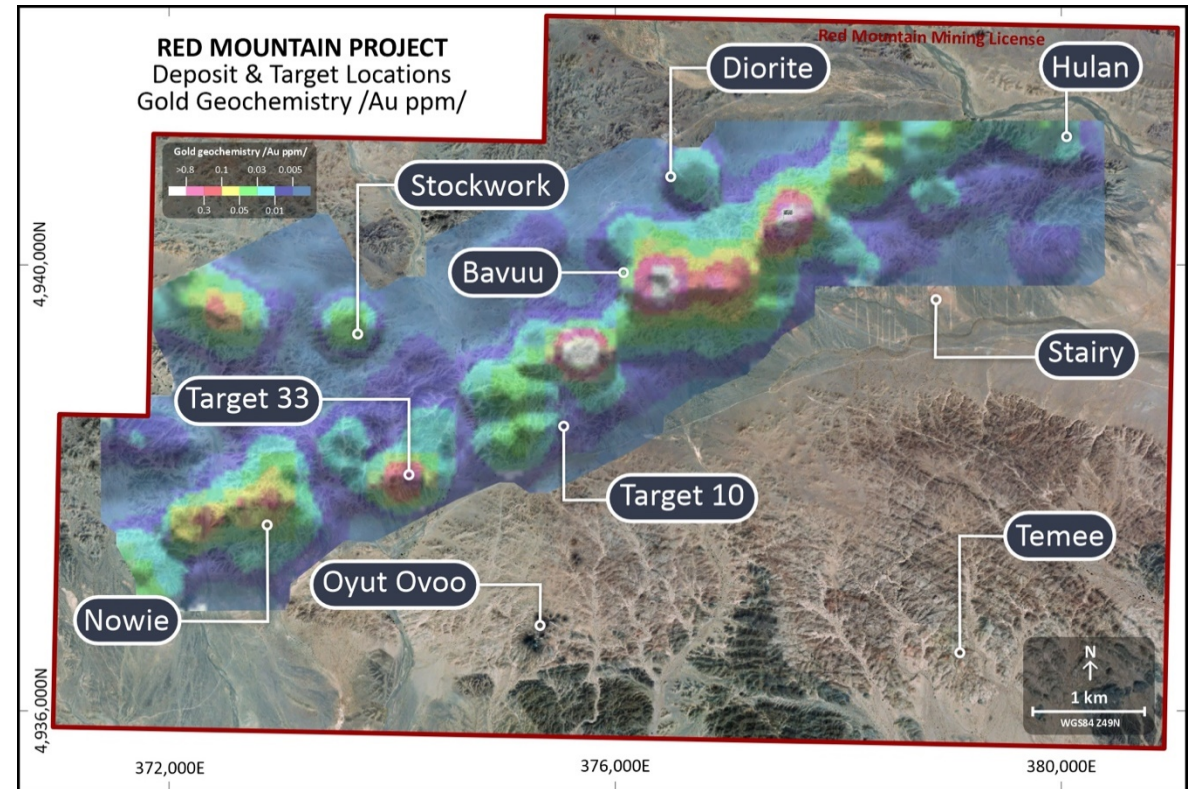
¹ https://www.researchgate.net/publication/276086472_The_Giant_Oyu_Tolgoi_Porphyry_Copper-Gold_Deposit_Discovery_History_and_Exploration_Implications_South_Gobi

² shown as Au (g/t) : Cu (%)

Red Mountain Exploration Firing Up

New broad gold zones expand & open up potential for more

- New exploration program kicked off August 2022 to expand upon prior trenching & drilling
- Good start – broad zones of **shallow gold** intercepted at Target 33 (T33)¹:
 - OUTF109: 66m @ 0.37g/t Au from 26m,
 - Including **18m @ 0.81g/t Au** from 50m,
 - Including **10m @ 1.23 g/t Au** from 58m
- Latest T33 trenching **expanded 350m x 80m zone** of highly anomalous gold, including >1g/t Au higher-grade core
- One of many **high-quality targets** in the exploration pipeline
- High priority targets for drilling have started to be defined post trenching, with **drill testing to kick off soon**
- Current exploration programs seeks to expand strike extent of shallow high-grade epithermal gold & copper-gold-silver skarn mineralisation
- In contrast to Kharmagtai, targeting **smaller scale, higher-grade** deposits enabling **lower capex development**

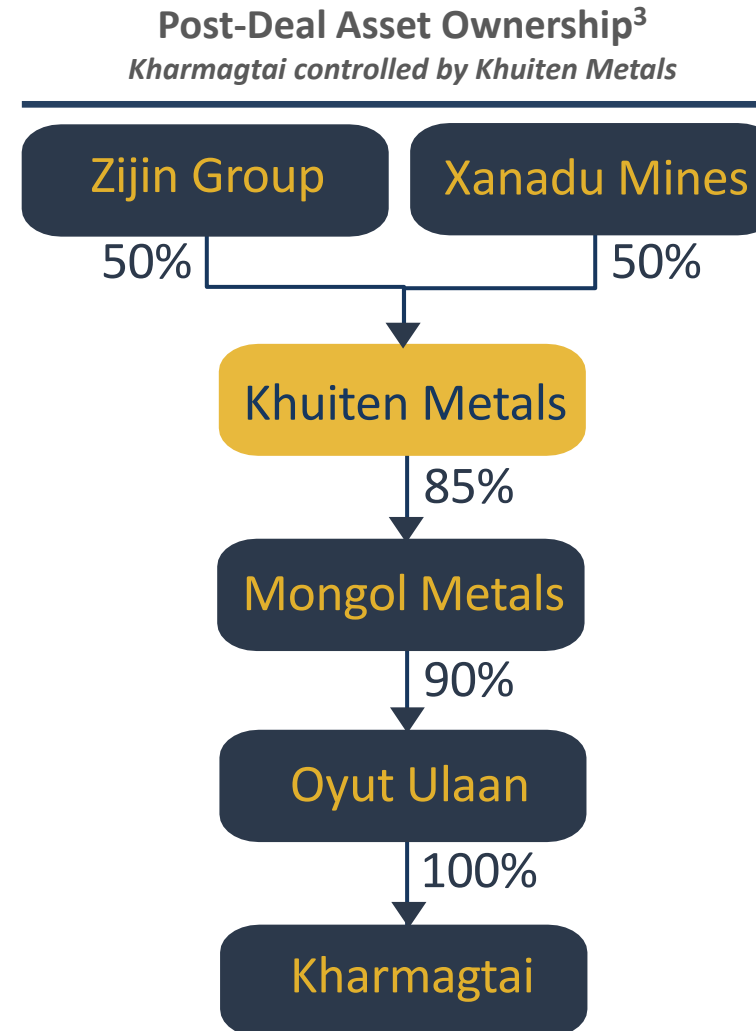


¹ ASX/TSX Announcement 27 September 2022 – Broad Shallow Gold Zone at Red Mountain

Funded via Strategic Partnership with Zijin Mining

Three phases of investment¹ totalling US\$43M² (A\$58M²)

- Phase 1 (completed) **A\$5.6M cash** @ 4cps representing **38% premium** for 9.9% minority stake in XAM
- Phase 2 **A\$5.7M cash** increasing to 19.99% XAM
- Phase 3 **US\$35M cash** invested in Khuiten Metals, forming **50-50 JV** in Kharmagtai controlling entity:
 - US\$20M ringfenced to fully fund PFS, including infill drilling
 - US\$15M to fund high impact exploration
- Phases 2-3 subject to remaining regulatory & shareholder approvals, noting **FIRB approval received August 2022⁴**
- Phases 2-3 are at an advanced stage, with full funding targeted during **December 2022 Quarter⁵**



Post-Deal XAM Shareholders
Top 20 hold 50%

20%	Zijin
15%	ACA
15%	Top 20 <i>excl Zijin & ACA</i>
5%	Board & Management
45%	Other Holders

Post-Deal XAM Share Capital

1,548M	Shares on Issue
A\$50M	Market Cap @ A\$0.032
A\$34M	Cash ⁶
A\$16M	Enterprise Value

¹ ASX/TSX Announcement 19 April 2022 – Strategic Partnership with Zijin Mining
² Currency conversion based on AUD:USD = 0.7387 as at 19 Apr 2022 close (transaction announcement date)
³ Effective ownership of Kharmagtai by each of Xanadu and Zijin is 38.25% (= 50% * 85% * 90%)
⁴ ASX/TSX announcement 22 August 2022 – FIRB approves Zijin investment in Xanadu
⁵ ASX/TSX announcement 24 August 2022 – Exploration Ramps up at Red Mountain
⁶ Post-Deal Cash = Current cash A\$4.105M + Phase 2 cash A\$5.44M + 50% of Phase 3 cash A\$24M

Investment Highlights

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.¹

FAST TRACKING DEVELOPMENT

PFS fully-funded; targeting FID by mid 2024.
 First production 2027-28 from processing sulphides; additional cashflow potential from partially oxidised material processing.

FUNDED & WELL POSITIONED

Zijin strategic investment²: A\$11M in XAM & US\$35M in Kharmagtai.
 Strengthens funding, technical capability. De-risks concentrate marketing & logistics.

MONGOLIA SEEKS TO BOOST MINING

Stable, educated democracy.
 Mining-driven economy; low ESG risk & established infra.
 Pro business govt seeking mining foreign investment growth; mining law revisions expected in 2023.

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 high impact 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 website³

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

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

³ ASX/TSX Announcement 9 June 2022 – Sustainability Report 2021

Thank you

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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

Board & Management – Proven & Experienced Team

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

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 ¹	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 ²	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

¹ 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

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

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	622	576	189	1,387	0.10	0.08	0.06	0.44%	0.42%	0.42%	2.0	1.5	0.4	2.7	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	28/02/22	424	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	0.24	0.48%	0.28%	0.24%	14.9	6.6	4.2	5.7	4.1	1.3	0.48%	15.2
Casino	29/04/22	188	2,303	1,413	3,903	0.40	0.17	0.14	0.24%	0.13%	0.10%	2.4	12.5	6.3	0.5	3.0	1.4	0.21%	8.3
Cortadera	31/03/22	0	471	108	579	0.00	0.12	0.08	0.00%	0.36%	0.28%	0.0	1.8	0.3	0.0	1.7	0.3	0.40%	2.3
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	8/12/21	0	487	664	1,151	0.00	0.20	0.20	0.00%	0.30%	0.20%	0.0	3.1	4.2	0.0	1.5	1.3	0.34%	4.0
Warintza	1/04/22	0	579	887	1,466	0.00	0.03	0.01	0.00%	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	19/11/19	319	403	415	1,137	0.03	0.03	0.03	0.24%	0.23%	0.24%	0.3	0.4	0.4	0.8	0.9	1.0	0.25%	2.9
Productora	31/03/22	0	253	90	343	0.00	0.08	0.03	0.00%	0.41%	0.29%	0.0	0.6	0.1	0.0	1.0	0.3	0.41%	1.4
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 Upgrade¹

Positioning as the Cadia Hill of Mongolia

Kharmagtai stacks up well on **strip ratio, scale & copper grade**

First 5yrs of production²:

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



Cadia Hill



Kharmagtai

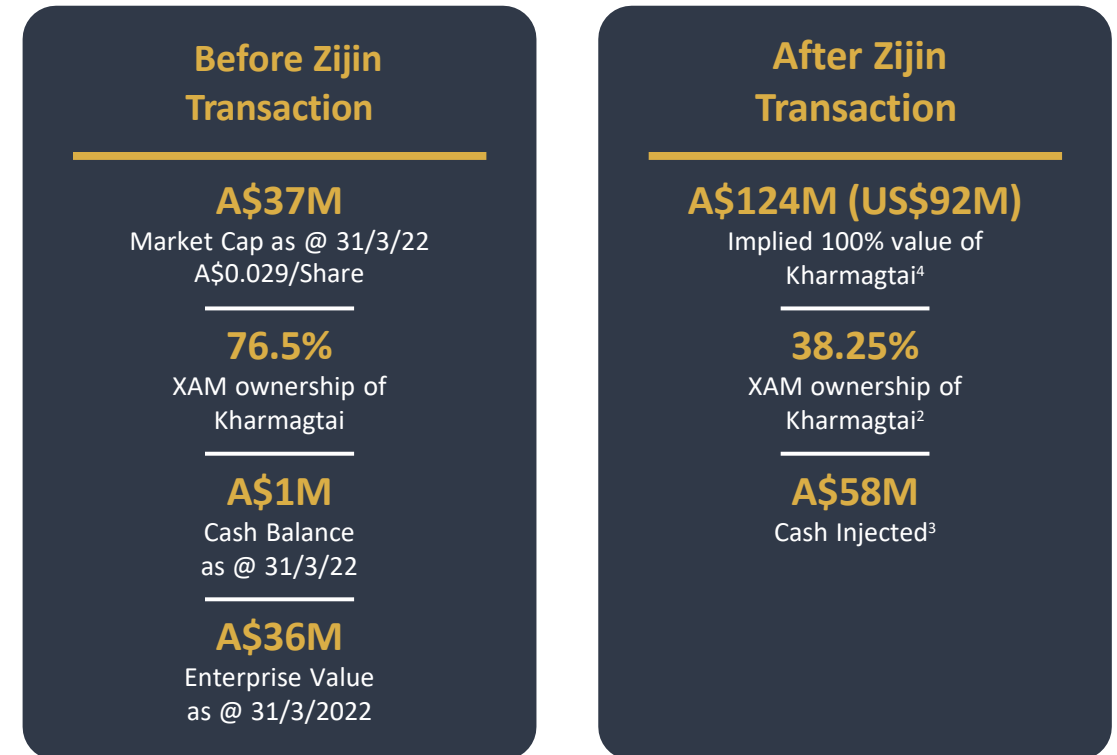
¹ Cadia Hill ore mined not reported, assumed ore mined = ore processed

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

Zijin Deal Transforms Xanadu⁵

Funded to develop Kharmagtai while retaining control

- Transaction implies 100% value of Kharmagtai is **US\$92M** (**A\$124M¹** or A\$29/t CuEq MRE)
- Xanadu **retains control** of Kharmagtai
 - Khuiten Metals controls Kharmagtai
 - 50-50 JV in Khuiten Metals
 - Xanadu **remains JV operator**
- Change of control in XAM requires a post-deal offer from Zijin, subject to XAM **shareholder approval**
- Kharmagtai funded through PFS (12-18 months); supported by solid discovery exploration budget
- Xanadu well-funded to explore 100% owned Red Mountain



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

² 50-50 JV in Khuiten Metals which holds 76.5% of Kharmagtai = 38.25%

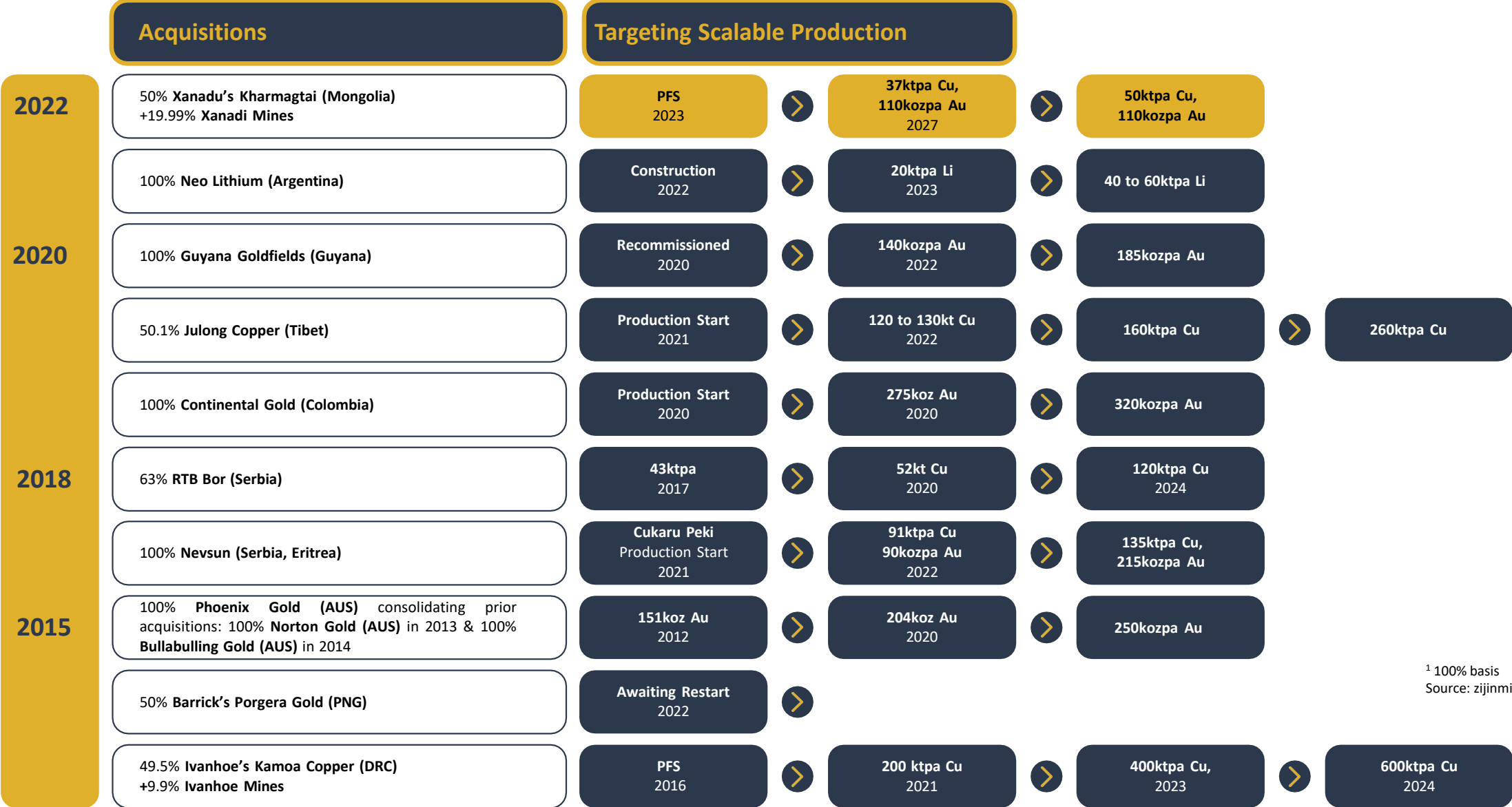
³ Cash Injected = (Zijin A\$11M placement) + (Khuiten Metals JV investment of US\$35M for Kharmagtai development)

⁴ Conversion based on AUD:USD = 0.7387 as at 19 Apr 2022 close (transaction announcement date)

⁵ ASX/TSX Announcement 19 April 2022 – Strategic Partnership with Zijin Mining

Zijin strategy is to acquire, control & scale-up

Aligns to Kharmagtai 2-stage expansion



¹ 100% basis
Source: zijinmining.com

Who is Zijin Mining Group?

A global copper & gold mining major

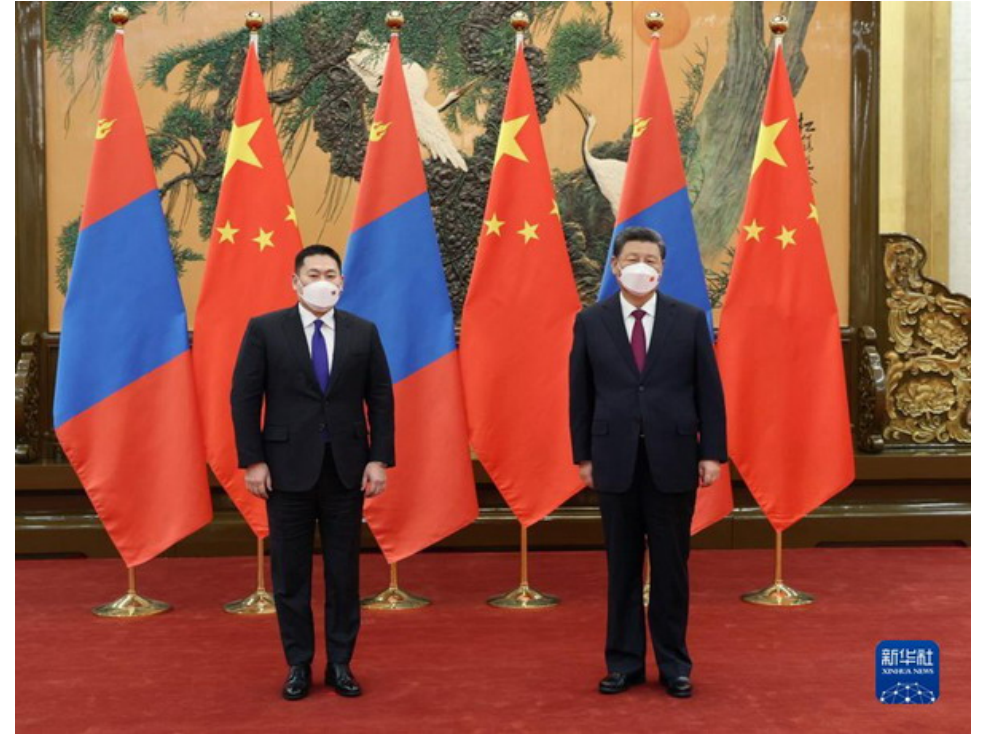
- Zijin brings **capability** and **balance sheet** to build a large-scale copper-gold mine like Kharmagtai
- **US\$51 billion** market capitalization, listed on Hong Kong & Shanghai exchanges
- **Global Top 10 copper producer**, 2021 mining production 584kt copper, 1.68 Moz gold and 396kt zinc
- Vertically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



Mongolia-China Growing Strategic Partnership

Zijin transaction echoes strengthening relationship

- Recent heads of state engagement confirms **alignment** of Mongolia's **New Revival Policy** with China's **Belt and Road Initiative** and Five-Year Plan ¹
- 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 Zijin 2022 Strategy**², targeting:
 - ✓ Large projects with best-in-class resources delivering sustainable growth
 - ✓ Responsible, green, high-tech mining
 - ✓ Good upside potential & strong synergies
 - ✓ Merger and acquisition to accelerate growth



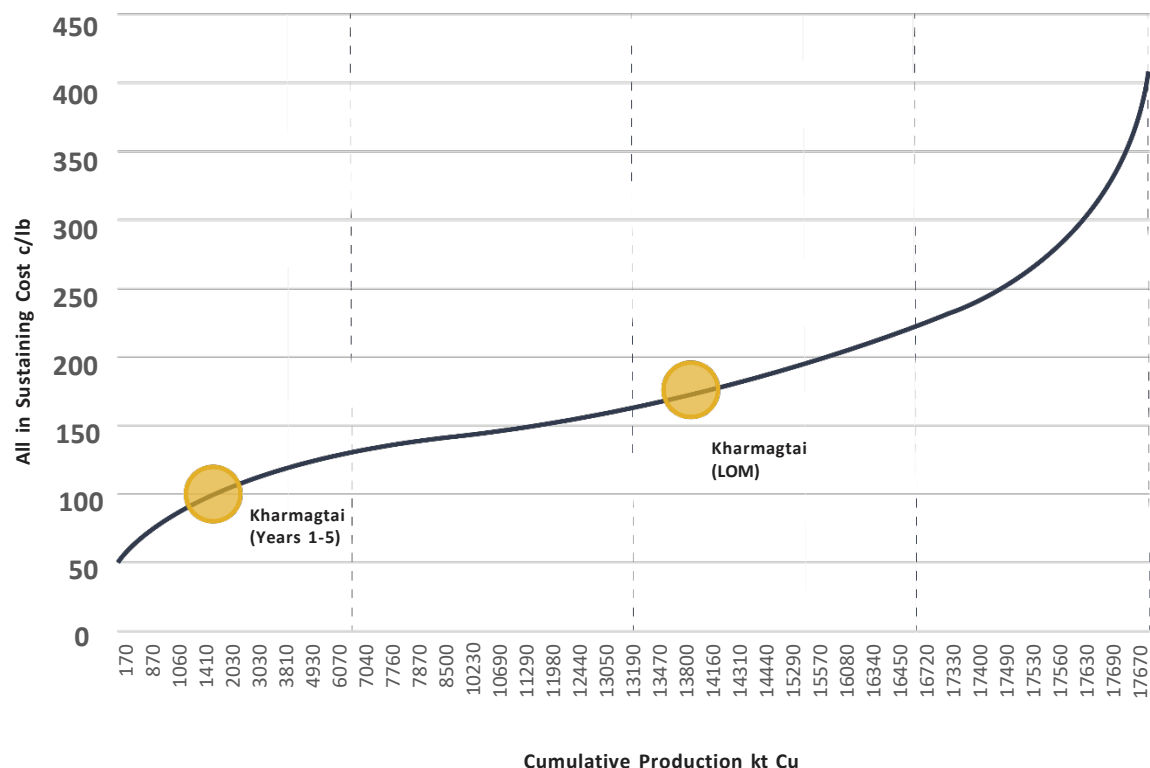
¹ Ministry of Foreign Affairs of the People's Republic of China 6 February 2022 – Xi Jinping Meets with Mongolia Primer Minister Luvsannamsrai Oyun-Erdene; www.fmprc.gov.cn/mfa_eng/zxxx_662805/202202/t20220207_10639712.html

² Source: Zijinmining.com

Starter Mine Expanded Post Capex Payback

Low AISC driven by **low strip** & **gold by-product credits**

Competitive Cost Curve Positioning

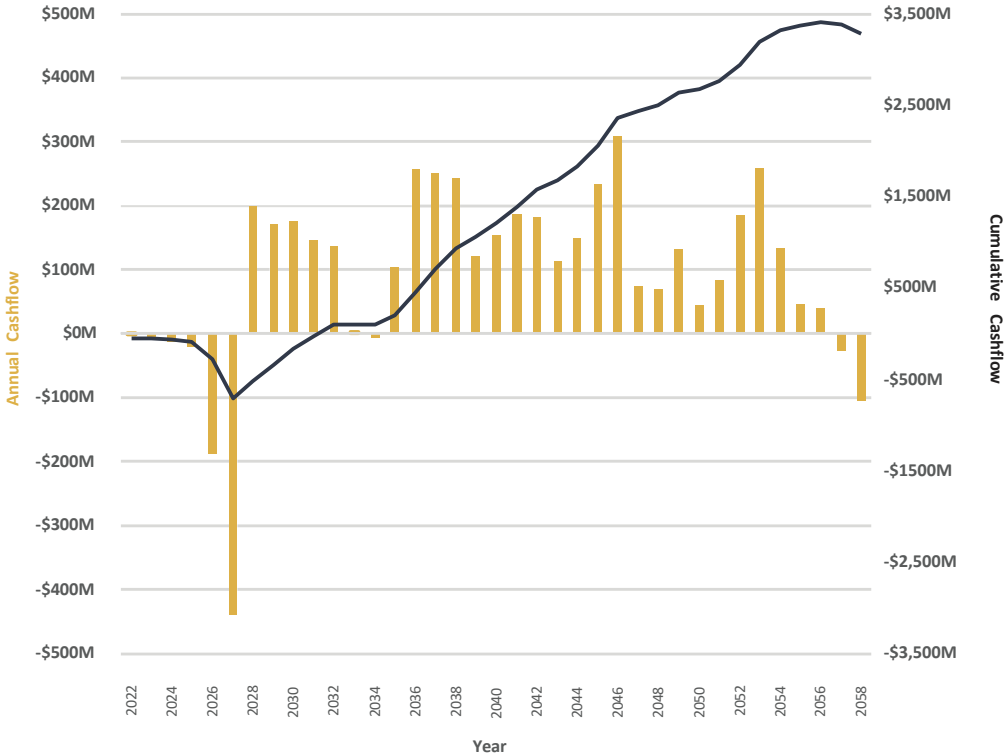


Area	Measure	Unit	Stage 1 Initial	Stage 2 Expansion	LOM
Production	Period	Years	5	25	30
	Ore process rate.	Mtpa	15	30	15-30
	Feed from Indicated Resource	%	100%	50%	55%
	Ore processed	Mt	70	690	760
	Average copper grade	%	0.29	0.21	0.21
	Average gold grade	g/t	0.30	0.16	0.18
	Copper produced	Mt	0.2	1.3	1.5
	Gold produced	Moz	0.5	2.8	3.3
	Capital	Project Capital	US\$M	690	620
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

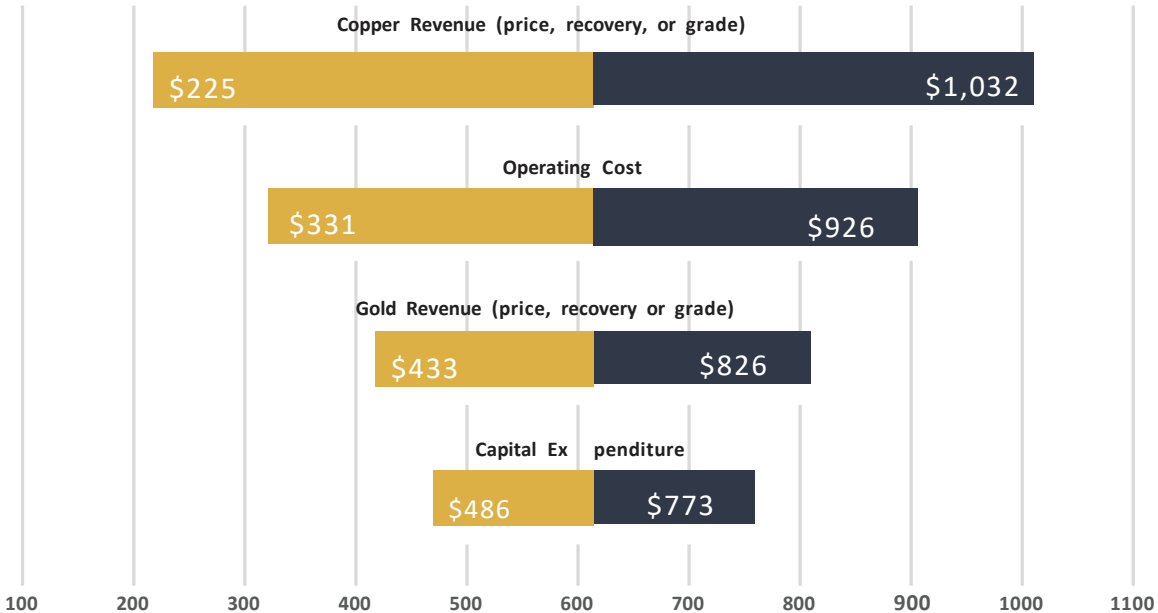
Robust Cash Flows

Positive cash flow across wide range of scenarios

Annual Cash Flow (US\$M)



- Kharmagtai starter mine cash flows funds expansion
- Strong earnings across +/- 20% sensitivity analysis range

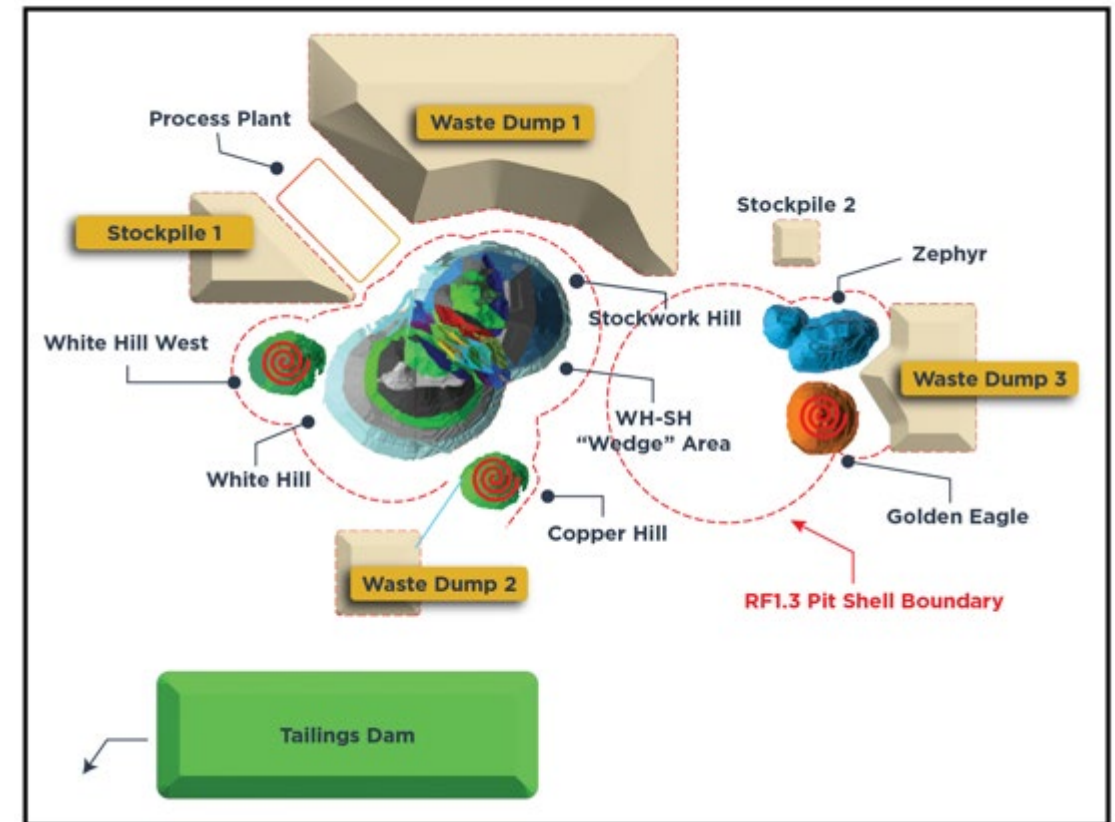


Simple Site Layout

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

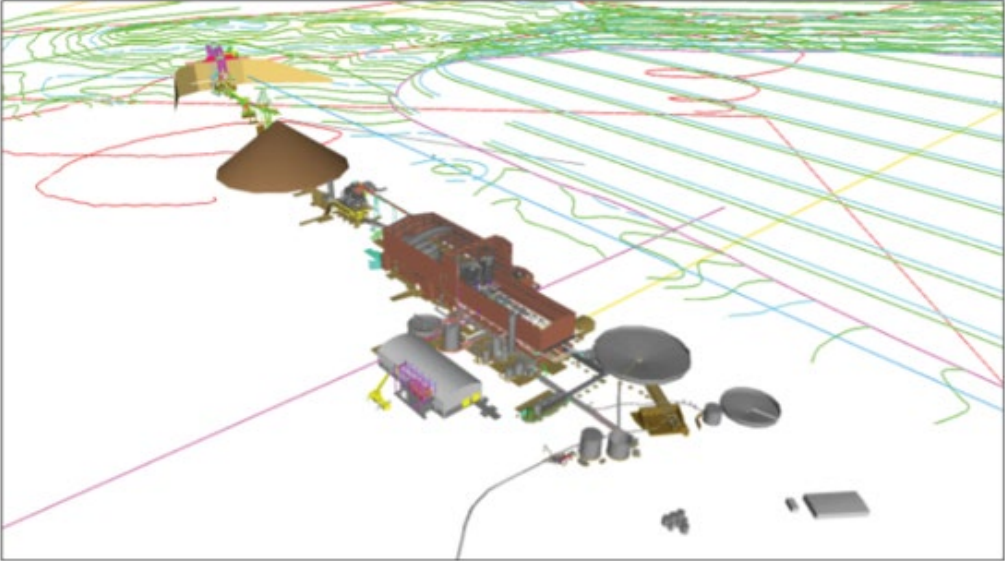
Project Layout



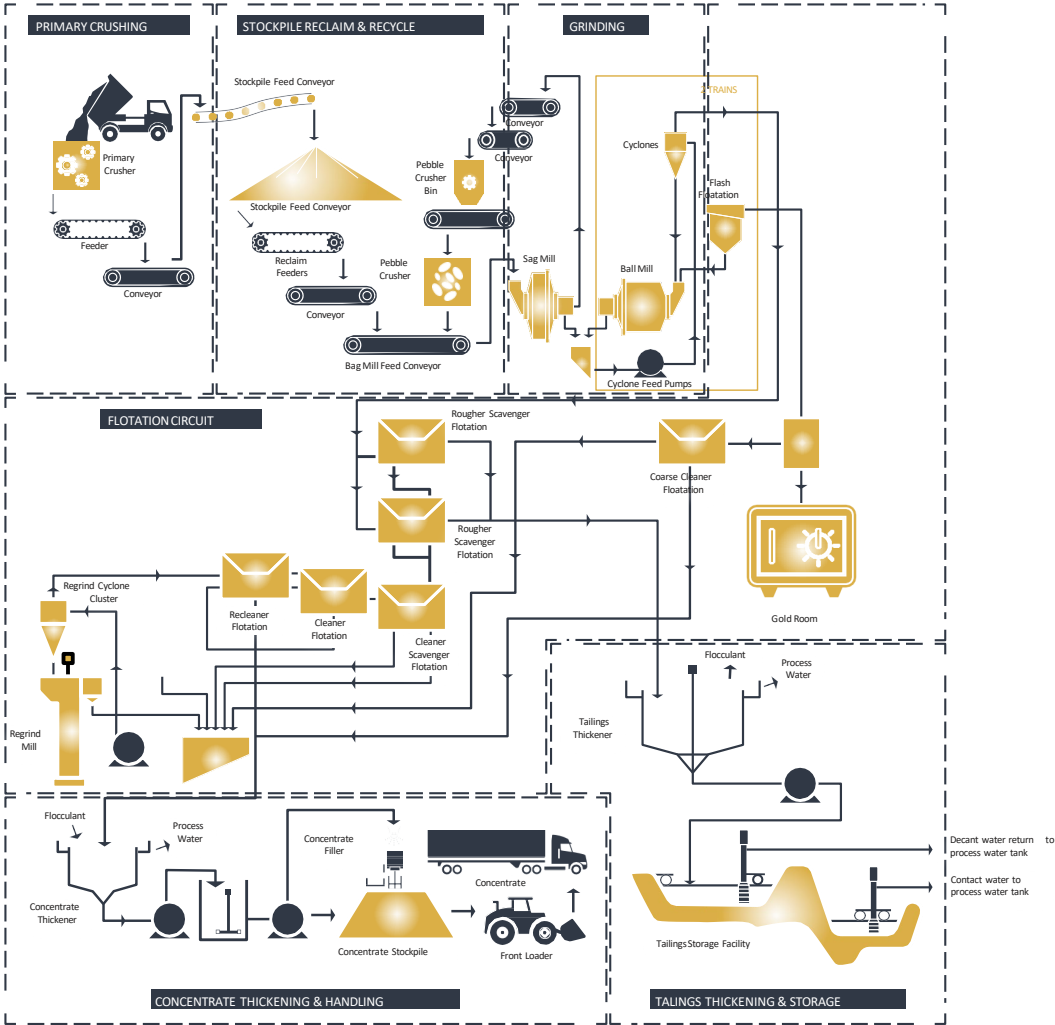
Sulphide Flotation Process Plant

Conventional, low risk process flow & plant design

Processing Plant Layout



Process Flow Diagram



Exploration Will Continue

Two active projects, seeking a third

Kharmagtai (76.5%)¹

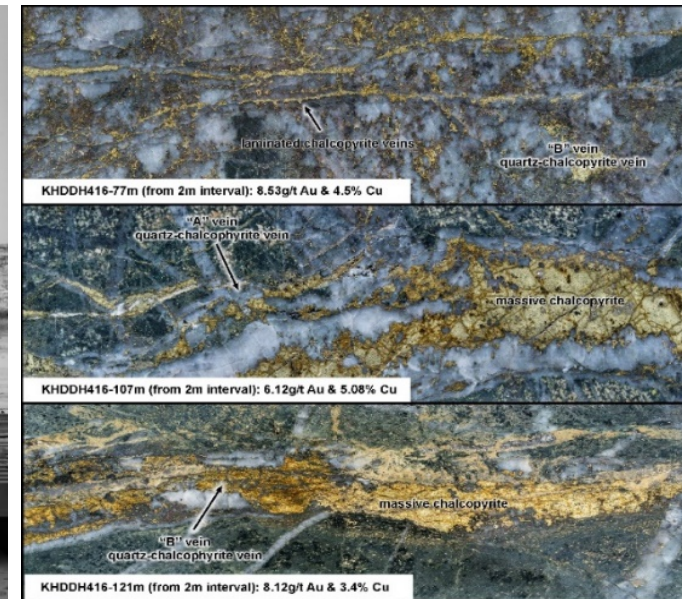
- Porphyry copper-gold
- Open in all directions & across the entire lease
- Bornite zones expanding at depth
- >20 high priority discovery targets identified for testing

Red Mountain (100%)

- Drill testing near surface copper-silver skarns & epithermal mineralisation
- Follow-up higher-grade bornite & massive bornite copper-silver intersected in 2021²
- Large-scale porphyry system potential at depth remains

New Project Generation

- Seeking third South Gobi project
- Completed on site investigations to identify potential new projects



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

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

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^{1,2}, including higher-grade zone 100Mt @ 0.8% CuEq¹

Scoping Study

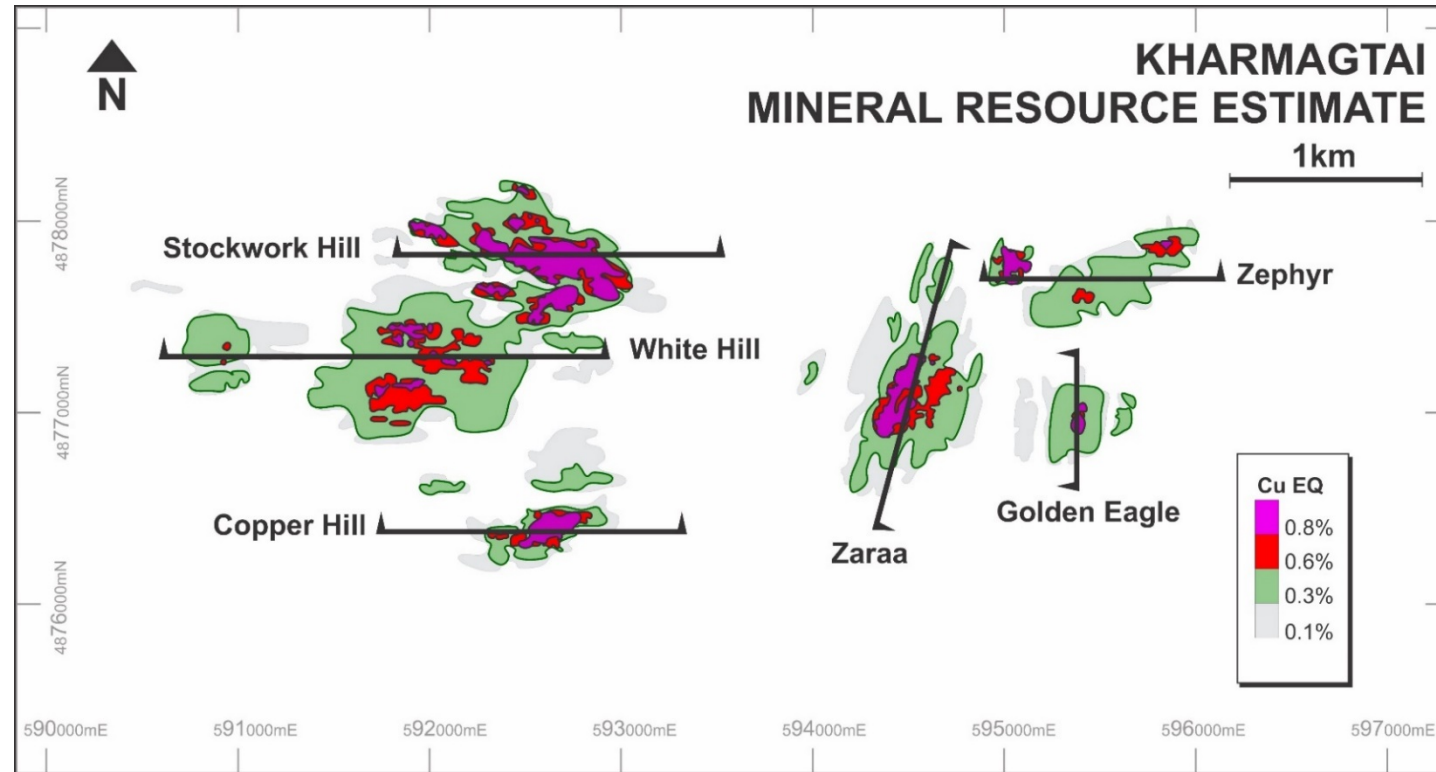
- ▶ 30-year life; producing 50ktpa Cu & 110kozpa Au; 0.9:1 strip ratio
- ▶ 20% IRR (16-25%); US\$630M NPV (405-850); and 4-year payback (4-7)

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



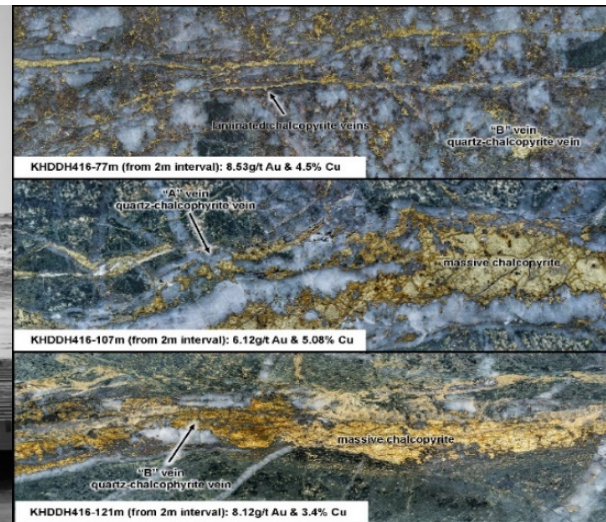
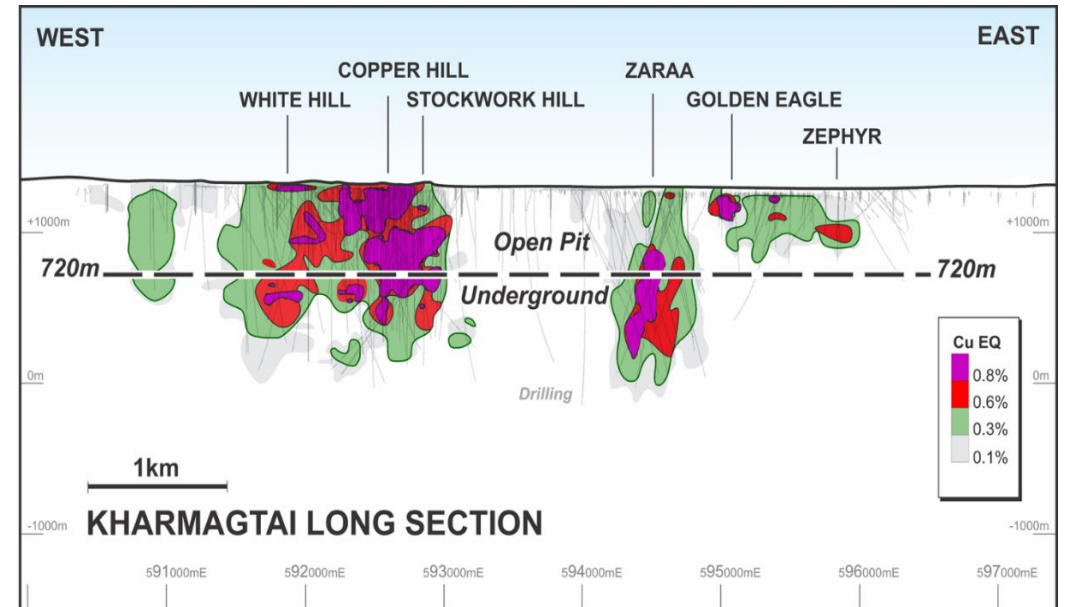
¹ ASX/TSX Announcement 28 February 2022 – Kharmagtai Technical Report, ASX/TSX Announcement 8 December 2021 – Kharmagtai Resource Grows to 1.1Bt containing 3Mt Cu and 8Moz Au

² 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 depth¹
- ▶ 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



¹ 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

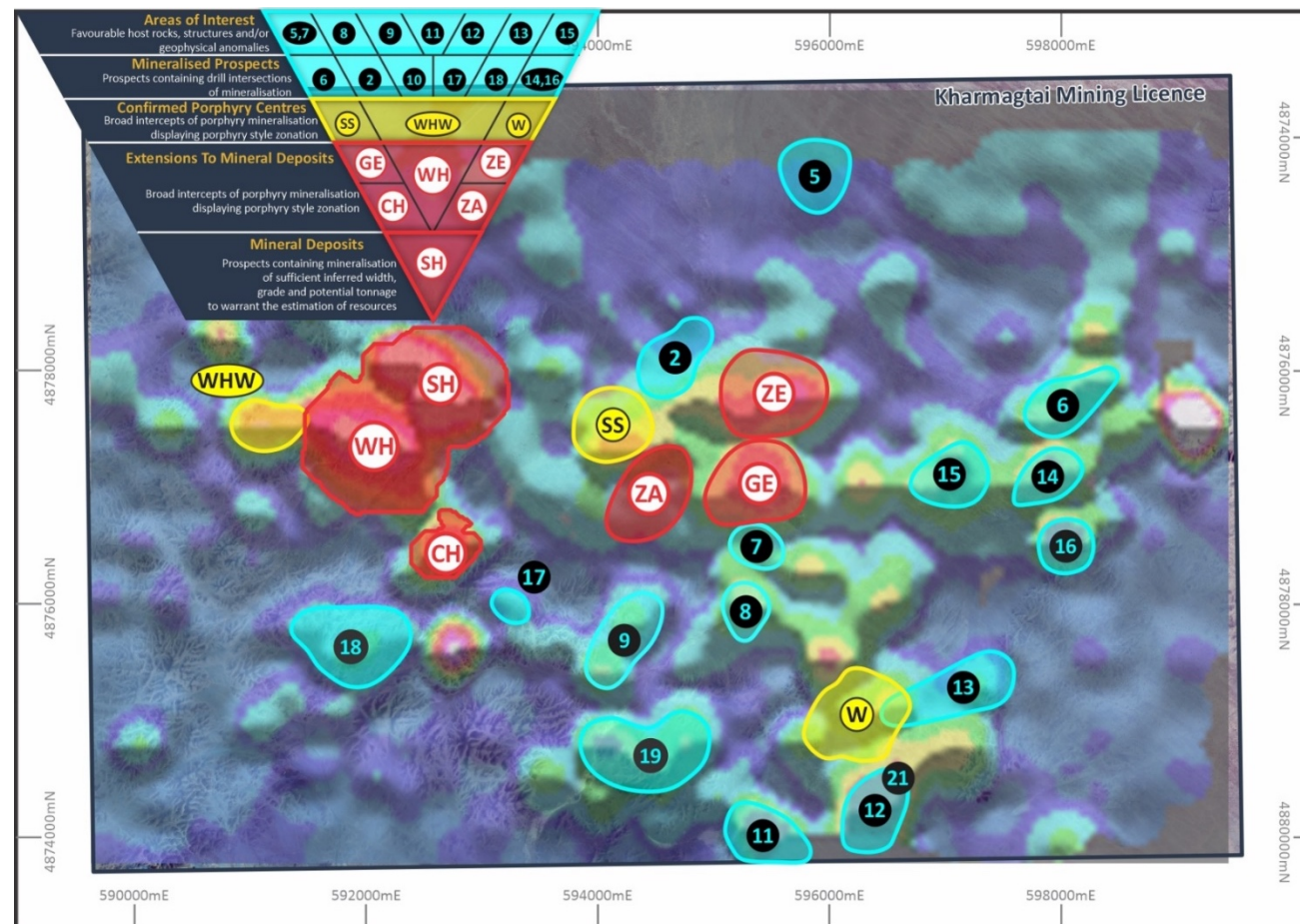
- 5 subsurface discoveries out of 10 prospects drilled
- <\$0.01/lb CuEq discovery cost vs ~\$0.07/lb industry avg¹

DISTRICT CONTINUES TO OPEN UP

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

PORPHYRY DEPOSITS EVOLVE OVER TIME

- Continued exploration for new high-grade systems
- 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

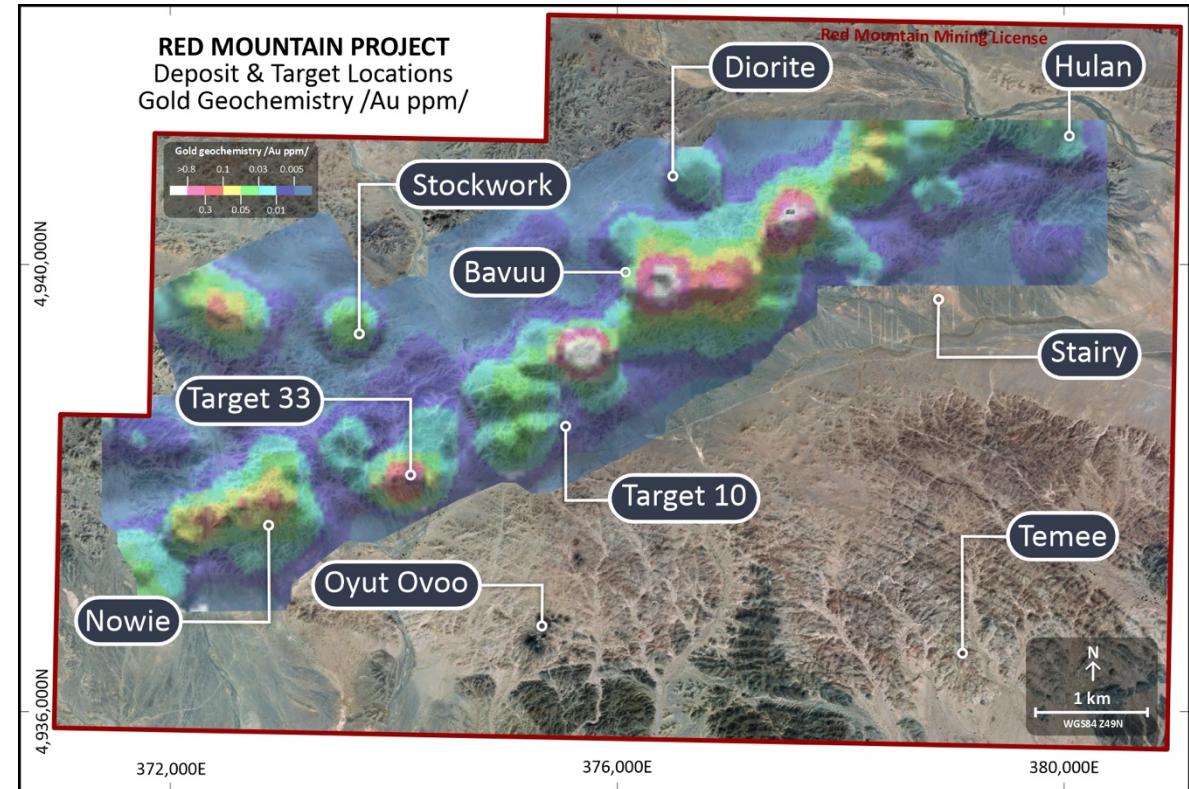


¹Minexconsulting <https://minexconsulting.com/recent-trends-in-copper-exploration-are-we-finding-enough-2/>

Red Mountain Highly Prospective

Already delivering exciting results

- ▶ Advanced exploration – 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
- ▶ 30-year extendable mining license
- ▶ Consolidated to 100% ownership in 2021¹
- ▶ New exploration program kicked off August 2022

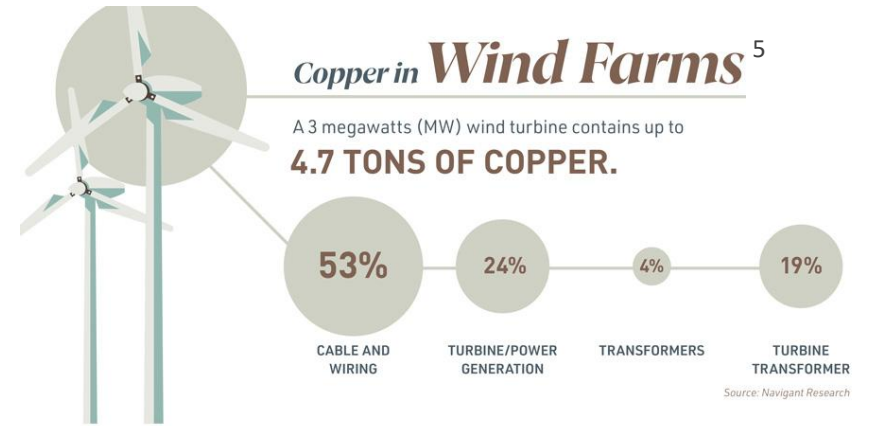
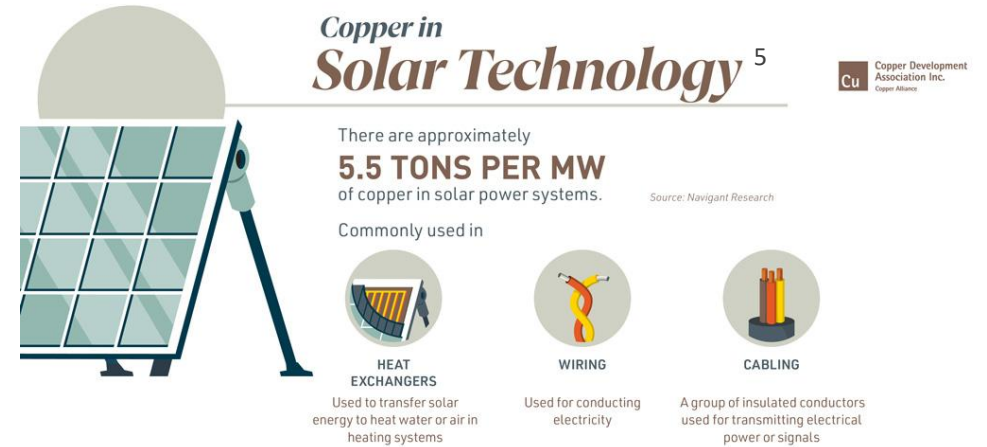


¹ ASX/TSX Announcement 27 October 2021 – Xanadu Consolidates 100% Ownership of Red Mountain

Renewable Power Needs More Copper

Renewables & electrification drive decarbonisation

- Wind & Solar between **3x** and **7x** more **copper intensive** than conventional electricity¹; Wind requires up to **8,000 kg copper** per MW¹
- Wind & Solar **carbon footprints** over the asset's lifespan are **1 to 4%** of coal-fired power & **3 to 9%** of natural gas, respectively²
- US requires **630GW wind & 450GW solar energy investment** to achieve 100% clean electricity by 2035³.
- US\$100bn **electrical grid upgrades required** to support US clean electricity targets, including construction of higher voltage DC transmission lines – all copper intensive⁴.



Offshore wind farms require significantly more copper per MW on average than onshore wind farms, with copper cabling accounting for up to 82% of copper usage.

¹ <https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions/executive-summary>

² <https://www.cnbc.com/2022/04/13/green-energy-the-race-to-roll-out-super-sized-wind-turbines-is-on.html>

³ <https://www.spglobal.com/marketintelligence/en/news-insights/research/national-clean-energy-standard-could-require-1000-gw-of-new-wind-solar-by-2035>

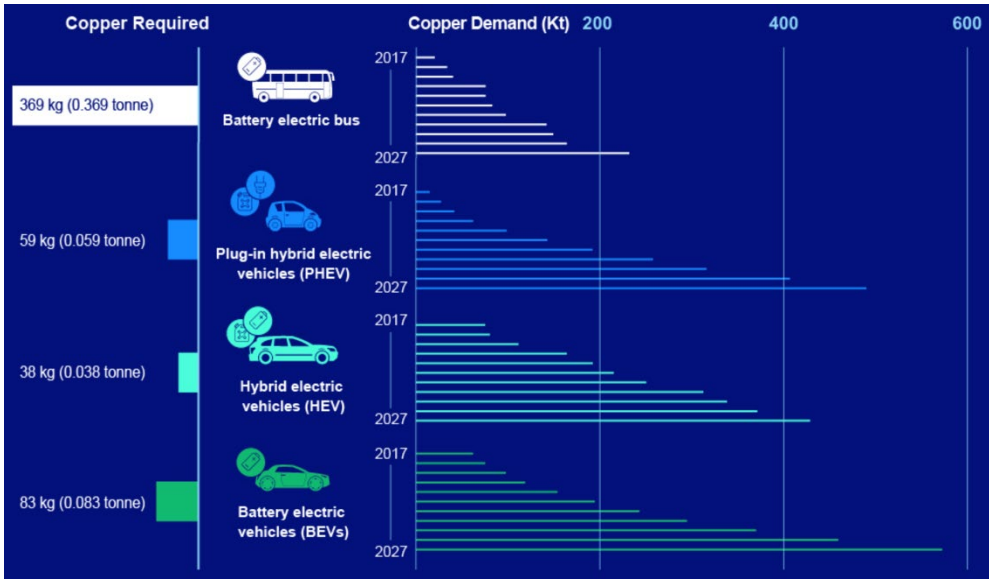
⁴ <https://aheadoftheherd.com/the-us-has-a-metals-problem/>; <https://www.energy.gov/sites/default/files/2022-02/Electric%20Grid%20Supply%20Chain%20Report%20-%20Final.pdf>

⁵ <https://www.copper.org/environment/sustainable-energy/renewables/>

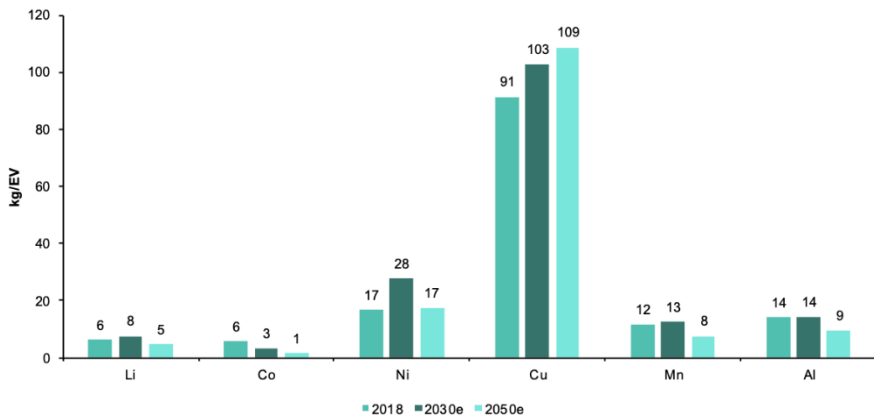
Copper Anchors the EV Ecosystem

EV production could be limited by copper availability

Copper Drives Bigger, Longer Range EVs (2017 to 2027e)¹



Copper Demand Per EV Continues Growing (2018 to 2030e to 2050e)²



- Copper used in **more than just the battery**, also the motor, inverter/converter, cabling & internal charging requirements
- **EV infrastructure** associated with ultra fast charging of EVs, as well as grid investment all heavily reliant on copper
- Unlike other EV metals, **copper metal use per EV rises**, even after expected battery chemistry transition reduces metal requirements out to 2030 – 2050²
- If EV growth pursued aggressively, **copper demand for EVs could exceed renewable power**
- Tesla, GM, BMW & Toyota have direct mining/refining relationships for Li, Co & Ni, but not for Cu (yet)
- As supply pressure builds, automakers expected to pursue similar **direct sourcing strategy for Cu**

¹ <https://www.visualcapitalist.com/visualizing-coppers-role-in-a-low-carbon-economy/>

² <https://cdn-ceo-ca.s3.amazonaws.com/1g9df18-Global-Metals-Mining-King-Copper-once-and-future-14-September-2020-Bernstein.pdf>