

Sustainability Report

For the year ending 31 December 2023

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ABOUT THIS REPORT

This Sustainability Report provides information on the Environment, Social and Governance (**ESG**) management and performance of Xanadu Mines Limited from 1 January 2023 to 31 December 2023, aligning with the company's financial reporting period.

This report complements Xanadu's Annual Report, Corporate Governance Statement and Appendix 4G, and the various Board Charters and Corporate Policies, all of which are publicly available on our website xanadumines.com/corporate-governance.

This report has been prepared with reference to the Global Reporting Initiative (2021) Standards (GRI) and the International Council on Mining & Metals (ICMM) 10 Mining Principles. All disclosures in this Report have been reviewed and approved by the Xanadu Mines Board.

Feedback and questions

Feedback on this report can be addressed to the Executive Chairman & Managing Director, who in conjunction with our Executive Management Team will address any shareholder and stakeholder queries.

Shareholders and other stakeholders can contact Xanadu Mines on +61 2 8280 7497 or via email at info@xanadumines.com.







Dear Shareholder,

On behalf of the Company, I am pleased to present the Sustainability Report for 2023 which outlines our performance against key sustainability and ESG metrics during the period. This fourth consecutive Sustainability Report reflects Xanadu's ongoing commitment to be a transparent and accountable metals explorer in Mongolia and to ensure sustainable development is at the forefront of our decision-making.

The world has entered a phase of energy transition that is unparalleled in terms of complexity and uncertainty, and copper is a critical metal to support this transition, supporting both renewable energy and lower emissions. At the same time, the copper market is heading towards a structural deficit, with both increasing demand to support the energy transition and an ongoing decline in historical supply.

With this backdrop, the development of Xanadu's flagship Kharmagtai copper-gold project provides a unique opportunity to contribute to the energy transition. Kharmagtai is a large scale copper project which will make a globally significant contribution to copper supply. At the same time, we are designing it to a modern, energy efficient standard with a low environmental footprint as a strong example of how the mining industry can be part of our shared energy solution.

Our vision from the outset has been to develop a modern, low impact copper mine that benefits all of our stakeholders, and we have worked towards this vision through our Pre-Feasibility Study (**PFS**), including studies on renewable power, electrified vehicles, reduced energy intensity processing, and low emissions intensity mining techniques.



Building on our proven track record at Kharmagtai, we will apply the same principles of sustainable exploration and development to Discovery Exploration and New Project Generation, as we work to grow and develop our project portfolio on behalf of our stakeholders.

During 2023, Xanadu continued our sustainability journey by developing an Environmental, Social and Governance (ESG) Framework that will guide our approach to embed sustainability across our business. This ESG Framework lists eight sustainability goals that we have identified as most important to our stakeholders, aligned to four pillars -Environment, People, Community, and Responsible Business. Secondly, we revised our Sustainability Policy to ensure that our future business activities can continue to align with our sustainability goals.

Xanadu remains excited by the future of mining in Mongolia. It is a country with a stable and democratic government, committed to develop a vibrant mining sector, and it is neighboured by China, the world's largest consumer for copper.

We thank all our stakeholders for their ongoing support and look forward to creating further sustainable value during the next phase of our journey.

Colin Moorhead

sould.

Executive Chairman and Managing Director



The year ended 31 December 2023 was a very busy year as we continued development of our sustainable practices at Xanadu's operations on the ground in Mongolia.

We have made significant advances in the application of our ESG Framework at the Kharmagtai Joint Venture in the South Gobi.

Examples of our achievements in 2023 include:

- 1. Connecting the Kharmagtai project to the Mongolian southern electrical grid. This will reduce our reliance on diesel-powered electricity and reduce transport of diesel on local roads, reducing impact on the environment as well as emissions. This has provided the site with access to a cleaner and more reliable source of electricity for the current study as well as construction when Kharmagtai transitions into production.
- 2. Providing our people with a safe and healthy workplace. We have made several upgrades to operations facilities including a new core processing facility, new accommodation, and new greenhouses to provide our people with fresh fruit and vegetables. The safety and health of our people continues to be of utmost importance, and we are pleased to report a Lost Time Injury Frequency Rate of zero in 2023, for the fourth year in a row.

- 3. Supporting communities as an ongoing commitment. This includes education, development of small businesses, water, and community health programs. We are particularly proud of our STAR program which featured in South Gobi media and received accolades from the local governor. This involved the refitting local kindergarten classrooms, a popular program that is continuing in 2024.
- **4. Executing our ESG framework.** This framework has guided us in our recent studies on future power supply for mine and plant operations, including a significant component of renewable energy sources, and in executing our water program in a sensitive ecological desert environment.

The funding and focus on technical studies for the Kharmagtai PFS has enabled rapid progress towards our Sustainability Goals. This pace will continue into future years and set the groundwork for what we expect to be a very large scale mining operation with world class ESG credentials.

Munkhsaikhan DambiinyamChief Operating Officer



Our Profile

Xanadu is an exploration and development company that aims to successfully explore for world class deposits in Mongolia. We have a multistage portfolio of projects, including our flagship copper-gold Kharmagtai project. We can be described as:

- · A listed exploration company with a proven track record of discovery
- Operating the Kharmagtai gold rich porphyry copper project in PFS stage. funded by JV with Zijin Mining Group
- Holding a growing portfolio of precious and base metal exploration projects in Mongolia
- Operating with a mandate to evaluate quality projects across the broader Central Asian Orogenic Belts

We see our position in Mongolia as a strategic advantage, due to:

- **Prospectivity** The right rocks with some globally significant discoveries, yet remains largely underexplored
- Develop-ability Sparse population and wide-open spaces with excellent infrastructure (especially in South Gobi)

- Mining Culture Stable democracy with high education and training standards with mining representing 25% of GDP and 90% of exports
- Location On China's doorstep (#1 global copper consumer) with excellent infrastructure existing and planned
- Local Know-How Xanadu has deep knowledge and experience with the geology and demonstrated ability to operate to high ESG standards in Mongolia

Xanadu is led by an experienced team of exploration and mining professionals who have a track record of discovery and development of successful porphyry copper-gold mines.

Along with its partners, Xanadu is progressing each project in its portfolio in a way that creates shared value for shareholders and all other stakeholders.

Our Values

The Board of Xanadu has established a **Statement of Values** which can be found on our website. Our values are the guiding principles and norms that define what type of organisation Xanadu aspires to be and what the Board expects from its directors, senior executives, and employees.

The five values that guide how we work include:

1. 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.

2. Integrity and Honesty

We understand our reputation is our most valuable asset.

3. Scientific Basis

We apply good science to everything we do.

4. Disciplined Capital Management

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

5. 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 Projects

Xanadu's portfolio of projects sits within Mongolia's porphyry copper belts. These are in the Middle Paleozoic South Gobi Porphyry belt (Gurvansayhan terrane), which is a 600 x 200km arcuate belt formed from Middle to Late Palaeozoic volcanic and sedimentary rocks that have been intruded by Late Devonian and Carboniferous granitoids. It hosts most of the known porphyry and intrusion-related mineralisation in the South Gobi region including the Oyu Tolgoi copper-gold mine and Tsagaan Suvarga coppermolybdenum project.

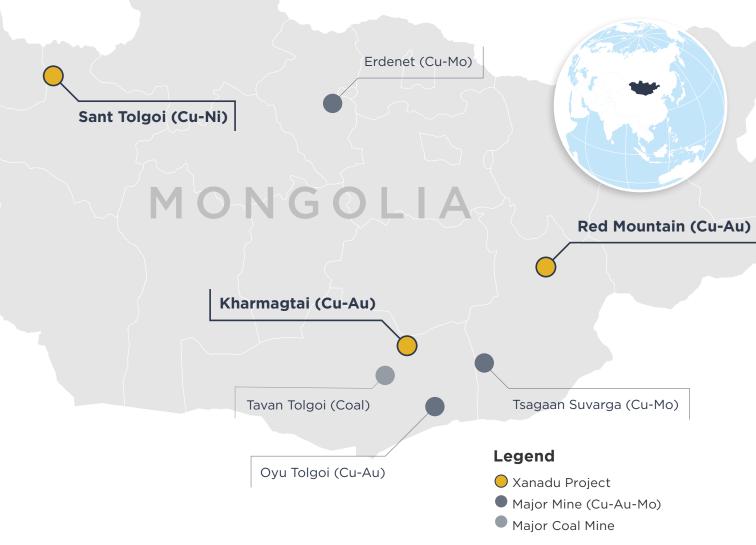
Within this zone, Xanadu maintains an active exploration and business development program and is constantly evaluating new project opportunities.

The Kharmagtai JV

The Kharmagtai project is located in Omnogovi Province, approximately 420km southeast of Ulaanbaatar. It is one of the largest undeveloped copper-gold deposits in the world and is expected to be Mongolia's next major copper mine. Kharmagtai is in PFS stage and expected to complete the study in Q3 of 2024. Despite being in PFS stage, Kharmagtai still has significant exploration upside.

To fund the PFS stage development of the Kharmagtai project, in March 2023 Xanadu entered into a strategic partnership with Zijin Mining Group Co., Ltd. (**Zijin**). Under the terms of the JV, Xanadu is the operator of the Kharmagtai project and oversees the management of material sustainability issues, until the completion of a PFS, upon which time operatorship will pass to Zijin.

Xanadu's 2023 drilling and exploration activity was focused entirely on progressing the Kharmagtai project.



Red Mountain

The Red Mountain porphyry copper-gold project is located within the Dornogovi Province of Mongolia, approximately 420km southeast of Ulaanbaatar and 70km west of Sainshand. Its geology consists of multiple co-genetic porphyry copper-gold centres, mineralised tourmaline breccia pipes and coppergold/base metal magnetite skarns.

Previous exploration at Red Mountain defined broad zones of strong quartz stockwork veining and associated high-grade gold mineralisation.

No drilling activity occurred in 2023 at the Red Mountain project. One operational supervisor and two rostered security staff were employed at the Red Mountain project during this period. Exploration activity at the Red Mountain project has resumed in 2024.

Other projects

Xanadu continues to look for opportunities to expand its portfolio of projects, targeting future facing metals including copper and gold, in Mongolia and the surrounding region. As suitable projects are discovered that meet our investment criteria, we will seek commercial opportunities to add them to the Company's portfolio for further development.

More detailed information on Xanadu's key projects can be found in Technical **Reports and Announcements** published on our website.

SUMMARY OF OUR PERFORMANCE

	Metric	2023	2022
	Metric	2023	2022
Operating			_
Total drilling	metres	71,932	0
Environment			
Scope 1 emissions	tonnes of CO ₂ equiv.	1,627	179
Scope 2 emissions	tonnes of CO ₂ equiv.	8,657	5
Water use	metres³	5,206	6,290
People			
Employees	number	56	29
Contractors	number	44	20
Lost-time-injuries	number	0	0
Total recordable injury frequency rate	number	0	0
Training and upskilling of employees	employee hours	610	384
Workforce that has undergone development training and review	percentage	100	100
Community			
Community-related grievances	number	2	4
Community-related grievances remediated	number	2	4
Scholarship grants awarded	number	28	43
Governance			
Reported breaches of Anti-bribery and Corruption Policy	number	0	0



OUR APPROACH TO SUSTAINABILITY

Xanadu believes that sustainability principles should be embedded in all stages of the mine lifecycle, and we have adopted this mindset as an exploration company.

Xanadu's recently updated sustainability framework identifies the four pillars that we will focus on to create value for our shareholders, employees, local communities, suppliers, and other stakeholders. These pillars guide us as we grow the Company and forms the structure of our approach to sustainability.

Xanadu is committed to reporting transparently on each topic under this framework.

In 2023, Xanadu revised its Sustainability Policy that describes our commitment to embedding sustainability principles in our business activities. This new policy is publicly available on our website.

Materiality

To inform our approach to sustainability, we previously conducted a desktop materiality assessment to identify our most material sustainability topics under each pillar of our sustainability framework.

Material Topics	What This Means to Xanadu Mines	Covered in the Report Under
Climate change	We are committed to minimising our contribution to climate change as we explore and develop critical minerals for the low energy transition.	Environment
Environmental management	We are committed to ensuring environmental regulatory compliance. We use modern, contemporary exploration methods to minimise our current and future environmental footprint.	Environment
Managing land and biodiversity	We respect the land where we operate and take care to minimise any adverse impact on the environment. As a sustainable exploration and development company, we seek to preserve the biodiversity and ecosystems on the land where we operate.	Environment
Water management	We acknowledge that water is a precious resource in Mongolia. We carefully manage our water use and consumption, along with the responsible disposal of water.	Environment
Safety and health	We are committed to maintaining a healthy and safe working environment for all our people.	People
Local community, development and investment	We understand that in 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. We collaborate with the community to support local initiatives in four areas – small business development, health, water, and education.	Community
Engaging our local communities	We are a responsible corporate citizen, and we partner with local government to ensure that business activities align with community interests. We respect the rights of the local community and actively engage with them.	Community
Conducting business ethically and transparently	We are committed to acting in a transparent and ethical manner. This means being honest and fair in our dealings with employees, contractors, suppliers, governments, and the communities in which we operate.	Responsible Business

Stakeholder Engagement

Our approach to sustainability is grounded in identifying our most significant stakeholders and understanding the topics that impact or are of most concern to each group.

We acknowledge the need for effective engagement with our stakeholders, and continually strive to build and improve our relationships through open and honest communication and respecting other points of view to bring about mutually beneficial outcomes. In prioritising stakeholders, we consider the degree to which they are influenced by Xanadu, and the degree to which they have an influence on Xanadu.

Xanadu has developed a strategy which prioritises regular engagement and has been tailored for the needs of each group of stakeholders. We have personnel dedicated to developing and maintaining these relationships. The table below summarises the nature of our engagement with these groups, and the periodicity of our interactions.

Stakeholder Group	Stakeholder Type	Method of Engagement
Shareholders	Shareholders, analysts	 Annual reports, quarterly reports, half-yearly financial reporting Website and email, investor briefings, one-on-one discussions Market announcements Annual General Meeting Industry conferences One on one meetings
Employees and Contractors	Management, employees, contractors	 Employee briefings Email, social events, notice boards, toolbox meetings, performance reviews Town hall meetings Whistle-blower service Direct engagement between people leaders and their teams
Local Communities	Local residents, communities, landowners	 Community relations team visits Resident/community meetings Site visits Regular communication with leaders and community generally, providing feedback forums Sponsorships and partnerships
Suppliers	Local suppliers, non-local supplier	 Out to market approaches Open and collaborative face-to-face engagement and discussions Regular performance meetings Contractual agreements
Government	Mongolia federal, state, regional and local governments; Australia federal government	 Open and collaborative face-to-face engagement Annual reports, website and email, compliance audits and inspections Regulatory submissions Direct engagement on matters of local importance Industry body involvement

ENVIRONMENT

Xanadu is committed to the sustainable discovery and development of world-class critical mineral mining projects. Our strategy is to prioritise using modern, contemporary exploration techniques that minimise the risk of adverse impacts on the environment.

The Xanadu Board is ultimately responsible for overseeing material environmental topics. To ensure that the Board can effectively perform this role, it is supported by the Safety, Health and Environment Committee.

This sub-Committee is updated by management on Xanadu's environmental initiatives and performance and makes recommendations to the Board to support improvement. Our approach to environmental stewardship is guided by our **Sustainability Policy** that can be accessed on our website.



Climate Change

Xanadu remains committed to minimising its contribution to climate change as we explore and develop critical minerals projects. Developing a portfolio of projects that targets multiple future facing metals is an important driver of the Xanadu growth strategy and will include, copper, gold and nickel.

The Company has a Climate Change Policy that is publicly available on our website. This Policy describes our commitment to include climate change considerations in business decisions and to publicly disclose our greenhouse gas emissions.

Transitioning to a Net-Zero World

Xanadu continues to be a proactive participant in the critical minerals' exploration and development sector. Our current portfolio of assets will play a role in supplying copper, an essential metal for electrification across many industries, and a key metal of a net-zero world.

Many new wind and solar technologies are associated with a significantly lower carbon footprint compared to coal-fired power generation. The adoption of these technologies will be crucial if we are to successfully transition to a net-zero world. Wind and solar is estimated to require up to 8,000kg of copper per MW of electricity, while conventional electricity only requires 1,000kg of copper per MW. As the world increasingly adopts newer forms of power generation, demand for Xanadu's copper resources is expected to rise.

The Kharmagtai JV

Xanadu's activities in 2023 have focused on completing tasks required to support a PFS. This will be finalised in 2024, after which time the decision will be made to develop a viable mining operation.

Xanadu is committed to developing economically viable projects that incorporate mining technologies and processes that will minimise greenhouse gas emissions. The following initiatives have been explored in the PFS:

- A power trade-off study that included ~50% of supply from solar and wind power generation, along with ~50% from the grid.
- Study of hybrid-electric haul fleet, electric trolley-assist, and in-pit crush and convey options.
- Tails thickening and dam design to increase water recovery and reduce water consumption.
- Course ore flotation to reduce gigajoules of electricity consumed per tonne of copper mined.
- Energy efficient non-process infrastructure.



Scope 1 & 2 Emissions

As part of our commitment to minimising the impact of our own activities on climate change, we assess many initiatives that could reduce the intensity of our greenhouse gas emissions.

In 2023, we connected the Kharmagtai project to grid electricity. This has reduced our reliance on diesel-powered electricity generation and provided the site with access to a cleaner and more reliable source of electricity for both current operations and future construction of the operating mine.

Several challenges were met to make this connection. These included obtaining the required permits, mobilising a contractor to install the infrastructure, and ensuring that geopolitical risks with using an electricity provider located outside of Mongolia could be managed. We are confident that this initiative will reduce emissions at the Kharmagtai project in future years.

In 2023, Xanadu emitted 10,283.82 tonnes of carbon dioxide equivalent (CO²e) from our operations. This is composed of our Scope 1 emissions which totalled 1,626.64 tonnes of CO²e, and Scope 2 emissions totalling 8,657.18 tonnes of CO²e. Our emissions intensity in 2023 for Scope 1 & 2 emissions was 0.14 tonnes of CO²e per metre drilled.

Total Scope 1 & 2 emissions increased from 183.89 to 10,283.82 tonnes of CO²e due to drilling activity that occurred in 2023.

Emissions	2023	2022
Scope 1	1,627	179
Scope 2	8,657	5
Total Scope 1 & 2	10,284	184

Environmental Management

At Xanadu, we are committed to ensuring environmental regulatory compliance.

Our commitment to ensuring environmental regulatory compliance is included in our revised **Sustainability** Policy.

Xanadu is required to lodge an annual Environmental Management Plan (EMP) with local governments to comply with environmental regulations. In 2023, this was lodged with the Omnogovi and Dornogovi provinces. Xanadu is also subject to scheduled and unscheduled inspections by agencies in each of these provinces who monitor ongoing environmental compliance.

As the scale of our drilling activities increased in 2023, we have been aware of our responsibility to remain compliant. Local communities and local government agencies have also given more attention on mining rehabilitation practices across Mongolia. As we anticipate a more onerous environmental regulatory environment, we have employed an Environmental Coordinator during 2023 to manage compliance activities and conduct environmental assessments.

During 2023, we had three inspections of the Kharmagtai project. This included a rehabilitation inspection by Tsogtsetsii Soum, a water exploration inspection by Manlai Soum, and an environmental inspection by the South Gobi province. We are pleased to report that Xanadu received no infringement notices and remained compliant with all applicable environmental regulations.

As part of Xanadu's PFS, in 2023 we commenced a Detailed Environmental Impact Assessment (**DEIA**) and an independent Environmental and Social Impact Assessment (ESIA). This is due to be completed in 2024 and will include an environmental regulatory gap analysis to ensure that the Kharmagtai project continues to remain compliant when mining starts.

Xanadu has not obtained an ISO14001 certification for its Environmental Management System, however, we will explore this as our exploration activities expand in future years.

Managing Land and Biodiversity

We respect the land where we operate and take care to minimise any adverse impact on the environment. As a sustainable exploration and development company, we seek to preserve the biodiversity and ecosystems on the land where we operate.

During 2023, our exploration activities only occurred at the Kharmagtai project and there were no protected areas within the exploration zones at this site.

Our revised Sustainability Policy describes our commitment to preserving biodiversity and minimising an adverse impact on land. Our drill pads typically take up a small amount of area (typically 20m x 20m) and all land is rehabilitated at the conclusion of drilling with native grass seeds and plants. To ensure that we minimise land disturbance, the following actions are also taken:

- Soil vegetation within the topsoil is separated during sampling and returned once a sample is taken.
- Excavation of trenches only occurs when necessary and soil cover is separately stored.
- Land slopes are protected from pluvial erosion by preventative drainage channels.

As part of Xanadu's PFS, we commenced a DEIA in 2023 that includes extensive biodiversity mapping of the Kharmagtai project. This Assessment is due to be completed in 2024 and will identify any unknown biodiversity risks. Subsequent mitigation plans may be required before mining commences at the Kharmagtai project.

In 2024, exploration activities will resume at the Red Mountain project. Our approach to managing land and biodiversity at this project, will employ the same principles that we have applied at the Kharmagtai project.



Water Management

We recognise that water is a precious resource in Mongolia. We carefully manage our water use and consumption, along with the responsible disposal of water.

All water is sourced from deep underground aquifers located beneath the Kharmagtai project. As part of our water management strategy, we do not infringe on water wells used by local communities and have installed our own production wells to supply all water required for our exploration activities.

In 2023, we utilised 5,206 m³ of water.

	2023	2022	2021	2020
Water used (m³)	5,206	6,290	N/A*	11,548

^{*} Data not captured in 2021

There are laws that apply to Xanadu that make provisions for the proper use, protection, and restoration of water resources. In 2023, the South Gobi Environmental Officer completed one inspection at the Kharmagtai project, and pleasingly, we received no infringements for water contamination breaches.

As part of our continuous improvement in water management, in 2023 we installed a septic leech drains system. This system allows for used water to be treated and safely dispersed into the ground, without contaminating nearby waterways. In 2024, all used water at the Kharmagtai project will be treated through this system.

Further water exploration activities will be completed in 2024 for our PFS. These activities will ensure that adequate water is available to facilitate mining activities without affecting water wells used by local communities.



CASE STUDY

Waste Water Treatment - Septic System

The Company added a second, high quality accommodation block to the Kharmagtai camp to improve working and living conditions for our valued staff. As part of this project, we took an important step toward environmental solutions for sewage water.

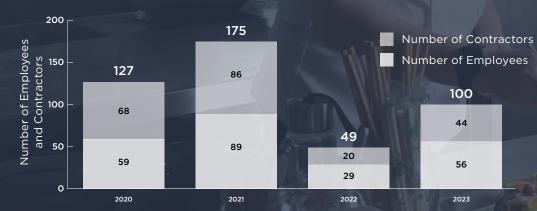
Avoiding improper treatment of sewage water is an important environmental requirement for exploration and mining activities and very important to the local government and community. To address the environmental impact, the Company invested in and installed a modern sewage treatment system that leaches treated water into the ground.

Kharmagtai was honourably named by the government as the first exploration camp in the South Gobi that installed a proper solution for treatment of sewage water.

PEOPLE

Xanadu's exploration projects create many high-quality employment opportunities for the local communities on, or adjacent to our operations. In providing these opportunities, Xanadu is committed to ensuring a safe and healthy workplace for our employees and contractors.

Number of Mongolia based employees and contractors



Percentage of women

Includes employees and contractors





Safety, Health, and Wellbeing

The Xanadu Board is ultimately responsible for ensuring that any risk of adverse health and safety outcomes is mitigated. The Safety, Health & Environment Committee ensures that the Board regularly receives reporting from management on the adequacy of our internal health and safety reporting systems and ensures that we comply with all applicable regulatory requirements.

Given the nature of Xanadu's business as an exploration company, our employees are exposed to a number of safety risks. Driving of vehicles, mineral and water exploration activities, and construction of the new core shed were identified as the most significant safety risks in 2023.

The Board proactively seeks to prevent accidents from occurring by ensuring that they are regularly aware of emerging safety hazards. The Company maintains a Hazard Register and a Near Miss Register, that is reported daily and discussed in weekly PFS meetings.

Our Sustainability Policy sets out Xanadu's commitment to a safe and healthy workplace. To minimise safety risks, all operating procedures are written in the local Mongolian language. This means that incident response procedures, along with safe work procedures can be understood and easily actioned by our local employees and contractors. Safe work procedures are updated by the Safety, Health, and Environment (HSE) Coordinator and approved by the Chief Operating Officer, as required. During the year, updates were made to the Emergency Response Plan, Travel Management Plan, and Camp Management Plan. We also developed a new Core Shed Operating Policy.

To ensure that employees and contractors are fit to safely perform their duties, they are subject to random alcohol testing before their shift starts. In total, 2,112 breathalyser tests were undertaken in 2023.

During the year, daily training was delivered to employees and contractors on safety topics, prior to every shift. Every month, the HSE Coordinator promotes a particular safety theme. Employees and contractors were encouraged to report potential safety hazards to the shift manager. Xanadu also required site visitors to complete safety inductions before they entered the sites.

In 2023, Xanadu received no infringement notices and remained compliant with all applicable health and safety regulations. Despite the increase in drilling activity during 2023 and a greater number of contractors being onsite to assist with the PFS, we recorded 0 lost time injuries and 0 fatalities for our 328,883 total employee and contractor hours worked. These results include ill health.

In 2023, we continued to provide our employees access to medical treatment under a Xanadu-sponsored medical insurance program. Employees who pass a three-month probation period and are employed by Xanadu on a full-time basis are eligible under the program. We also provided annual health checks to all employees and contractors, in compliance with Mongolian laws.



CASE STUDY

Core Processing Facility

Until 2023, the Kharmagtai camp had used an outdated coreshed area developed in the early 2000's to support our exploration. The old coreshed had started to hold several HSE hazards for our people and the project.

As part of the PFS investment, the Company built a new, modern, larger core processing facility of 2,000 square meters to house all our core activities, office, storage and fleet. The new coreshed was commissioned in November 2023.

This investment demonstrated the Company's commitment to a quality work environment for our people that meets international standards of health, safety and environment. After the new coreshed was commissioned, the Company demolished the old coreshed which eliminated those historic HSE hazards.

COMMUNITY

We aspire to be a leader of sustainable exploration in Mongolia. To help us achieve this goal, we respect the rights of local communities and actively look for ways to support their aspirations.



Community Engagement

To create shared value for shareholders and other stakeholders, we partner with local governments to ensure that our exploration activities align with the interests of communities located on or adjacent to our project sites.

Mining activities often occur on or adjacent to indigenous peoples' land and we regularly engage with local people to ensure that we respect their rights.

While we endeavour to be respectful visitors in the communities where we undertake our exploration activities, we recognise that concerns and grievances can arise from time to time, and we are committed to fostering a culture of openness and accountability. We have also been aware that community concerns could arise with the expanded drilling program in 2023.

As part of our community engagement strategy, we have employed a full time Community Relations Coordinator to act as the liaison between Xanadu and neighbouring communities. An important part of their role is to ensure that community concerns and grievances are managed in a fair and timely way. This coordinator is a Mongolian citizen who is accustomed to the cultural norms of the local people.

If a community member wishes to make a complaint or express a concern regarding our activities, they are encouraged to verbally raise the matter with the Community Relations Coordinator. Upon talking with the affected persons, they are offered an opportunity to escalate their complaint or concern in writing to the Chief Operating Officer.

To further support our community engagement strategy, we have also set up a hotline for community members.

In 2023, we received two communityrelated grievances relating to water and dust management. Pleasingly both grievances were resolved, and preventative measures put in place.

In 2024, we will develop a new community engagement plan and strategy for our PFS.

	2023	2022	2021	2020
Community- related grievances (number)	2	4	0	0
Community- related grievances remediated (number)	2	4	0	0

Community Development and Investment

We understand that in 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.

Our community engagement strategy is underpinned by community engagement programs focused on four key areas – education, small business development, water, and health.

To support our community development and investment strategy, Xanadu signs a Social Engagement Cooperation Agreement with relevant local governments each year. These agreements list the community

engagement programs that we have selected and our financial commitment to support those programs.

In 2023, Xanadu entered into agreements with the Tsogtsetsii Soum and Bilgekh Bagg (both Kharmagtai project). We are pleased to report that all agreed community programs were completed during the year.

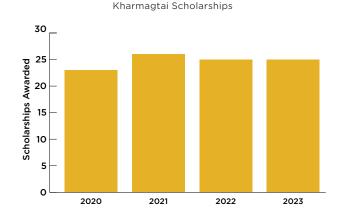
In 2024, Xanadu will also enter into an agreement with Manlai Soum (Kharmagtai project), along with the Tsogttsetsii Soum and Bilgekh Bagg.

Education

In 2015, Xanadu established a program to provide scholarship grants for community members to receive a higher education in Mongolia's capital city - Ulaanbaatar.

In 2023, we continued this program and provided 28 scholarships to community members residing at the Kharmagtai and Red Mountain projects. We encourage scholarship recipients to enrol in a range of subjects. The 25 recipients have elected to pursue studies at 15 universities, across 13 academic majors.

In 2021, the STAR program was established to modernise kindergarten classrooms attended by preschool children at the Kharmagtai project. In 2023, two classrooms were refitted. We are committed to this program and have planned to refurbish two additional classrooms in 2024.



Classrooms refitted under STAR program (number)



Note: 2022 scholarship numbers include correction vs. previously reported data.

Small Business Development

Xanadu actively supports the economic development of communities that live on or adjacent to our exploration sites. Where possible, we locally procure goods and services to complete the PFS. In 2023, we completed the Four-Season Greenhouse Project to supply fresh fruit and vegetables at the Kharmagtai project. Locally sourced materials and services were used to construct this greenhouse.

Water

The local communities where we undertake our exploration activities depend on clean water for household use and their livestock feeding and husbandry needs. Xanadu has committed to supporting local communities by commissioning contractors to drill ground-water wells at a depth of 100m every two to three years, with the goal of securing high quality water for our local communities living adjacent to our exploration sites.

In 2023, Xanadu drilled and fitted-out a new water well at the Kharmagtai location for the exclusive use of the broader community.

Xanadu continued to conduct hydrology studies and measurements to determine water quality, provided generators and pumping equipment to support water extraction, and completed ongoing maintenance of those wells to ensure they are operationally healthy. We conducted approx. 20 measurements per month across 4 wells in the Kharmagtai region 2023.

Health

Xanadu has continued its partnership with Tsogttsetsii Hospital by donating medical and refrigeration equipment during the year. This medical facility is located within 100km of the Kharmagtai project and serves over 7,300 residents. Xanadu's ongoing support helps to provide the best medical care in the region for the wider community, along with Xanadu's employees and contractors in the event of an accident.

Other Initiatives

The Annual 'Mountain Offering' ceremony is widely regarded as the most important cultural event in the Kharmagtai region. Xanadu continued to support this event during the year.

The Tsogttsetsii Soum will celebrate its 100th anniversary in 2024. To commemorate this occasion, Xanadu will provide financial support, and has planned to complete a cultural centre fitting project and install CCTV security camera equipment for the event.



CASE STUDY

Community Kindergarten

We have continued renovating the Bilgekh Bagg kindergarten for the third consecutive year.

This kindergarten is home for 320 kids from our community. For the Kharmagtai team, our kindergarten project is one of the most valued programs. We believe this is our 'star' project as it sets community engagement standard for not only Bilgekh Bagg but for entire country.

In 2023, the Company renovated and furnished two classrooms with the aim of adding four more in 2024. The project provides classrooms with kitchen, dining area with table and chairs, play area with eco toys, bed for each kid, hygienic toilet and sinks.









Business Ethics and Transparency

The Xanadu Board is comprised of members with relevant skills and experience to ensure ethical and transparent delivery of value to shareholders and other stakeholders. The composition of the Board is regularly reviewed by the Nomination and Remuneration Committee.

The Board Charter requires a majority of directors to be nonexecutive. On 31 December 2023, the Board comprised five directors, three of whom were non-executive directors. Details of each Board member, including their skills and experience are set out in the 2023 Annual Report and are also available on the Company's website.

One requirement of the Board Charter is for the Chair to be an independent, non-executive director. Since 31 March 2022, we have not met this requirement as the Chair concurrently holds the position of Managing Director.

Xanadu viewed this as necessary based on the required skills mix and stage of development of the Company and its projects and following management changes in early 2023. To keep the size of the Board suitable for Xanadu's current stage of development, it was decided that the position of Managing Director and Chair be combined to fully leverage the expertise of the incumbent Mr. Colin Moorhead and minimise administrative costs.

The board currently has four committees to assist in carrying out the role of guiding the Company's strategic direction - the Nomination & Remuneration Committee; the Safety, Health & Environment Committee; the Audit & Risk Committee, and the Independent Board Committee. The charters for these committees are available on the Company's website.

The charters require that all members of the Nomination & Remuneration Committee, and the Audit & Risk Committee all be independent, nonexecutive directors. All members of the Safety, Health and Environment Committee are not required to be independent, non-executive directors; however, this is required for the Chair of the Committee. In 2023 Xanadu did not meet these commitments due to the Chairman also holding the position of Managing Director. The Company believes this is necessary and beneficial to its stakeholders, as discussed on the previous page.

The Safety, Health & Environment Committee met in April, July, and December 2023. At a minimum, the Committee must meet at least two times per year, but will meet as often as the Chair of the Committee decides it is necessary.

Topics discussed by the Safety, Health & Environment Committee in 2023 included:

- Safety culture, and performance
- Health performance
- Environment performance
- Safety, Health, and Environment management systems
- Community performance and investment plans
- Production of the Sustainability Report 2023

Managing the risk of unethical behaviour was a forefront consideration in 2023 as more short-term contractors supported the PFS at the Kharmagtai project. We ensured that all employees and contractors were aware of our expectations for ethical behaviour and have provided guidelines written in Mongolian in the Employee Handbook.

Code of Conduct

Our Code of Conduct sets out the standards of behaviour expected of our directors, employees, contractors, consultants and suppliers. 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
- Community and environment

The Code also requires all Board and Senior Management, including the Managing Director and Chief Financial Officer, to certify compliance with this Code, each year.

Anti-Bribery and Corruption

Our Anti-bribery and Corruption (ABAC)
Policy sets out Xanadu's zero tolerance
for any bribery or corruption in our
business dealings and operations.
A copy of the ABAC Policy is provided
to all new employees upon starting their
employment, and to all employees if
the Policy is subsequently revised and
adopted. A copy of the ABAC Policy is
available on the Company's website.

Consistent with the policy, no political donations or facilitation payments were made during 2023.

In accordance with ABAC Policy, all employees are required to submit expense claims relating to any gifts, entertainment, or hospitality that they receive, or payments made to third parties, and to record the reason for expenditure.

All breaches of the ABAC Policy are reported to the Board and the Audit & Risk Committee. No breaches of the ABAC Policy were reported during 2023.



Timely and Consistent Disclosure

Xanadu's Continuous Disclosure and Shareholder Communication (CDSC) Policy outlines our commitment to providing shareholders and the market with full and timely information about our activities. A copy of the CDSC Policy is available on the Company's website.

In 2023, Xanadu made 69 announcements and disclosures via the Australian Securities Exchange and Toronto Stock Exchange, with no breaches of continuous disclosure rules reported.

Modern Slavery

Xanadu takes the risk of modern slavery seriously. Our commitment to combating modern slavery in our value chain is formalised in the Xanadu Human Rights (HR) Policy. A copy of the HR Policy is available on the Company's website.

We have taken a proactive approach to minimising the risk of modern slavery by sourcing all drilling, geophysical survey, and core analysis services within Mongolia, via long term supplier relationships, and on terms and conditions that are compliant with the Mongolian regulatory environment. The Constitution of Mongolia explicitly prohibits any form of forced labour, and the Law on Labor of Mongolia further prohibits any form of child labour.

Risk Management

Xanadu recognises that its operating activities expose it to potential risks. Management considers ongoing risk management to be a core component of the management of the Company and understands that the Company's ability to identify and address risk is central to creating shared value for shareholders and other stakeholders.

Xanadu takes a proactive approach to risk management and elimination. A copy of the Risk Management (RM) Policy is available on the Company's website.

The Managing Director is responsible for management of Xanadu's risk function and in turn reports to the Audit & Risk Committee. The Committee is charged with risk oversight and maintains a risk register, which is regularly reviewed and updated, every six months. The Committee met in March, September, and December 2023.

The Audit & Risk Committee reports to the Board of Directors, following each Committee meeting. The full Board is then actively involved in the ultimate review of and determination of risk to within sensible tolerances.

APPENDIX 1: GRI INDEX

Statement of Use: Xanadu Mines has reported the information cited in this GRI content index for the period 01/01/2023 – 31/12/2023 with reference to the GRI Standards (2021).

<u>Disclosure</u> Location or comment

GRI 1: Foundation 2021

This Sustainability Report has been prepared in line with the principles for defining report content and quality, including undertaking a materiality assessment.

About this report (pg. 4) Our profile (pg. 9) Annual Report 2023 (pg. 2)
Annual Report 2023 (pg. 78)
About this report (pg. 4)
No restatements
Not applicable
Our profile (pg. 9) Projects (pg. 10)
People (pg. 22)
People (pg. 22)
Business ethics and transparency (pg. 31) Corporate Governance Statement 2023
Corporate Governance Statement 2023 Nomination and Remuneration Committee Charter
Corporate Governance Statement 2023
Business ethics and transparency (pg. 31) Corporate Governance Statement 2023
Business ethics and transparency (pg. 31)

Disclosure	Location or comment
2-14 Role of the highest governance body in sustainability reporting	Corporate Governance Statement 2023
2-15 Conflicts of interest	The Code of Conduct covers conflicts of interest. All personnel are required to report breaches of the Code of Conduct (including conflicts of interest), to the Company Secretary, or the Executive Chairman & Managing Director.
2-16 Communication of critical concerns	Grievances and critical concerns can be made to the Community Engagement Coordinator or Whistleblower Officer.
	The Chief Operation Officer and/or the Whistleblower Officer raises any critical concerns and whistleblower reports to the attention of the Audit and Risk Committee as soon as is required depending on the risk rating (in the context of our risk appetite).
2-17 Collective knowledge of the highest governance body	Business ethics and transparency (pg. 31)
2-18 Evaluation of the performance of the highest governance body	Board Charter Nomination and Remuneration Committee Charter
2-19 Remuneration policies	Annual Report 2023 (pg. 29)
	Nomination and Remuneration Committee Charter
2-20 Process to determine remuneration	Annual Report 2023 (pg. 29)
2-21 Annual total compensation ratio	Not applicable. The Annual Total Compensation Ratio is incomparable across the two jurisdictions of Australia and Mongolia. The Audit & Risk Committee is aware of the relativity of salaries in both jurisdictions.
2-22 Statement on sustainable	Our approach to sustainability (pg. 13)
development strategy	Sustainability Policy
	Climate Change Policy
2-23 Policy commitments	Code of Conduct located here.
	Human Rights Policy located here.
2-24 Embedding policy commitments	Code of Conduct
	Human Rights Policy
	Xanadu Mines' commitments are included in the Employee Handbook.

Disclosure	Location or comment	
2-25 Processes to remediate	Community engagement (pg. 26)	
negative impacts	Safety, health, and wellbeing (pg. 23)	
2-26 Machanisms for socking		
2-26 Mechanisms for seeking advice and raising concerns	To raise a concern, stakeholders can contact Spencer Cole on +61 2 8280 7497 or via email at:	
	spencer.cole@xanadumines.com	
	Whistleblower Policy	
2-27 Compliance with laws and regulations	No significant breaches or laws and/or regulations occurred in 2023.	
2-28 Membership associations	Mongolian Mining Association	
	Australian Chamber of Commerce	
2-29 Approach to stakeholder engagement	Stakeholder engagement (pg. 15)	
2-30 Collective bargaining agreements	No employees covered by collective bargaining agreements.	
GRI 3: Material Topics 2021		
3-1 Process to determine material topics	Materiality (pg. 14)	
3-2 List of material topics	Materiality (pg. 14)	
3-3 Management of material topics	Materiality (pg. 14)	
GRI 201: Economic Performance	2016	
201-1 Direct economic value generated and distributed	Annual Report 2023	
201-2 Financial implications and other risks and opportunities due to climate change	Information unavailable	
201-3 Defined benefit	Not applicable	
plan obligations and other retirement plans		
201-4 Financial assistance received from government	No financial assistance received from government	
GRI 203: Indirect Economic Impacts 2016		
203-1 Infrastructure investments and services supported	Community development and investment (pg. 26)	
203-2 Significant indirect economic impacts	Community development and investment (pg. 26)	

Disclosure	Location or comment	
GRI 205: Anti-corruption 2016		
205-1 Operations assessed for risks related to corruption	Xanadu Mines maintains two exploration sites in Mongolia, both of which are assessed for corruption risk when key decisions are made.	
	The criteria are based on relative size and importance of each decision (contract size etc). Xanadu Mines also conducts audits both in Australia (for the full company) and in Mongolia (for Mongolian operations on a standalone basis) by different auditing companies.	
205-2 Communication and training about anti-corruption policies and procedures	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.	
205-3 Confirmed incidents of corruption and actions taken	No confirmed instances in 2023	
GRI 206: Anti-competitive Behav	iour 2016	
206-1 Legal actions for anti- competitive behaviour, anti- trust, and monopoly practices	No instances of legal actions 2023.	
GRI 302: Energy 2016		
302-1 Energy consumption within the organisation	35,255.5 GJ	
302-2 Energy consumption outside of the organisation	Information unavailable	
302-3 Energy intensity	0.49 GJ per metre drilled.	
302-4 Reduction of energy consumption	Not applicable	
302-5 Reductions in energy requirements of products and services	Not applicable	
GRI 303: Water and Effluents 2018		
303-1 Interactions with water as a shared resource	Water management (pg. 20)	
303-2 Management of water discharge-related impacts	No minimum standards set beyond regulatory requirements.	
303-3 Water withdrawal	Information unavailable	

Disclosure	Location or comment
303-4 Water discharge	Information unavailable
303-5 Water consumption	Water management (pg. 20)
GRI 304 Biodiversity 2016	
304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high diversity value outside protected areas	Operational sites are not located in protected areas, or areas of high biodiversity value.
304-2 Significant impacts of activities, products and services on biodiversity	Managing land and biodiversity (pg. 19)
304-3 Habitats protected or restored	No habitats were impacted by Xanadu in 2023 to necessitate protection or restoration activities
304-4 IUCN Red List species and national conversation list species with habitats in areas affected by operations	No IUCN Red list species and national conversation list species affected by operations.
GRI 305: Emissions 2016	
305-1 Direct (Scope 1) GHG emissions	Climate change (pg. 17)
305-2 Energy indirect (Scope 2) GHG emissions	Climate change (pg. 17)
305-3 Other indirect (Scope 3) GHG emissions	Information unavailable
305-4 GHG emissions intensity	Climate change (pg. 17)
305-5 Reduction of GHG emissions	Not applicable. Growth in activity at the Kharmagtai project necessitated the grid electricity connection, rather than reducing GHG emissions. GRI 307: Environmental Compliance
307-1 Non-compliance with	Environmental Management (pg. 19)
environmental laws and regulations	Environmental Flanagement (pg. 15)
GRI 401: Employment 2016	
401-2 Benefits provided to full- time employees that are not provided to temporary or part- time employees	Safety, health, and wellbeing (pg. 23)
401-3 Parental leave	Employees are entitled to parental leave as per legislated requirements in each jurisdiction. No employees took parental leave in 2023.

Disclosure	Location or comment			
GRI 403: Occupational Health and Safety 2018				
403-1 Occupational health and safety management system	Xanadu has implemented an occupational health and safety management system to ensure that we comply with regulatory requirements.			
403-2 Hazard identification, risk assessment, and incident investigation	Safety, health, and wellbeing (pg. 23)			
403-3 Occupational health services	Not applicable			
403-4 Worker participation, consultation, and communication on occupational health and safety	Safety, health, and wellbeing (pg. 23)			
403-5 Worker training on occupational health and safety	Safety, health, and wellbeing (pg. 23)			
403-6 Promotion of worker health	Safety, health, and wellbeing (pg. 23)			
403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Safety, health, and wellbeing (pg. 23)			
403-8 Workers covered by an occupational health and safety management system	100% of employees and contractors covered.			
403-9 Work-related injuries	Safety, health, and wellbeing (pg. 23)			
403-10 Work-related ill health	No cases of recordable work-related ill health or fatalities due to work-related ill health in 2023.			
GRI 404: Training and Education 2016				
404-1 Average hours of training per year per employee	18.39 hours			
404-2 Programs for upgrading employee skills and transition assistance programs	Safety, health, and wellbeing (pg. 23)			
404-3 Percentage of employees receiving regular performance and career development reviews	100%			

Disclosure Location or comment GRI 406: Non-discrimination 2016 406-1 Incidents of No incidents of discrimination in 2023. discrimination and corrective actions taken GRI 408: Child Labour 2016 408-1 Operations and suppliers No operations or suppliers identified in 2023. at significant risk for incidents of child labour GRI 409: Forced or Compulsory Labour 2016 409-1 Operations and suppliers No operations or suppliers identified in 2023. at significant risk for incidents of forced or compulsory labour **GRI 411: Rights of Indigenous Peoples 2016** 411-1 Incidents of violations Community engagement (pg. 26) involving rights of indigenous peoples GRI 413: Local Communities 2016 413-1 Operations with local Community development and investment (pg. 26) community engagement, impact assessments, and development programs 413-2 Operations with Community engagement (pg. 26)

communities

significant actual and potential negative impacts on local

415-1 Political contributions No political contributions made in 2023.

APPENDIX 2: INTERNATIONAL COUNCIL ON MINING AND METALS 10 PRINCIPLES

Xanadu considers the International Council on Mining and Metals (ICMM) Sustainable Development Framework to be a 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)
Principle 1 Implement and maintain ethical business practices and sound systems of corporate governance	Xanadu's Code of Conduct and Anti-Bribery and Corruption Policy governs 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.	Business ethics and transparency (pg. 31)
Principle 2 Integrate sustainable development considerations within the corporate decision-making process	Xanadu integrates sustainable development into decision-making. The Sustainability Policy outlines the company's key objectives and commitments. The Safety, Health, and Environment Committee reports to the Board on sustainability matters.	Business ethics and transparency (pg. 31)
Principle 3 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.	Safety, health, and wellbeing (pg. 23) Community engagement (pg. 26) Community development and investment (pg. 26)

ICMM Principle	Our Alignment	Report Section (Page)
Principle 4 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 Policy.	Business ethics and transparency (pg. 31)
Principle 5 Seek continual improvement on our health and safety performance	Xanadu's approach to health and safety is governed by the Board's Safety, Health, and Environment Committee and implemented through the Sustainability Policy and site standards.	Safety, health, and wellbeing (pg. 23)
Principle 6 Seek continual improvement of our environmental performance	Xanadu's environmental performance is governed by the Board's Safety, Health and Environment Committee. The Sustainability Policy requires the company to minimise its environmental footprint.	Environmental management (pg. 19)
Principle 7 Contribute to conservation of biodiversity and integrated approaches to land use planning	Xanadu respects the land and native flora and fauna in which it operates and endeavours to minimise its impact by complying with site environmental standards.	Managing land and biodiversity (pg. 19)
Principle 8 Facilitate and encourage responsible product design, use, re-use, recycling, and disposal of our products	The scoping study, to develop the Kharmagtai Project, uses modern technology to embed in-process safety along with contemporary caving operations and processing systems to ensure maximum re-use of resources, minimising waste production, and disposing of tailings in a responsible manner.	Climate Change (pg. 17)

ICMM Principle	Our Alignment	Report Section (Page)
Principle 9 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. The company prides itself on supporting and contributing to local communities in a way that provides meaningful benefits, as well as long-term development opportunities for their future growth.	Community engagement (pg. 26) Community development and investment (pg. 26)
Principle 10 Implement effective and transparent engagement, communication and independently verified reporting arrangements with our stakeholders	In accordance with the 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.	Stakeholder engagement (pg. 15)

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