

XANADU MINES

Final Regulatory Approval Funds Kharmagtai Pre-Feasibility Study and Exploration

24 February 2023

Xanadu Mines Ltd (**ASX: XAM, TSX: XAM**) (**Xanadu** or the **Company**) is pleased to announce that Zijin Mining Group Co., Ltd. (**Zijin**) has advised Xanadu of the receipt of regulatory approvals from the People's Republic of China (**PRC**), which completes the final key regulatory approval required to progress Phase 2 and Phase 3 of the Strategic Partnership¹ between Xanadu and Zijin. The Strategic Partnership will fully fund the Company's flagship Kharmagtai Copper-Gold Project (**Kharmagtai**) through the next phase of project evaluation and exploration, leading to formal Decision to Mine. It will also provide funding to Xanadu for activities outside of Kharmagtai such as our second project at Red Mountain. The Company will now proceed to finalise arrangements with Zijin to progress to completion.

Highlights

- **Final hurdle cleared to execute Strategic Partnership and 50-50 Joint Venture (JV) with Zijin in the Kharmagtai copper-gold project.**
- **Remaining A\$7.2 million to be invested in Xanadu, at company level.**
- **Additional US\$35 million to be invested directly in Kharmagtai project.**
- **Kharmagtai Pre-Feasibility Study (PFS) and Discovery Exploration to commence March 2023.**
- **PFS will evaluate growth-focussed opportunities in Mining & Processing Technologies and higher-grade focussed Discovery Exploration, aimed at materially upgrading the base case Scoping Study².**
- **Xanadu is Operator of the JV with an 18-month plan to complete the PFS.**
- **Post PFS, Xanadu has options to a) independently fund its share of construction, b) sell its 50% share of the JV to Zijin for US\$50M, or c) sell half its share of the JV (25%) to Zijin for US\$25M plus a zero cash loan carry for the remaining 25% to commercial production¹.**
- **Upcoming near term announcements will outline detailed Kharmagtai PFS program of work, targeting value enhancement, Resource Definition Drilling and Discovery Exploration.**

¹ ASX/TSX Announcement 21 December 2022 - Investment Deal Signed with Zijin - Pathway to Production

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

Xanadu's Executive Chairman & Managing Director, Colin Moorhead said, "After strong support from shareholders at the recent Xanadu Extraordinary General Meeting³, it is pleasing to now have PRC regulatory approval, clearing the final hurdle to launch our partnership with Zijin. We look forward to working with Zijin to add real value to Kharmagtai, which is already a globally significant copper-gold project. The team is ready to go with drill rigs in place and study work ready to start immediately. We expect to provide regular updates and news-flow through the next 18-month PFS period."

Strategic Partnership

The strategic partnership⁴ includes three phases of investment. The first phase (**Phase 1 Placement**) was completed on 27 April 2022, raising A\$5.56 million via a subscription by Zijin to 139 million fully paid ordinary shares in Xanadu at A\$0.04 per share to provide Zijin with a 9.9% shareholding in the Company. The two subsequent phases (which were subject to further negotiation, entry into formal documentation and the remaining approvals above) include a second placement of ordinary shares at A\$0.04 per share to increase Zijin's total shareholding in the Company to 19.99% (**Phase 2 Placement**) and the creation of a 50/50 Joint Venture in Khuiten Metals Pte. Ltd., the entity currently 100% owned by Xanadu that holds a 76.5% effective interest in Kharmagtai (**Phase 3 JV**), for a cash investment of US\$35 million.

Following the 18 month PFS, Xanadu has the option to fund its share of construction, sell its 50% of the Phase 3 JV to Zijin for US\$50 million or sell half of its share of the Phase 3 JV (25%) to Zijin for US\$25 million plus a loan carry for Xanadu's remaining share of costs until commercial production.

PFS to Evaluate Upside in Scoping Study

The 2022 Scoping Study⁵ confirmed Kharmagtai as a potential world class, low cost, long life mine with an estimated **20% IRR (range 16-25%), US\$630 million NPV @ 8% (range US\$ 405-850 million) and 4-year payback (range 4-7 years) over 30 year mine life**. This included first quartile all in sustaining costs and projected production ranges from 30-50ktpa copper and 50-110kozpa gold production during the first five years.

The Scoping Study outlined a conventional, low technical complexity open pit and process plant with low 0.9:1 strip ratio for the first five years. However, it also identified growth-focussed upside opportunities which could materially upgrade the economics of the project, all of which will be investigated during the PFS:

- **Oxide Processing:** Top 20-30 metres of partially oxidised mineralisation cannot be processed through flotation and is conservatively treated as waste in the Scoping Study. The PFS will evaluate the use of glycine-cyanide leach technology to convert this pre-strip waste into cash generating ore.
- **Mining Technology:** Use of electrified haulage and in-pit crush & convey technology could significantly reduce mining costs as well as Scope 1 emissions. This has the potential to deepen and extend current pit shells, incorporating additional, deep zones of high-grade ore, adding to the valuation and enhancing life of the mine.
- **Processing Technology:** PFS will evaluate coarse ore flotation and beneficiation technologies, targeted at reducing energy requirements and operating cost per tonne of ore processed.

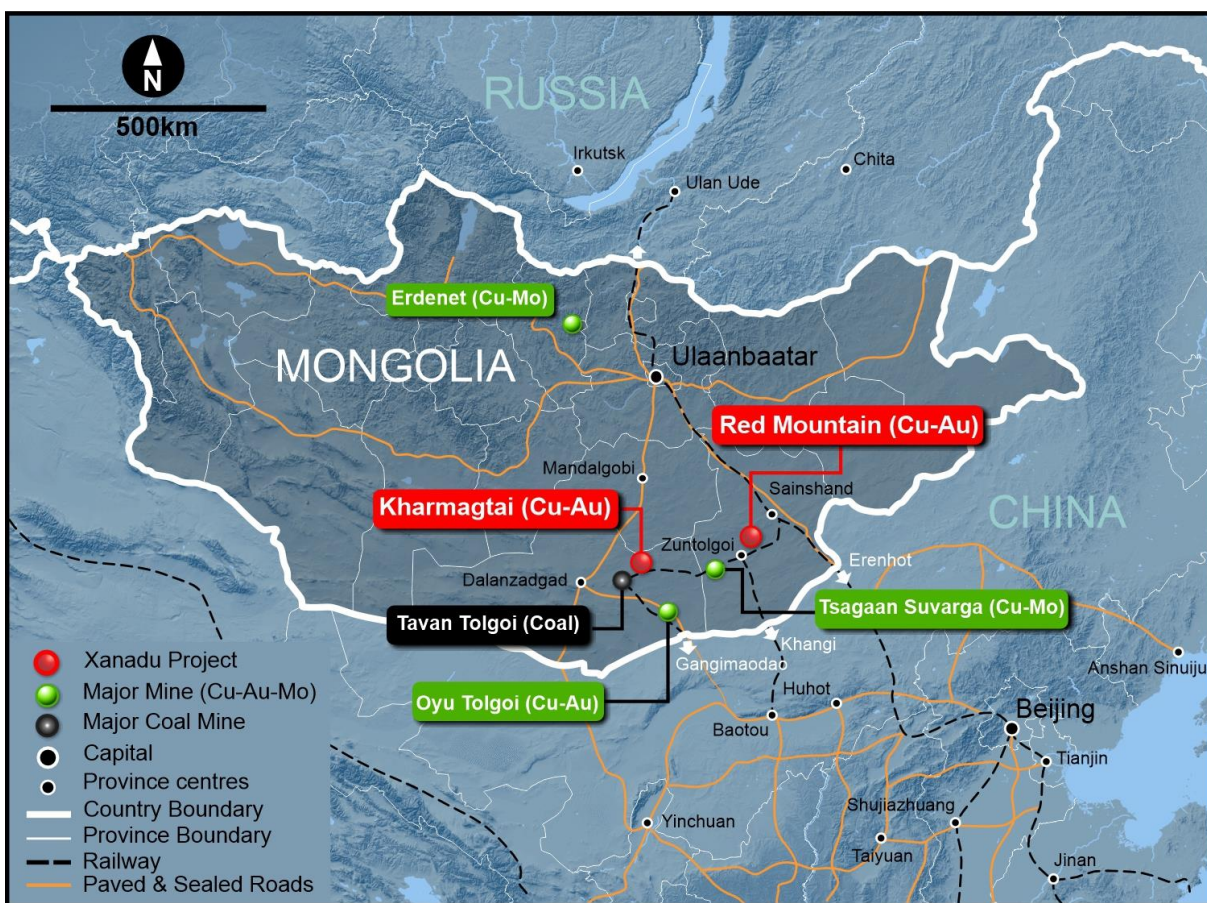
³ ASX/TSX Announcement 7 Feb 2023 – Results of Extraordinary General Meeting

⁴ ASX/TSX Announcement 21 December 2022 - Investment Deal Signed with Zijin - Pathway to Production

⁵ ASX/TSX Announcement 6 April 2022 – Scoping Study – Kharmagtai Copper-Gold Project

- Exploration:** Kharmagtai Mineral Resource remains open at depth and along strike. Deeper drilling at Stockwork Hill completed after the 2021 Mineral Resource has already confirmed continuation of the higher-grade bornite mineralisation at depth. There is also significant potential to grow White Hill Resource and new discoveries across the tenement. These will be investigated as a matter of priority and could prove transformational for Kharmagtai project economics.

During the PFS, Xanadu and its partner Zijin will complete all major project trade-off decisions and refine capital and operating cost estimates to +/-15-25%, leading to selection of a single go-forward option for final engineering and construction. With the study and inclusion of upside opportunities above, Xanadu is targeting a real and sustained uplift relative to the Scoping Study economics.



About Xanadu Mines

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 is operator of the globally significant Kharmagtai copper-gold project.

For further information on Xanadu, please visit: www.xanadumines.com or contact:

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This Announcement was authorised for release by Xanadu's Board of Directors.