

XANADU MINES

# SUSTAINABILITY REPORT

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## 2022

For the year ended 31 Dec 2022



ASX:XAM | TSX:XAM

[XANADUMINES.COM](https://www.xanadumines.com)

# Forward Looking Statements

This document contains forward-looking statements, which are based on certain assumptions and analyses made by the Company derived from its experience and perceptions. The forward-looking statements in this document are subject to important risks, uncertainties, and assumptions, which are difficult to predict and which may affect the Company's operations 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. The words believe, expect, anticipate, indicate, contemplate, target, plan, intends, continue, budget, estimate, may, will, schedule and similar expressions identify forward-looking statements. The forward-looking statements included in this document are made as of the date of this document and other than as required by law, the Company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.





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# Message from the Executive Chairman and Managing Director



**Colin Moorhead**

Executive Chairman and Managing Director

Dear Shareholder,

I am proud to present Xanadu Mines Ltd's (Xanadu Mines, Xanadu or the Company) Sustainability Report for the year-ended 31 December 2022 on behalf of the Board of Xanadu Mines. This report represents our third consecutive standalone Sustainability Report with the reporting in accordance with the GRI standards and guided by the mining principles of the International Council on Mining and Metals (ICMM) and the United Nations Sustainable Development Goals (UN SDGs).

Xanadu operates as an exploration company that discovers and defines porphyry copper-gold deposits in Mongolia. As a player in the mining industry, we acknowledge the critical importance of carrying out our business activities in a sustainable way such that both the environment and communities in Mongolia are not negatively impacted by our operations. Sustainability represents one of the key values that guides how we work.

Our aim to be a leader in sustainable exploration and development is underpinned by various objectives as outlined in our Sustainability Policy. These objectives include safe and healthy operations, minimising our environmental footprint, developing and maintaining strong relationships with communities and the government of Mongolia, the country in which we operate, and acting in a transparent and ethical

manner. Our Board of Directors monitors Xanadu's sustainability performance through its sub-committee, the Safety, Health and Environment Committee.

This year we made further advances along our Sustainability Reporting journey by conducting a materiality assessment. The purpose of this materiality assessment was to help identify and prioritise the most material sustainability issues to us and our stakeholders. We define our material topics as those that have the potential to impact/disrupt Xanadu's operations and those that are important to stakeholders.

In terms of our sustainability performance this year, we are happy to report zero injuries and fatalities amongst the workforce demonstrating our commitment to ensuring safe and health operations and effective engagement with communities. This year's Sustainability Report provides further disclosure on our efforts in supporting our communities through educational assistance, building up the local educational infrastructure as well as ESG data on our energy and water use and carbon emissions. We are committed to running our operations in a responsible manner and improving our environmental and social performance.

We thank you for your continued support and look forward to what we could achieve in the future together.



**We are committed to running our operations in a responsible manner and improving our environment and social performance.”**

**Colin Moorhead** | Executive Chairman and Managing Director



# Message from the Chief Operating Officer



**Munkhsaikhan Dambiinyam**

Chief Operating Officer

One of Xanadu's key highlights this year was the announcement of a strategic partnership between Xanadu Mines and Zijin Mining Group Co. Ltd (Zijin), which will greatly enhance our sustainability journey. The partnership has allowed for a staged investment by Zijin to inject up to AUD11 million into Xanadu and up to a further USD35 million into the Kharmagtai project. Following completion of Zijin's investment in early 2023, Kharmagtai is well-positioned for its next phase of development.

In 2022, we are pleased to report on how we continue to live our sustainability value by being good corporate citizens and neighbors to our partners in Mongolia. We continue to operate and explore in a way that keeps our team safe, cares for the environment, and supports the communities where we operate. A few key highlights in this space include:

- Over 350 hours of training and upskilling allocated across to employees.
- 0 lost time injuries and 0 fatalities for our over 52,000 total employee hours worked
- On-going engagement with our local communities
- Successful remediation of community related grievances
- Further contributions to economic growth in the region by building up the local educational infrastructure and supporting local communities through educational assistance.
- During 2022, we supported 43 students across Kharmagtai and Red Mountain regions to attend university, a significant increase from 2021.

As we move forward, we are confident that our strategic partnership with Zijin will continue to drive progress and enhance Xanadu's sustainability journey, enabling us to create lasting value for all stakeholders involved.



**For the 2022 year, I am pleased to report on how we continue to live our sustainability values by being good corporate citizens and neighbours to our partners in Mongolia.”**

**Munkhsaikhan Dambiinyam** | Chief Operating Officer





# About **Xanadu Mines**

Mongolia-focused Xanadu Mines is an exploration company that specialises in finding and defining porphyry copper-gold deposits globally, but with a focus in Mongolia. With over 10 years of experience in Mongolia, we have developed strong relationships that allow the delivery of low cost and effective discovery and resource growth. We maintain a multi-stage portfolio of exploration projects and remain one of the few junior explorers who control an emerging Tier 1 copper-gold deposit in our flagship Kharmagtai project. We create value for shareholders by giving them exposure to large scale copper-gold discoveries in Mongolia and by delivering liquidity events at peak points in the mining life cycle. All of this is delivered through our low cost of discovery and inventory growth and by progressing projects from discovery to pre-feasibility.





# Company Profile

We are an exploration and development company that discovers and develops globally significant porphyry copper-gold deposits. We have over a decade of experience and relationships in the country, which allows us to deliver low-cost and effective discovery and resource growth. We have a multi-stage portfolio of projects, including our flagship copper-gold Kharmagtai project.



<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 13 March 2023 – Zijin and Xanadu Transaction Completed and Kharmagtai PFS Underway



### **We create value for our shareholders by**

- Giving exposure to large scale copper-gold discoveries in Mongolia
- Creating liquidity events at peak points in the mining life cycle
- Delivered through low cost of discovery and inventory growth and by progressing projects from Discovery towards Pre-Feasibility

### **Our position in Mongolia is a strategic advantage, with:**

- Scale of Deposits – Multiple globally significant discoveries, still underexplored
- Location – On China’s doorstep, the key global copper consumer, with lots of land and a sparse population
- Infrastructure – Next door to Rio’s Oyu Tolgoi, with established grid power, roads, rail and water that will enable short time to production and low capital development intensity
- Mining Culture – Mining represents 21% of GDP and 85% of exports, and there are >40,000 Mongolian mining professionals in the workforce
- Stable and Democratic – With a 30 year history of democratic elections and 98% literacy rate



# Strategic partnership with Zijin Mining Group

In 2022 Xanadu entered a strategic partnership (Agreement) with Zijin Mining Group Co., Ltd (Zijin) to progress the Company's flagship Kharmagtai Copper-Gold Project (Kharmagtai) through its next phase of project evaluation and decision on future development, which was completed in early 2023<sup>1</sup>. Under the Agreement, Zijin invested in both the Xanadu corporate level and the Kharmagtai project level including a 19.4% shareholding in the Company and the creation of a 50/50 Joint Venture in Khuiten Metals Pte. Ltd., the entity that holds a 76.5% effective controlling interest in Kharmagtai.

## About Zijin Mining Group

Zijin is a multinational mining group dedicated to the exploration and development of gold, copper, zinc and other mineral resources globally, as well as associated refining, processing, trading and other businesses. Its operations include projects and operations in 14 provinces in the People's Republic of China (PRC) as well as 13 overseas countries across Europe, Central Asia, Africa, Oceania and South America. It is one of the largest Chinese mining companies distinguished by its significant domestic and international copper and gold resource, reserves and production.

Zijin's Mining Operations in China



Zijin's Offshore Mining Operations



<sup>1</sup> ASX/TSX Announcement 13 March 2023 – Zijin and Xanadu Transaction Completed and Kharmagtai PFS Underway





## Our Projects and Status

### Kharmagtai District (Xanadu 38.25%, Zijin 38.25%)

The flagship Kharmagtai District has continued to emerge as one of the premier undeveloped copper and gold assets globally. Kharmagtai is a highly prospective copper-gold porphyry district, located within the Omnogovi Province, approximately 420 kilometers southeast of Ulaanbaatar and 120 kilometers north of the Rio Tinto-controlled Oyu Tolgoi deposit. Kharmagtai currently has a JORC Compliant Mineral Resource Estimate of 1.1Bt containing 3Mt copper and 8Moz gold and is actively exploring to drive growth in this resource.

Since our last report, Xanadu Mines Ltd (Xanadu or the Company) focused on progressing the Company's flagship Kharmagtai Copper-Gold Project (Kharmagtai). This included the publication of a Scoping Study and a National Instrument 43-101 Preliminary Economic Assessment (PEA) Technical Report and establishing a strategic partnership with Zijin Mining Group Co which will provide funding and

technical expertise to progress the Kharmagtai through PFS to a decision to construct.

Moving forward into 2023:

- Kharmagtai PFS started in March 2023; Maiden Ore Reserve and Decision to Mine in 2024.
- Explore Kharmagtai high-grade extension & new discovery.
- Explore Red Mountain following up recent shallow, high grade bornite intercepts.



**Kharmagtai Project Camp**

### **Red Mountain District (Xanadu 100%)**

The Red Mountain copper-gold district is located in the Dornogovi Province of southern Mongolia, approximately 70 kilometres west of the planned industrial centre of Sainshand. Red Mountain is a highly prospective and underexplored porphyry

copper-gold district, comprising approximately 40 square kilometres. Its geology consists of multiple co-genetic porphyry copper-gold centres, mineralised tourmaline breccia pipes and copper-gold/base metal magnetite skarns.



# Our Values

The Board of Xanadu Mines Ltd (Xanadu or the Company) has established this Statement of Values, which are the guiding principles and norms that define what type of organisation Xanadu aspires to be and what the Board requires from its directors, senior executives and employees to achieve that aspiration.

Xanadu's Values create a link between the Company's purpose and its strategic goals, by expressing the standards and behaviours the Board expects from its directors, senior executives and employees to fulfil its purpose and meet its goals.

## There are five values that guide how we work:



### **Sustainability**

We are good corporate citizens and neighbours to our partners in Mongolia. We operate and explore in a way that keeps our team safe, cares for the environment, and supports the communities where we operate.



### **Integrity and Honesty**

We understand our reputation is our most valuable asset.



### **Scientific Basis**

We apply good science to everything we do.



### **Disciplined Capital Management**

We behave as owners and emphasise long-term value creation over short-term gains.



### **Culture and Performance**

We value technical excellence and innovation, and we aim to attract and retain the best people for jobs at all levels.

We lead by example, supporting each other to act with integrity, be accountable, and consistently live our values every day.

# Our Approach to Sustainability

Now our third Sustainability Report, we continue to improve our ESG data and practices building on our prior reports. We believe that sustainability principles should be embedded in all stages of the mine lifecycle and seek to lead this mindset as an exploration company. Our approach to sustainability is guided by the recognition that our activities have the potential to impact both the environment and local communities in Mongolia. We are committed to managing these impacts in a responsible manner and to continually improving our environmental and social performance. Xanadu works closely with local communities to ensure that our activities

are undertaken with due respect for their rights and interests. Local stakeholders are consulted on plans and operations, and an effort is made to create shared value through presence in the community. From our perspective, it is increasingly important to consider the environmental footprint of their operations. We therefore aim to minimise our environmental footprint through the efficient use of resources and the application of best practices in environmental management. We are constantly looking for ways to reduce our impact on the environment, and we are committed to the principles of sustainable development.





# Materiality Assessment

As an ASX-listed company, we acknowledge ASX's Corporate Governance Principles and Recommendations, and take guidance from leading industry frameworks and processes (such as the GRI Standards and ICMM's Sustainable Development Framework) for progressively reporting on ESG information in the coming years. We have included our GRI, ICMM, UNSDG index in the later section of this report.

As part of this approach, we conducted our materiality assessment to help define the scope of this report. We have adopted Accountability's Five-Part Materiality Test to help identify and prioritise our most material sustainability aspects to Xanadu and our key stakeholders. Further information on our key stakeholders is outlined in the sub-section below.



Materiality approach using AccountAbility's Five-Part Materiality Test to define our most material issues.

## Research:

In determining our most material aspects, we researched and reviewed several inputs. These include an internal document review (i.e. policies, risk register), a media scan, peer benchmarking, and internal stakeholder discussions.

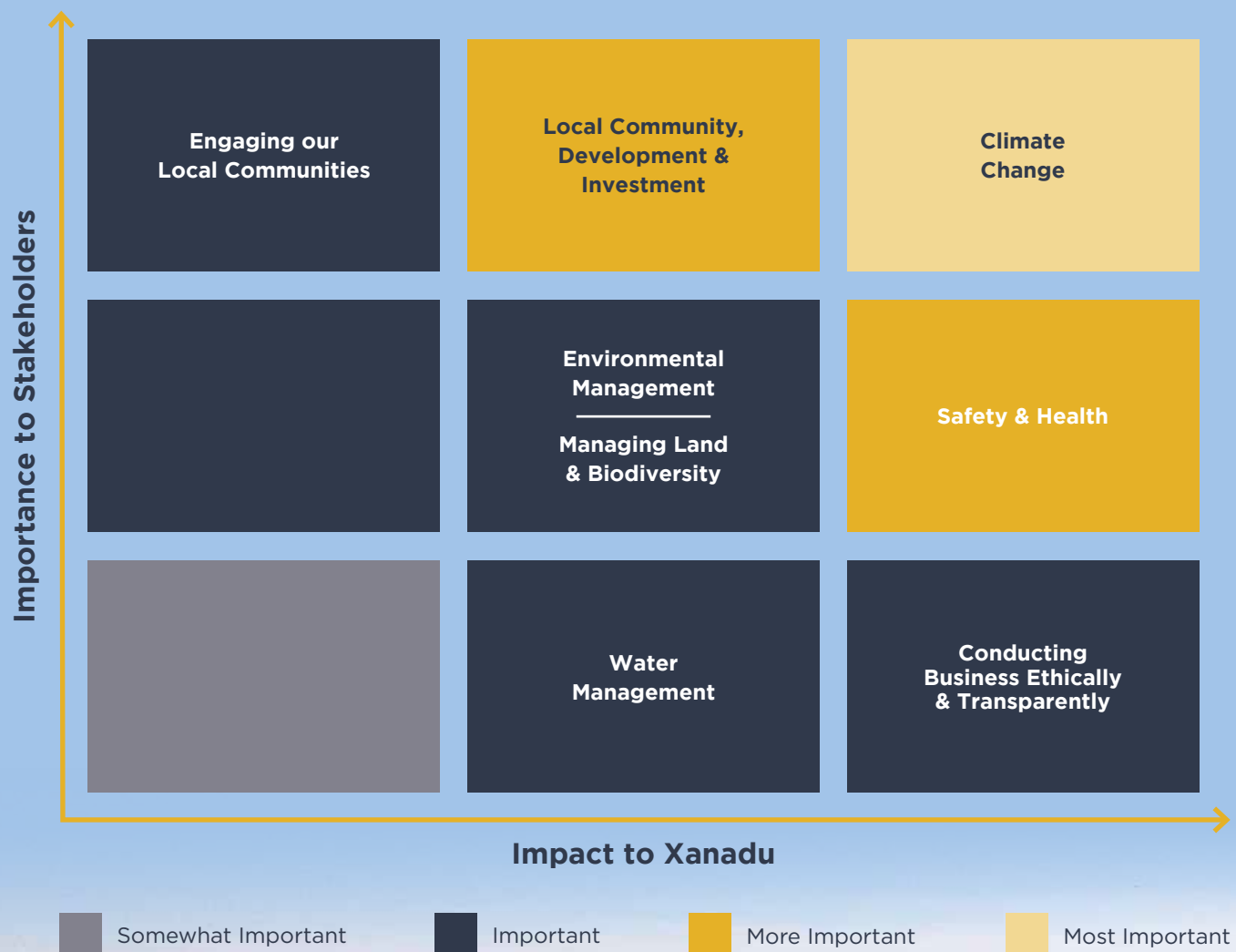
## Prioritise:

This information was then consolidated, streamlined and prioritised on our risk matrix to identify our most material risks.

## Validate:

An internal workshop was held to validate these risks, with the risks of highest importance disclosed in this report.

# Material Topics

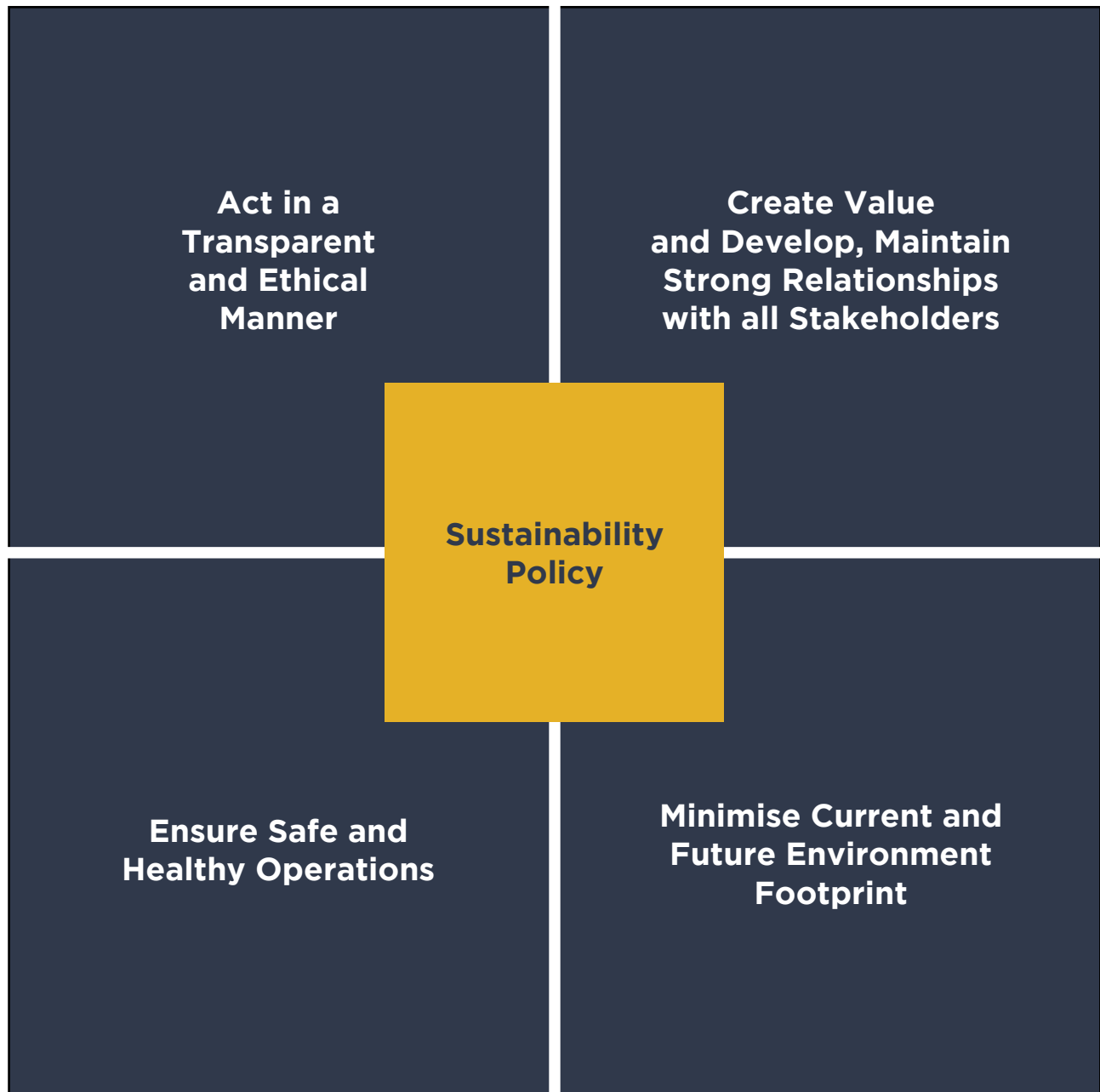




High Material Issue	Location in this Report
Engaging Our Local Communities	Page 36
Local Community Development & Investment	Page 38
Environmental Management	Page 44
Managing Land & Biodiversity	Page 48
Water Management	Page 46
Climate Change	Page 43
Safety and Health	Page 33
Conducting Business Ethically & Transparently	Page 24

# Sustainability Policy

At Xanadu, we aim to be a leader in sustainable exploration and development. To help us achieve this, we have integrated Sustainability into our core business values. Our Sustainability Policy has four focus areas that we believe will continue to guide us in our all our endeavors as we progress and grow in the years to come.



We endeavour to be good corporate citizens and neighbours to our partners in Mongolia, working hard to create value for all our stakeholders through safe exploration, development, and operation, that cares for the environment, and supports our host communities.

# Governance

As part of ensuring we maintain a sustainable and profitable business, Xanadu is committed to upholding ethical business practices across all our sites and offices. Our Board has full oversight over all aspects of our operations to ensure that.



The Chair of the Safety, Health and Environment Committee holds primary responsibility for sustainability oversight and governance:

- Processes in place to ensure that workplace health, safety and environment is a priority at all Xanadu operational sites;
- Processes in place to facilitate compliance with all workplace health and safety, environmental, legal and regulatory requirements in each jurisdiction that Xanadu operates;
- Processes in place to manage community relationships;
- The adequacy of reporting systems for health, safety and environment actual or potential accidents, breaches and incidents;
- Subsequent safety investigations and remedial actions conducted by management;
- Performance against Board-approved targets; and,
- Appropriate opportunities to address community sensitivities in the areas in which Xanadu operates.

A copy of the Safety, Health and Environment Committee Charter can be accessed via our website. The Audit and Risk Committee further assists the Board in identifying and managing potential or apparent business, economic, environmental, social sustainability and other non-financial risks. The Committee will also oversee Xanadu's environmental risk management and workplace health and safety processes.



# Our Board and Management

Our Board and management team are highly experienced with 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



**Shaoyang Shen**  
Non-executive Director

## Management



**Munkhsaikhan Dambiinyam**  
Chief Operating Officer



**Andrew Stewart**  
Vice President Exploration



**Mat Brown**  
Chief Geologist



**Spencer Cole**  
Chief Development Officer  
Chief Financial Officer

## Track record of discovering and developing porphyry copper-gold



**Mongolia  
Expertise**



**Deep Exploration  
Skills**



**Experienced  
Developers of  
Porphyry Deposits**



**Significant  
Commercial  
Capability**



# Acting in a Transparent and Ethical Manner



**We are committed to acting in a transparent and ethical manner in all our business dealings. This means being honest and fair in our dealings with employees, contractors, suppliers, governments, and the communities in which we operate.**

Our position on sustainability is clearly stated in our Code of Conduct and is reflected in our Sustainability Policy. All our employees, contractors and suppliers must comply with our Code of Conduct. The Code outlines mandatory requirements in:

- Ethical business (including anti-bribery and corruption)
- Supply chain free from modern slavery (analysis of this is a work in progress)
- Employment practices (including equal opportunity and anti-discrimination, harassment, and offensive behaviour)
- Workplace health and safety
- Community and environment





# 100%

of employees compliant with  
anti-bribery & corruption policy



# Policies and Procedures

**As part of ensuring we maintain a sustainable and profitable business, Xanadu is committed to upholding ethical business practices across all our sites and offices.**

Our position is clearly stated in our Code of Conduct and is reflected in our Sustainability Policy. All our employees, contractors and suppliers must comply with our Code of Conduct. The Code outlines mandatory requirements in:

- ethical business (including anti-bribery and corruption)
- employment practices (including equal opportunity and anti-discrimination, harassment and offensive behaviour)
- workplace health and safety; and,
- community and environment.

Further to our Code of Conduct, Xanadu upholds its ethical business practices through its Anti-Bribery and Corruption Policy (available on our website).

The purpose of this policy is to protect the interests of Xanadu stakeholders, the integrity of Xanadu's reputation and to set out the position of Xanadu and its controlled entities (Xanadu or the Company) on bribery and corruption.

This outlines the responsibilities of all individuals working for or with Xanadu in observing and upholding Xanadu's commitment to conducting business in an ethical and honest way and with the highest level of integrity. This policy also provides information and guidance on how to recognise and deal with bribery and corruption issues.

This policy applies to all directors and employees of Xanadu, as well as contractors, agents and consultants of Xanadu and any third party who conducts business activities on Xanadu's behalf or distributes Xanadu's products (including suppliers, distributors, resellers, and consultants).

## **The key principles of our Anti-Bribery and Corruption Policy state that:**

Xanadu conducts business in an ethical and honest way and Xanadu is committed to instilling a strong anti-corruption and anti-bribery culture. It is the aim of Xanadu to maintain the highest level of integrity in all interactions with third parties.

Xanadu strives to participate as a strong competitor in its global market and is committed to doing so without the use of bribery or other corrupt practices.

Xanadu applies a zero-tolerance approach to acts of bribery and corruption by its workforce and any third parties. Any breach of this policy will be regarded as a serious matter and will result in disciplinary action which may include termination of employment or other contract as applicable.





Xanadu takes the issue of modern slavery and exploitation seriously and takes steps to ensure this does not occur within our supply chain. We source our drilling, geophysical survey and core analysis services within Mongolia, via long term supplier relationships, and on terms and conditions that comply with the regulatory environment. Looking forward, Xanadu will continue to work with its suppliers to understand their supply chains and partner with them to develop awareness of the risk of Modern Slavery.

In addition to conducting ethical business, we also endeavor to engage with our key stakeholders wherever possible. Some of our key methods for engaging transparently include face-to-face discussions; regulatory wW submissions; employed briefings and townhalls; community visits; contractual agreements; and, industry meetings and events.

The Board of Xanadu Mines is committed to following the corporate governance guidelines and recommendations set out by the ASX Corporate Governance Principles and Recommendations (ASX Guidelines).

Charters	Codes and Policies	Governance
<u>Board Charter</u>	<u>Code of Conduct</u>	<u>Constitution</u>
<u>Nomination and Remuneration Committee Charter</u>	<u>Anti-Bribery and Corruption Policy</u>	<u>Corporate Governance Statement</u>
<u>Safety, Health and Environment Committee Charter</u>	<u>Continuous Disclosure and Shareholders Communication Policy</u>	<u>Employee Share and Option Plan</u>
<u>Audit and Risk Committee Charter</u>	<u>Risk Management Policy</u>	
	<u>Securities Trading Policy</u>	
	<u>Sustainability Policy</u>	
	<u>Climate Change Policy</u>	
	<u>Whistleblower Policy</u>	
	<u>Human Rights Policy</u>	



# Creating value and developing, **maintaining strong relationships with all our stakeholders**

## Stakeholder Engagement

**Engagement with our key stakeholders underpins our business performance and the livelihoods that are impacted through our business.**

We acknowledge the need for effective engagement, and continually strive to build and improve our relationships through open and honest dialogue and respecting other points of view to bring about mutually beneficial outcomes. The basis to which we select our stakeholders is selected by the degree to which they are influenced by Xanadu, and the degree to which they have an influence on Xanadu, with decisions being made across the other stakeholder groups.

Xanadu engages key stakeholder groups regularly and comprehensively. The table below summarises the nature of our engagement with these groups, their areas of interest, and the periodicity of our interactions. We have personnel dedicated to developing and maintaining these relationships. Given the nature of our business and our location, we prioritise engagement with local communities and governments to ensure that we understand their views and that they are effectively informed about our activities.



Stakeholder Group	Stakeholder Type	Method of Engagement	Areas of Interest
Shareholders	Shareholders, analysts	<ul style="list-style-type: none"> <li>Annual reports, quarterly reports, half-yearly financial reporting</li> <li>Website and email, investor briefings, one-on-one discussions</li> <li>Market announcements</li> <li>Annual General Meeting</li> <li>Industry conferences</li> <li>One on one meetings</li> </ul>	<ul style="list-style-type: none"> <li>Safety performance</li> <li>Exploration results</li> <li>Development profile</li> <li>Executive remuneration</li> <li>Community relations</li> <li>Financial performance</li> <li>Share price</li> </ul>
Employees and Contractors	Management, employees, contractors	<ul style="list-style-type: none"> <li>Employee briefings</li> <li>Email, social events, notice boards, toolbox meetings, performance reviews</li> <li>Town hall meetings</li> <li>Whistleblower service</li> <li>Direct engagement between people leaders and their teams</li> </ul>	<ul style="list-style-type: none"> <li>Operational performance</li> <li>Safety and environmental performance</li> <li>Employee involvement</li> <li>Employment development opportunities</li> </ul>
Local Communities	Local residents, communities, landowners	<ul style="list-style-type: none"> <li>Community relations team visits</li> <li>Resident/community meetings</li> <li>Site visits</li> <li>Regular communication with leaders and community generally, providing feedback forums</li> <li>Sponsorships and partnerships</li> </ul>	<ul style="list-style-type: none"> <li>Impact on, and relations with, communities</li> <li>Environmental impacts</li> <li>Contributions to community services and infrastructure</li> <li>Land use</li> </ul>
Suppliers	Local suppliers, non-local suppliers	<ul style="list-style-type: none"> <li>Out to market approaches</li> <li>Open and collaborative face-to-face engagement and discussions</li> <li>Regular performance meetings</li> <li>Contractual agreements</li> </ul>	<ul style="list-style-type: none"> <li>Long-term relationships and collaboration</li> <li>Supply chains free from modern slavery</li> </ul>
Government	Mongolia federal, state, regional and local governments; Australia federal government	<ul style="list-style-type: none"> <li>Open and collaborative face-to-face engagement</li> <li>Annual reports, website and email, compliance audits and inspections</li> <li>Regulatory submissions</li> <li>Direct engagement on matters of local importance</li> <li>Industry body involvement</li> </ul>	<ul style="list-style-type: none"> <li>Royalty and licence fees</li> <li>Safety performance</li> <li>Employment</li> <li>Proposed changes in legislation and regulations</li> <li>Environmental management and rehabilitation</li> </ul>
Industry	Mining and/or exploration industry, business and professional associations, local country and regional business associations	<ul style="list-style-type: none"> <li>Meetings, reports and discussions around the specific considerations of mining and considerations for policy</li> <li>Reports, face-to-face discussions, presentations, collaborative agreements</li> </ul>	<ul style="list-style-type: none"> <li>Environmental impacts</li> <li>Safety performance</li> <li>Mental health</li> </ul>
NGOs	Environmental, community, mining	<ul style="list-style-type: none"> <li>Meetings, reports</li> <li>Exploring collaborative opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Impacts to people, communities and the environment</li> <li>Bribery, corruption and disclosure of payments</li> </ul>
Education	Tertiary & vocational institutions	<ul style="list-style-type: none"> <li>Conference attendance</li> <li>Meetings, reports, face-to-face discussions</li> </ul>	<ul style="list-style-type: none"> <li>Education and opportunities for those in host communities</li> </ul>

# Our People



**Investing in our people is essential to the success of the business. That's why we've aimed to maximise the potential our people by fostering an inclusive and diverse workplace.**

Our mission is to create an environment where local talent, project managers, and experienced professionals can collaborate on these exciting projects in the safest and most effective ways. In CY22, we allocated 384 hours of training and upskilling to our female and male employees, across all operations. Additionally, 100% of our operational workforce in Mongolia had undergone a form of developmental training and review for CY22. We will continue to review these figures on a yearly basis with the intention to develop additional ways to enhance our work culture, ethics, talent attraction, diversity, and inclusion.

We are led by an experienced team of exploration and mining professionals who have a track record of discovery and value creation. We are continually striving to improve on our Sustainability Policy

which places our duty of care to employees and the communities within which they operate, high on our agenda. Xanadu is committed to listening to our team members, learning from them, and leveraging their perspectives on how we can better support their work. By offering this support, we have created a workforce where our employees and contractors can work with full reassurance that they have the best chances to succeed. Xanadu will continue to invest in our employees and contractors with the aim of supporting their journey with us, whilst fostering sustainable business growth. The table below outlines this year's employee count, which has lowered compared with last year due to the reduction in our drilling operations.

	2021	2022
Total count of Mongolia based employees and contractors	175	49
Number of employees	89	29
Number of contractors	86	20
Percentage of Women	25%	14%





**Our mission is to create an environment where local talent, project managers, and experienced professionals can collaborate on these exciting projects in the safest and most effective ways.”**



# Access to Quality Medical Treatment

**Xanadu has continued our partnership with Tsogtsetsii hospital, our medical facility of choice.**

Given the sparsely populated area in which we operate, having Tsogtsetsii within 100km away from Kharmagtai provides us the assurances required to know that our people in good hands in case of any risks or emergencies. Serving over

7300 local residents and boasting the regions best treatment and care initiatives, the partnership not only ensures quality care to all of our employees and contractors, but the wider community in the region.





# Ensuring Safe and Healthy Operations



**Xanadu is committed to maintaining a healthy and safe working environment for all our people. Since the COVID 19 pandemic began, all employees went through company sponsored comprehensive medical screenings. Screenings were followed up by medical treatments for employees under our company-sponsored medical insurance program.**

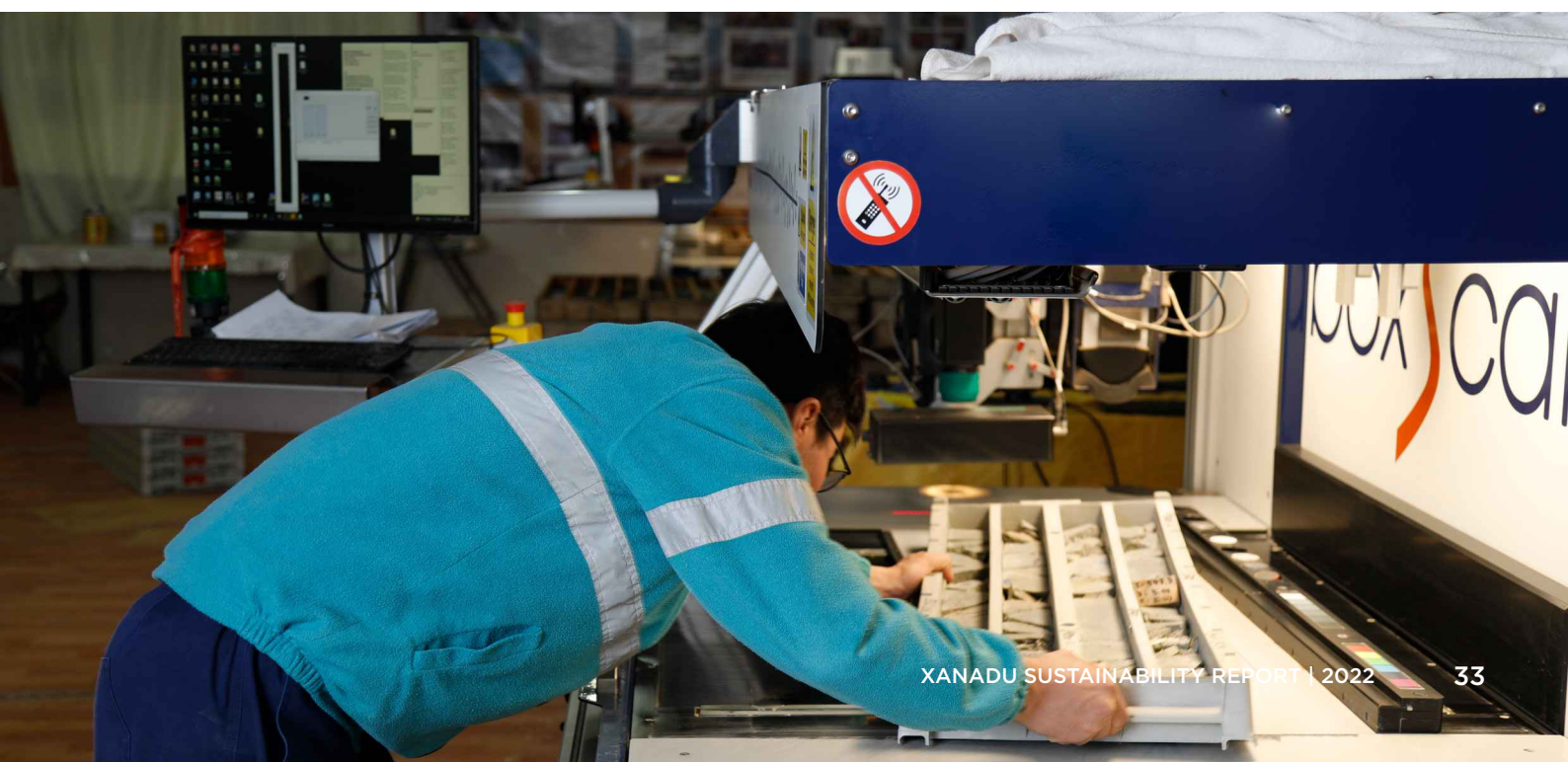
Xanadu deploys a highly effective OHS system and HR retention tool, which is crucial in preventing long-term injuries for all employees. By focusing on improving the culture around reporting near miss events, we have been successful in preventing serious accidents from occurring. We are proud to report that in CY2022, we had 0 lost time injuries and 0 fatalities for our over 52,000 total employee hours worked. This includes ill health.

Xanadu employees and contractors are required to comply with all applicable workplace health and safety laws and regulations, as well as Xanadu's policies and procedures, to ensure that its people work in an environment that is safe and without risk to their health. We believe that an effective safety system can enhance operational efficiency and streamline processes in exploration. As a result, we created a risk register that is specifically tailored to address high-risk activities within projects. The register places a particular emphasis

on the role of middle management in the execution of key responsibilities and the mitigation of operational risks. Our policies and training on health and safety on operational sites are also Mongolian language based.

Our position on Safety and Health is reflected in our Sustainability Policy. Through our Policy, we aim to:

- Engage all stakeholders to create a safe and healthy work environment.
- Create a diverse and inclusive workplace where everyone feels safe, valued, and supported
- Respect and protect the human rights of our employees, contractors, suppliers, and community members.
- A copy of Xanadu's Sustainability Policy can be accessed on our website.





# Encouraging Employee Growth

**One of the key factors that sets Xanadu apart as a sustainable employer is our focus on integrating professional growth with personal development for our employees, as demonstrated by the experience of Ms Gantsetseg, who joined in 2006 as a geologist.**

Throughout her tenure, Ms Gantsetseg has held various roles within the company, including working with government authorities and compliance with regulations related to mining. She highlights that Xanadu has supported her development from a geologist to a critical role in tenement compliance, allowing her to make more meaningful contributions to the company and the industry and bridge the gap between the company and its external stakeholders.

“As a geologist, I was attracted to the opportunity to explore and unlock Mongolia’s vast minerals potential. I’m surrounded by capable people who are genuinely interested in supporting each

other. The company focused on my growth from a geologist to a critical role of tenement compliance working with the government authorities”.

Now that she’s playing a critical role with us, Ms Gantsetseg has highlighted that the future of the company and its direction excites her for further professional development, especially the flagship Kharmagtai program.

“I am pleased that Xanadu is making a big contribution to Mongolia’s geological and mining sector. I’m most looking forward to the decision to mine and to begin copper production at the Kharmagtai deposit.”



# Supporting Career Ambitions

## Battsengel joined Xanadu in 2017 as an assistant geologist with a passion for exploration

Battsengel joined Xanadu in 2017 as an assistant geologist with a passion for exploration. Through his front-line experience on projects such as Kharmagtai and Red Mountain, he has developed expertise in various aspects of geological exploration, including core logging, data entry, and the operation of high-tech scanning equipment.

He appreciates Xanadu's commitment to employee development and its scientific approach to exploration, which has provided valuable opportunities for him to expand his knowledge and skills.

"Xanadu considers employees as the company's values and takes care of their personal development and social status. For me, the scientific nature of the company has been a great support for me in familiarising myself with many things, such as equipment that are rarely used in exploration work and doing geological documentation".

Battsengel has set personal goals to further specialise in his profession, and he is optimistic about the future growth of Xanadu and the potential for his own growth within the organisation.

## 2022-2023 Student Scholarship Program





# Caring for Our Community

**Community matters, and we're aiming to leave a positive mark. Xanadu is a responsible corporate citizen and actively supports the communities in which we live and work.**

Our internal and external teams are expected to uphold our commitment to pursue best practice corporate practice in the lead up to, during and post corporate activity. Our company supports and encourages our people to actively contribute to the needs of the wider community. Throughout the past four years, we have been regularly engaging with our communities to ensure that we can align ourselves with their interests, including remediating any possible grievances that may arise. We take immediate steps to address any complaints and work to improve our relationships. In the rare occasion issues arise, we encourage our community members to reach out to our community manager, and express their concerns in writing, after which our team follows up immediately and endeavors to tackle the issue directly. Additionally, we have set up a hotline for community members to voice their concerns.

Our goal is to continue and expand this form of direct communication in the future.

We received 4 community related grievances in total in CY22, which were successfully remediated by collaborative and direct responses to the issues.

Our primary areas of focus are:

- Respecting and protecting the human rights of our employees, contractors, suppliers, and community members.
- Building a workforce representing the communities in which we operate to attract and retain the right people.
- Delivering benefits to host communities in a manner that supports and respects their rights and aspirations
- Honouring cultural heritage, customs and traditions of people touched by our activities
- Regularly engaging openly and transparently with our host governments and communities whilst considering their views in our decision-making









# Supporting the Social and Economic Development of our Communities



## The social and economic development of our host communities is of great importance to Xanadu and our stakeholders.

We understand that in such remote locations, there are many opportunities to support and develop communities, and enable them to meet their short-term needs and achieve long term growth.

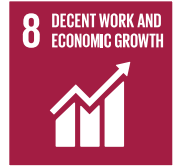
Over the past four years we have partnered with local governments and people groups to implement a variety of initiatives with the purpose of enriching the social and economic development in the region. One of these initiatives included our engagement with a local sewing shop run by single mothers, where we enlisted their help to make various products from our team uniforms to machinery protectors. The results of employing locally have been significant in terms of fostering better connections with our hosts, and we intend to continue to find more opportunities in the future for similar engagement.

Other initiatives provided by Xanadu that offer socio-economic benefit to our communities include:

- Supported cultural festivity events, including horse-racing, and local seasonal and religious celebrations with over 200 people in attendance including over 80 local families.
- Donating animal feed through a feed drive, after harsh winters that typically deplete food stores
- Donating medical equipment to local hospitals including refrigerators for medicine and vaccination storage, as well as helping to construct a new morgue.



# Ground Water Access for Local Communities



## Water in the Gobi Desert is a scarce and important resource.

Our local communities depend on water for household use, the conservation of their livestock, and the essentials for life in the region. Xanadu realises the dependence on our local community's ability to access ground water but also the challenges this can present. That is why we have commissioned our drilling contractors to support local herders and the broader community by drilling 100m depth ground-water wells in each area of its projects every 2-3 years, with the goal of securing high quality water for our local community.

Xanadu conducts hydrology studies and measurements to determine water quality, provides diesel generators or pumps to support the extraction of water, and helps with ongoing maintenance of these wells to ensure they are operationally healthy and up to standard. We conducted over 900 measurements in the Kharmagtai region and over 200 in the Red Mountain region during 2022.





# Building Up Local Educational Infrastructure



**Our organisation aims to focus its community expenditure on the education and economic development of the people where it operates.**

Some of its key contributions has been the refurbishment and outfitting of the classrooms at the local kindergartens in the regional Kharmagtai district. Both schools admit roughly 70 children between the ages of 3-5 years old. We provided the school with a new classroom, furniture, fittings, and toys as a part of our plan to enhance the development of our youngest stakeholders, as well as their parents who depend on the facility and the education it provides. We achieved this, in part thanks to our partnership with the local government, a testament to our organisation's cooperation with both regional government and local communities.



# Supporting our Communities Through Educational Assistance



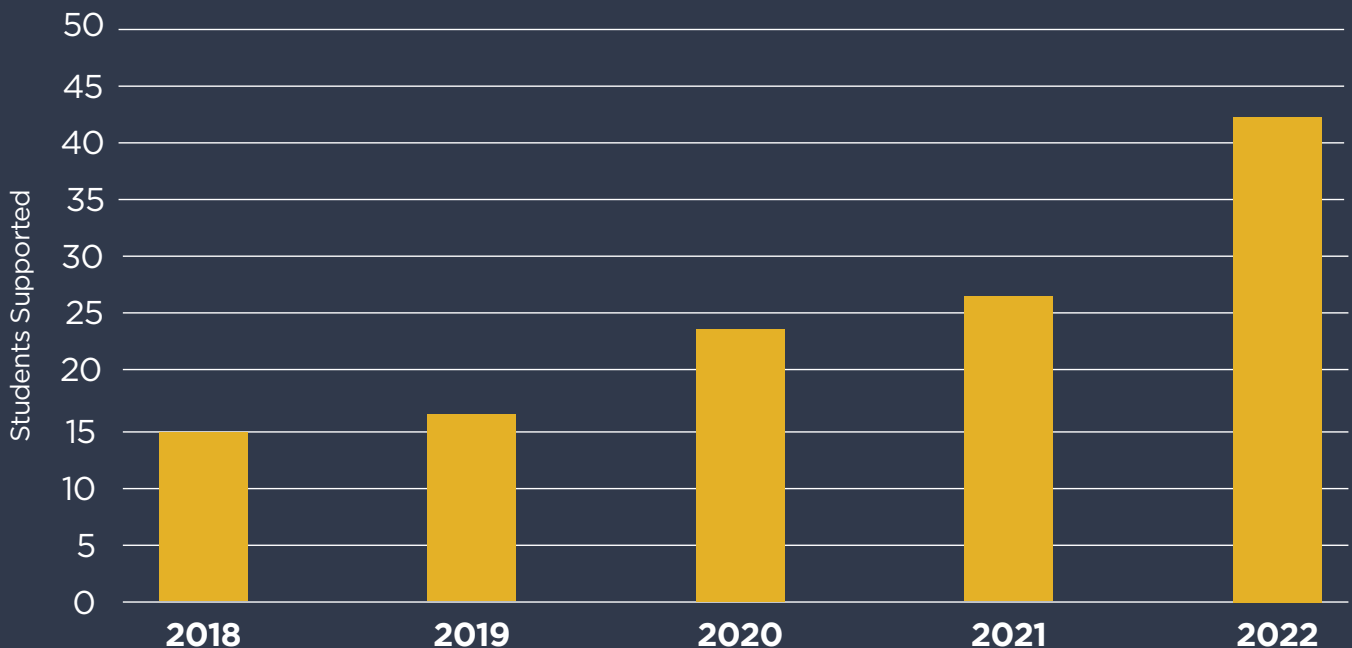
## Xanadu continues to grow our long-term future of communities through secondary educational assistance and company internship programs.

We understand the importance of developing our communities by supporting the education of youth as they transition from school into the working economy. This enables younger generations to develop their skills, explore opportunities, and help give back to their communities.

Each year, we provide tertiary education support to our host communities through scholarships. Students are encouraged to attend different universities and study different fields, such as engineering, medicine, accountancy, and sciences.

During 2022, we supported 43 students across Kharmagtai and Red Mountain regions to attend university, a significant increase from 2021. The students are given the opportunity to participate in over 15 different universities of their choice and take part in over 10 academic majors. In addition, we grant internships to those who wish to develop experience or employment in the mining industry. We are committed to continue our investment in education, which helps improve the economic development and future of our host communities.

### Total Scholarship Grants Awarded 2018-2022



# Supporting Mongolia in Developing Mining in South Gobi

**Our projects and operations are expected to contribute significantly to the Mongolian Government's goals of developing mining in South Gobi.**

Our Kharmagtai project in full production mode is expected to produce 40 ktpa Cu and 100 kozpa Au annually in the first 5 years. It is also expected there will be over 500 personnel on camp for the first 5 years and over 900 personnel thereafter due to a planned expansion. There will be additional employment in regional offices and in Ulaanbaatar that are not included in the numbers.

The Mongolian government is investing heavily in the regional infrastructure to support.

## **Rail and Road Infrastructure:**

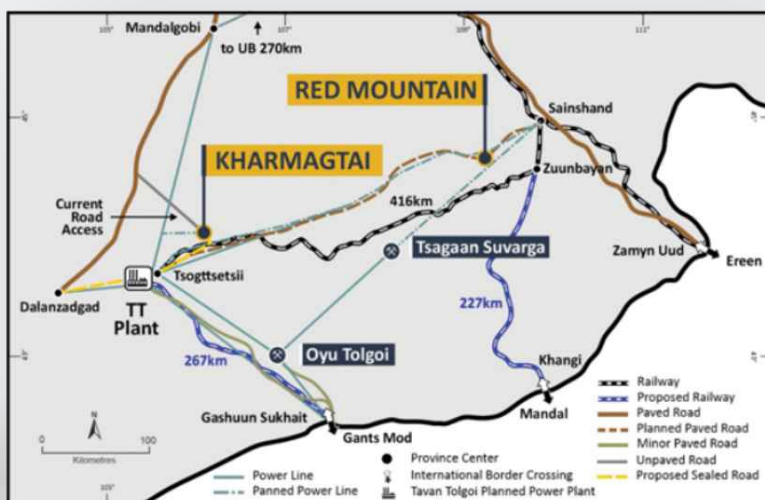
New rail line has been commissioned between Sainshand and Tsogttsetsii linking to the trans-Mongolia railway. New sealed road follows the rail line. Further rail is currently under construction south to China from Zuunbayan and Tsogttsetsii

## **Power Infrastructure:**

New Tavan Tolgoi power plant is being constructed. Additional power lines will link the region to Tavan Tolgoi

## **Smelter Infrastructure:**

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



## **South Gobi Regional Infrastructure**

**Train using South Gobi Railway**



# Minimising Our Current and Future Environmental Footprint

## Supporting low energy transition

Copper will play a critical role in the low-energy transition by increasing the growth of renewables and electrifying many industries. Proven wind and solar technologies have an asset lifespan carbon footprint of 1-4% of coal-fired power and 3-9% of natural gas. These will be the key levers, along with renewables accompanying electrification, driven by advances in better technology, such as electric vehicles. This will see a demand for materials like lithium, nickel, cobalt and copper multiply.

Wind and Solar require up to 8,000 kg of copper per MW, while conventional electricity only requires between 3x and 7x more copper.

Copper is used not just in the battery in EVs, but also the motor, inverter/converter, cabling & internal charging requirements. EV infrastructure associated with ultra-fast charging of EVs, as well as grid investment are all heavily reliant on copper. Unlike other EV metals, copper metal use per EV rises, even after expected battery chemistry transition reduces metal requirements

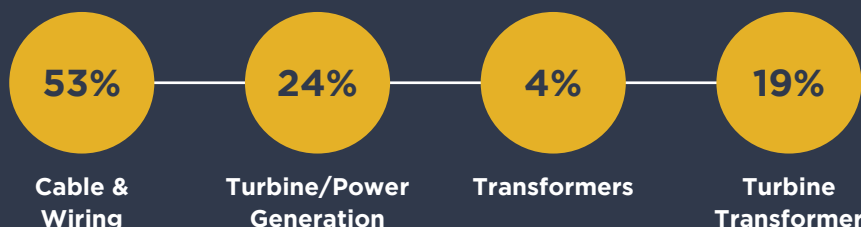
out to 2030 – 2052. We believe that if EV growth is pursued aggressively, copper demand for EVs could exceed renewable power. We believe that relative to expected consumption, copper supply and new discoveries of copper are likely to be constrained. A number of factors point to an approaching Copper supply cliff, including:

- Fewer new copper projects
- Lower grades (Global reserve grades falling since 1990s; halved to ~0.5% Cu)
- Long project lead times (currently >10yr from Cu discovery to production)

Xanadu Mines intends to contribute to the low energy transition via proven copper reserves at its flagship Kharmagtai project which is positioned for development. With a mineral resource of 1.1Bt containing 3Mt Cu & 8Moz Au, including >100Mt higher-grade zone, Kharmagtai is expected to add 1.5Mt Cu supply between 2028 to 2057. Kharmagtai PFS commenced in 2023 with Maiden Ore Reserve & Decision to Mine in expected in 2024

## Copper in Wind Farms

A 3 Megawatts (MW) wind turbine contains up to **4.7 Tons of Copper**



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

## Copper in Solar Technology

There are approximately **5.5 Tons Per MW** of copper in solar systems

Source: Navigant Research

Commonly used in:



### Heat Exchangers

Used to transfer solar energy to heat water or air in heating systems



### Wiring

Used for conducting electricity



### Cabling

A group insulated conductors used for transmitting electrical power or signals

# Minimising Current Environment Footprint



**At Xanadu, we are committed to using modern, contemporary exploration methods to minimise our environmental footprint and to remain at the forefront of our industry.**

This includes the use of modern geophysical tools to identify targets better and reduce the number of drill holes, energy and resource consumption to make a discovery.

Once drilling commences, Xanadu uses advanced, multi-spectrum core scanning technology to pull the maximum amount of data from each drill hole. Artificial intelligence and machine learning are used to analyse the data and determine chemical composition, geological structure, geotechnical and geo-metallurgical characteristics. This analysis

enables effective exploration with the least amount of drilling and environmental impact.

As Xanadu develops its exploration projects from discovery into study phases, we use technology and contemporary design to optimise safety and health outcomes and minimise our environmental footprint, to enable modern and productive mines of the future.

## Energy and Carbon Emissions Management

As a company that is reliant on natural resources, we are acutely aware of the need to protect the environment. We are also keenly aware of the potential impacts climate change and energy have on our business. We are committed to doing our part to mitigate and adapt to this global challenge; whether that's through considering renewable energy usage in our operations, carbon costs in trade-off decisions, developing robust scenario planning to account for climate change related risks, optimizing our sustainability goals around climate and energy is an iterative

process which deserves a considered approach. During CY22, our company emitted 183 tonnes of carbon dioxide equivalent (CO<sub>2</sub>e) from our operations. This total is composed of our Scope 1 and 2 emissions. Our Scope 1 emissions totalled 179 tonnes of CO<sub>2</sub>e and were generated by the consumption of diesel fuel in our transport fleet. Our Scope 2 emissions totalled 4.6 tonnes of CO<sub>2</sub>e and was generated by the consumption of electricity at our facilities. Our emissions data is provided below:

Scope 1 Emissions*	Scope 2 Emissions**
179.24	4.65 Tonnes of CO <sub>2</sub> e

\*Emissions methodology: GHG Protocol, under operational control. Calculated with emissions factor used from DBEIS (Department for business, energy & industrial strategy. Figures represented are proxy and do not constitute the organisations baseline estimation. We aim to implement a baseline in the next two years.

\*\*Emissions methodology: GHG Protocol, under operational control. Calculated with emissions factor used from UNFCCC (United Nations framework convention on climate change). Figures represented are proxy and do not constitute the organisations baseline estimation. We aim to implement a baseline estimation in the next two years.





# Water Management



**We acknowledge that water is a precious resource in Mongolia, and we responsibly manage our water. Xanadu uses our own production wells to access water to operate, particularly for drill rigs.**

In CY22 we have utilised 6290 m<sup>3</sup> or 6.293 megalitres of water for exploration use.

We ensure that our host communities are effectively engaged about water extraction to reinforce that our own activities do not impede on their ability to access ground water. We engage a drilling contractor to help establish pollution ponds or bunds to prevent any spills of contaminated water. A bund is a secondary containment system which is designed to capture any leaks or spillages from a primary containment such as a storage tank. We ensure that the management of our impacts on local water wells are effectively communicated with our communities, encouraging open dialogue to address any concerns.

Xanadu plans to continue to manage scarce water resources most effectively. The raw water supply is planned to be sourced from a water resource 8 km from Kharmagtai, defined as part of the Kharmagtai Mining License application. The initial water requirement would be approximately 15 GL/annum, rising to 30GL/annum after the plant expansion. The water would be pumped to site via a pipeline, with raw water used for ore processing and water purification plants to provide potable water.

Water purification plants are planned in the ore processing plant, mine office area and at the accommodation village. An alternative water supply is a fully developed but underutilised bore field 40 km from site developed for the Tavan Tolgoi power station. Both bore fields access deep aquifers of non-potable water designated for industrial use. Alternative water sources will be assessed in the PFS based on their environmental, social, sustainability and technical performance.









# Land and Biodiversity Management

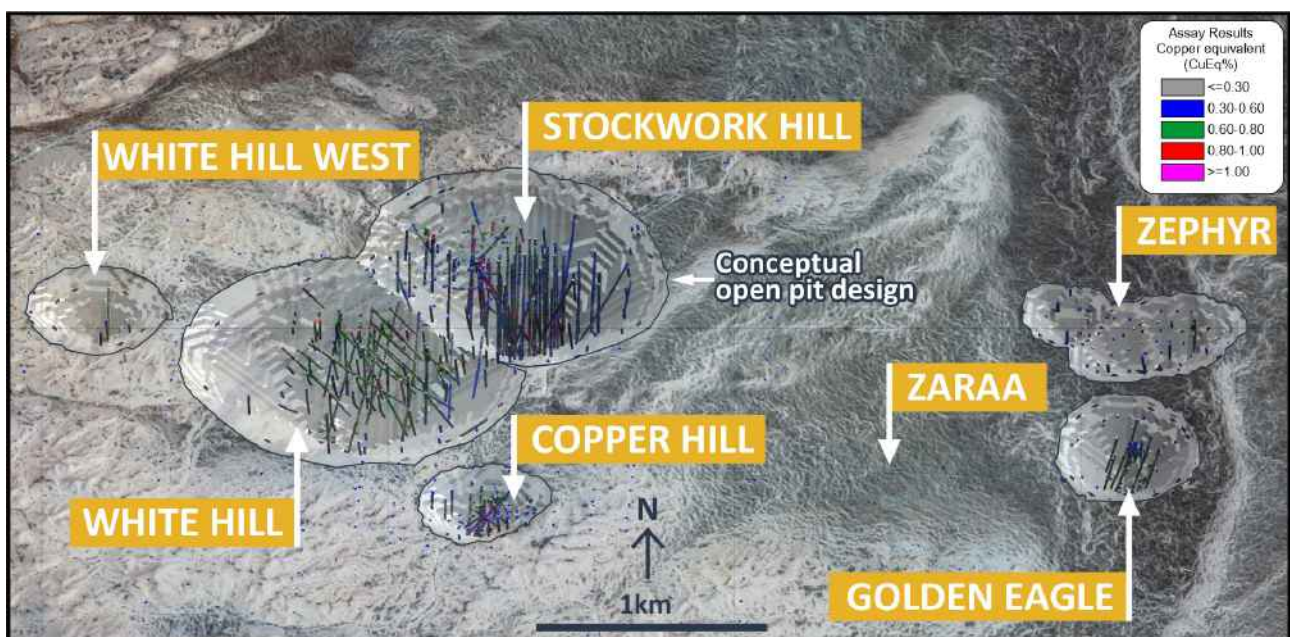


## At Xanadu, we respect the land where we operate and take care to minimise our impact on the environment

In CY2022, there were no instances of fines received by the company for non-compliance with environmental laws or regulations. Our drill pads in Kharmagtai and Red Mountain take up a small amount of space (20mx20m) and we make sure to rehabilitate the land after we finish drilling, which minimises the exploration activities' impact on local biodiversity. Our Sustainability Policy has been prepared to ensure that we are disturbing the land as little as possible and that we are rehabilitating it when we are finished with our operations. Some of our actions include:

- Separating soil and vegetation within the topsoil during sampling procedures and return once the sample has been taken;
- Discreetly marking sample spots and in a manner that does not cause harm to livestock;
- Excavating trenches only when necessary, storing the soil cover separately. After mapping and sample removal, trenches must be closed and covered with the soil layer and re-vegetated.
- Protecting slopes from pluvial erosion through the execution of preventative drainage channels; and,
- Revegetating slopes immediately after any field activity with native grass seeds and plants to promote fast recovery.

We also endeavor to carefully manage the local fauna and flora, condemning any engagement with local animals (native or feral) and protecting the habitats of local plant species by not removing or damaging any vegetation without attaining prior approval.





## Ensuring reduced footprint during development, operation, and mine closure

Though Kharmagtai has a relatively low environmental, social and governance (ESG) risk due to the sparse population, flat terrain, permitting and approvals process established and achievable we intend to use modern and contemporary technologies and practices to ensure the project is energy efficient, safe, and commercially viable. Some of these include:

- Mobile electrification: a fully electrified mobile fleet significantly reduces diesel particulate risk underground, and reduces heat generation and cooling requirements
- Electrified mining equipment to reduce emissions and haulage costs
- Conveyor haulage: using a conveyor for material movement to the surface replaces diesel equipment, further reducing particulates, and improves safety by getting traffic off the roads, plus it provides a scalable solution as the mine grows and changes
- Modern caving: if/when the project incorporates underground mining, use of block caving reduces energy use per tonne mined and reduces the number of personnel in higher risk environments.
- Underground beneficiation: if/when the project incorporates underground mining, use of crushing and sorting material underground reduces energy demand by reducing the amount of material to hauled to the surface
- Surface beneficiation: the next stage of sorting at surface further reduces energy as less material goes through the process facility, and it reduces waste tailings to be disposed and rehabilitated
- Green power: use grid power contracts that incorporate and support Mongolian solar and wind clean energy suppliers, reducing secondary emissions caused by demand on local coal power plants
- Rail haulage: leveraging the Mongolian rail infrastructure within 7 kilometres of Kharmagtai enables shipment of concentrate at lower energy intensity and reduces the number of long-haul trucks on the road.
- Tailings: Storage using saddle dams between the hills constructed in two lifts with a capacity of around 10 years of operation. The final tailings storage solution for the life of the mine will be addressed in the PFS.

# International Council on Mining and Metals

**Xanadu considers the International Council on Mining and Metals (ICMM) Sustainable Development Framework to be leading practice in providing appropriate standards on sustainability performance. We aim to align with ICMM's 10 Principles. A summary of our alignment is outlined in the table below:**

ICMM Principle	Our Alignment	Report Section (page)
<b>Principle 1</b> Implement and maintain ethical business practices and sound systems of corporate governance.	Xanadu's Code of Conduct and Anti-Bribery and Corruption Policy govern the Company's approach to ensuring ethical business practices, employment practices, health and safety, community and environment and a supply chain devoid of modern slavery. The Board is responsible for establishing and monitoring ethical business practices, and all employees receive education in these policies as part of their onboarding.	Sustainability Governance (page 21)
<b>Principle 2</b> Integrate sustainable development considerations within the corporate decision-making process.	Sustainability considerations are integrated into the company's decision-making. Sustainability aspects are included within the Board's sub-committees on Safety, Health and Environment, as well as Audit and Risk. Xanadu's Sustainability Policy outlines the company's key objectives and commitments.	Sustainability Frameworks (pages 26,27)
<b>Principle 3</b> Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities.	Human rights considerations are integrated in the way that Xanadu engages and supports its host communities, whether through providing water to local families and herders or through school scholarship grants. For more information, refer to our case studies on pages XX.	Caring for the Environment; Supporting Our Communities (pages 36, 43)
<b>Principle 4</b> Implement risk management strategies based on valid data that has been collected, used and reported and on sound science	Risk management is governed by the Board's Audit and Risk Committee and strategies developed and implemented in association with Xanadu's Risk Management and Sustainability Policies.	Sustainability Governance (page 21)
<b>Principle 5</b> Seek continual improvement of our health and safety performance.	Xanadu's approach to Safety and Health is governed by the Board's Safety, Health and Environment Committee and facilitated through the implementation of its Sustainability Policy and site standards.	Promoting a Safe Workplace (page 33)
<b>Principle 6</b> Seek continual improvement of our environmental performance.	Xanadu's environmental performance is governed by the Board's Safety, Health and Environment Committee. The company endeavours to minimise its environmental footprint through adhering to its Sustainability Policy and site standards.	Caring for the Environment (page 43)

ICMM Principle	Our Alignment	Report Section (page)
<b>Principle 7</b> Contribute to conservation of biodiversity and integrated approaches to land use planning.	Xanadu's people respect the land and its native flora and fauna in which it operates and endeavours to minimise its impact by complying to site environmental standards.	Caring for the Environment (page 43)
<b>Principle 8.</b> Facilitate and encourage responsible product design, use, re-use, recycling and disposal of our products.	Xanadu's Scoping Study, for future development of its products, uses technology to design in process safety and modern, contemporary caving operations and processing systems to ensure maximum re-use of resources, minimise waste production, and dispose of tailings in a responsible manner.	Climate Change (page 44)
<b>Principle 9</b> Contribute to the social, economic and institutional development of the communities in which we operate.	Xanadu regularly engages its host communities to build and maintain strong relationships, and understand what social, economic and institutional opportunities are important to them. We pride ourselves on supporting and contributing to our local communities to encourage benefits that are meaningful to them, as well as long-term development opportunities for their future growth.	Supporting Our Communities (page 36)
<b>Principle 10</b> Implement effective and transparent engagement, communication and independently verified reporting arrangements with our stakeholders.	In line with our Sustainability Policy, Xanadu endeavours to engage all stakeholders to create a safe and healthy work environment. Understanding our stakeholders and their needs makes good business sense and is critical to the growth of our business and the communities in which we operate.	About This Report (pages 28-29)



# United Nations Sustainable Development Goals

The United Nations Sustainable Development Goals (UNSDGs) are a framework for global development that aim to create a better and more sustainable future for all. At Xanadu, we fully endorse this framework and are committed to working towards achieving these goals. Some of the goals that are particularly relevant to Xanadu include:





# GRI

## Index

Disclosure	Description	Location in report/direct response
GRI102: General Disclosures		
102-1 Name of the organisation		Xanadu Mines
102-2 Activities, brands, products, and services		About Xanadu Mines section Page 8
102-3 Location of headquarters		Level 12, 680 George Street Sydney, NSW, Australia 2000
102-4 Location of operations		Company Profile Section Pages 10-11
102-5 Ownership and legal form		Xanadu Mines Ltd shares are listed on the Australian Securities Exchange and Toronto Stock Exchange (ASX and TSX code: XAM)
102-6 Markets served		Mining and resources
102-7 Scale of the organisation		Annual Report CY22 Results of operations section Page 13
102-8 Information on employees and other workers		Our People section page 30
102-10 Significant changes to the organisation and its supply chain		Strategic Partnership with Zijin Mining Group section page 12
102-11 Precautionary principle of approach		Annual Report CY22 Results of operations section Page 16
102-12 External initiatives		Caring for our community section pages 36-37



Disclosure	Description	Location in report/ direct response
102-13 Membership of associations		We are members of: Mongolian Mining Association and Australian Chamber of Commerce.
102-14 Statement from senior decision-maker		Message from Executive Chairman and Managing Director page 4
102-16 Values, principles, standards, and norms of behaviour		Acting in transparent and ethical manner section page 24
102-18 Governance structure		Governance section page 21
102-40 List of stakeholder groups		Stakeholder Engagement section page 29
102-41 Collective bargaining agreements		Nil
102-42 Identifying and selecting stakeholders		Stakeholder Engagement section page 28
102-43 Approach to stakeholder engagement		Stakeholder Engagement section page 28
102-45 Entities included in the consolidated financial statements		Annual Report CY22 Results of operations section Page 42
102-46 Defining report content and topic boundaries		Materiality Assessment section page 17
102-47 List of material topics		Material Topics section pages 18-19





# GRI Index


Disclosure	Description	Location in report/direct response
102-48 Restatements of information		Nil
102-49 Changes in reporting		Alignment to the GRI Sustainability Framework
102-50 Reporting period		Reporting period is 1st January 2022 - 31st December 2022
102-51 Date of most recent report		9th June 2022
102-52 Reporting Cycle		Annually
102-53 Contact point for questions regarding the report		Spencer Cole <a href="mailto:spencer.cole@xanadumines.com">spencer.cole@xanadumines.com</a>
102-54 Claims of reporting in according with the GRI Standards		This report has been prepared in accordance with the GRI Standards Core Option.
102-55 GRI Content Index		This section of the report represents the company's content index.
102-56 External Assurance		This report was prepared with our partners at Morrow Sodali

Description	Location in report/ direct response	Relevant SDGs
<b>GRI 205 Anti-Corruption 205-1</b>		
<p>205-1 Operations assessed for risks related to corruption</p>	<p>Xanadu maintains 2 exploration sites in Mongolia, both of which are assessed for corruption risk when key decisions are made. The criteria is based on relative size and importance of each decision (contract size etc). Xanadu also conducts audits both in Australia (for the full company) and in Mongolia (for Mongolian operations on a standalone basis) by different auditing companies.</p>	
<p>205-2 Communication and training about anti-corruption policies</p>	<p>Xanadu mandates Anti Bribery and Corruption Policy training for 100% of existing and new employees and Board members. This is conducted annually. Additionally, an annual prompt is sent by the CFO to confirm this. Xanadu's Anti-Bribery and Corruption Policy can be found here: <a href="#">XAM-Anti-Bribery-and-Corruption-Policy.pdf (xanadumines.com)</a></p>	
<p>205-3 Confirmed incidents of corruption and actions taken</p>	<p>Nil incidents of corruption in CY2022</p>	



# GRI Index

Description	Location in report/ direct response	Relevant SDGs
<b>GRI 206 Anti-Competitive Behaviour</b>		
<p>206-1 Legal actions for anti-competitive behaviour, anti-trust, and monopoly practice.</p>	Xanadu is not aware of any legal actions for anti-competitive behaviour, anti-trust, and monopoly practice in CY2022	
<b>GRI 303 Water &amp; Effluents</b>		
<p>303-1 Interactions with water as a shared resource</p>	Water management section page 46	
<b>GRI 304 Biodiversity</b>		
<p>304-3 Habitats protected or restored</p>	Land and biodiversity section page 48	
<b>GRI 305 Emissions</b>		
<p>305-1 Direct (Scope 1) GHG Emissions</p>	Energy and carbon emissions management section page 44	
<p>305-2 Energy indirect (Scope 2) GHG Emissions</p>	Energy and Carbon emissions management section page 44	

Description	Location in report/ direct response	Relevant SDGs
<b>GRI 307 Environmental Compliance</b>		
<p>307-1 Non-compliance with environmental laws and regulations</p>	Land and biodiversity section page 48	
<b>GRI 404 Training and Education</b>		
<p>404-1 Average hours of training per year per employee</p>	Our people section page 30	
<p>404-2 Programs for upgrading employee skills and transition assistance programs</p>	Advancing employee skills and opportunities and Supporting career ambitions section page 34	
<b>GRI 403 Occupational Health and Safety</b>		
<p>403-1 Occupational health and safety management system</p>	Ensuring safe and healthy operations page 33	
<p>403-8 Workers covered by an occupational health and safety management system</p>	100% of our workers are covered by our occupational health and safety management system. Ensuring safe and healthy operations page 33	

# GRI Index

Description	Location in report/ direct response	Relevant SDGs
GRI 403 Occupational Health and Safety		
403-19 Work-related injuries	Ensuring safe and healthy operations page 33	
403-10 Work-related ill health	Ensuring safe and healthy operations page 33	
GRI 413 Local Communities		
413-1 Operations with local community engagement, impact assessments and development programs	All of our operations have implemented local community engagement. For more information please refer to our Caring for Community section page 36	  



# Corporate Directory

## Directors

### **Colin Moorhead**

Executive Chairman and Managing Director

### **Ganbayar Lkhagvasuren**

Executive Director & Country Manager

### **Michele Muscillo**

Independent Non-Executive Director

### **Tony Pearson**

Independent Non-Executive Director

### **Shaoyang Shen**

Non-Executive Director

## Company Secretary

### **Bill Hundy**

## Registered Office - Australia

c/o Company Matters Pty Limited

Level 12, 680 George Street

Sydney NSW 2000

Tel: +61 2 8280 7497

Fax: +61 2 9287 0350

## Registered Office - Mongolia

Suite 23, Building 9B

Olympic Street, Khoroo 1, Sukhbaatar District

Ulaanbaatar 14240

Tel: +976 11 7012 0211

## Share Register

Computershare Investor Services Pty Limited

Level 3, 60 Carrington Street

Sydney NSW 2000

Tel: +61 1300 855 080

## Auditor

Ernst and Young

200 George Street

Sydney NSW 2000

## Stock Exchange Listing

Xanadu Mines Ltd shares are listed on the Australian Securities Exchange and Toronto Stock Exchange (ASX and TSX code: XAM)

## Website

[www.xanadumines.com](http://www.xanadumines.com)

## ABN

92 114 249 026

## Corporate Governance Statement

**The Company's Corporate Governance Statement can be found on the Company's website:**

[www.xanadumines.com/corporate-governance/](http://www.xanadumines.com/corporate-governance/)



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[au.linkedin.com/company/xanadu-mines-limited](https://au.linkedin.com/company/xanadu-mines-limited)



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