



GBR SERIES

MONGOLIA MINING 2025



Economy - Politics - Copper - Precious Metals Critical Minerals - Coal - Technology - Workforce



# Dear Readers,

In the 18 months since GBR's last report on Mongolia's mining industry, numerous changes have taken place across the country. Despite winning re-election in June 2024, Prime Minister Luvsannamsrain Oyun-Erdene resigned less than a year later. This created a level of uncertainty about the role mining will play in Mongolia's development. Industry leaders hope that new Prime Minister Zandanshatar will continue the supportive rhetoric and policy initiatives of his predecessor. Early signs suggest this is already happening. The Gold-3 initiative maintains the momentum for updates to the Minerals Law and efforts to streamline the investment process, emphasizing that Mongolia's top industry remains a priority.

While copper and coal have received most global media attention regarding Mongolia, the nation is actively working to diversify its mineral base and establish itself as a key player in the global energy transition. With a uranium deal signed and a new gold mine about to begin production, Mongolia's mineral wealth is increasingly recognized throughout the mining world.

Alongside various programs and initiatives, modernizing the mining industry is a stated goal of the new government. This involves bringing in new technologies and attracting younger generations to the industry. Past issues with poor community relations and irresponsible practices have tarnished the reputation of mining in Mongolia, and improving standards will be crucial to unlocking the country's mineral potential. This focus is especially evident among the companies providing the services and equipment required to keep Mongolia's mines operational, from multinational OEMs to local consultancy firms.

GBR's Mongolia Mining 2025 examines the trends shaping the industry, featuring interviews with over 50 executives, government officials, and industry leaders. We thank all participants for sharing their insights, with special thanks to the Mongolian National Mining Association and AustCham for their ongoing partnership and support.



Alfonso Tejerina Director and General Manager **Global Business Reports (GBR)** 





2025

Mining

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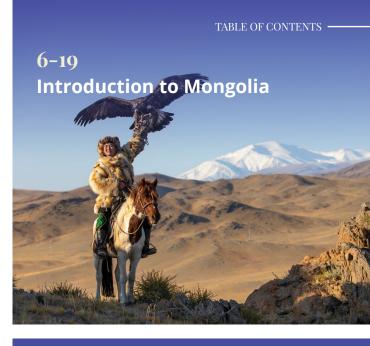
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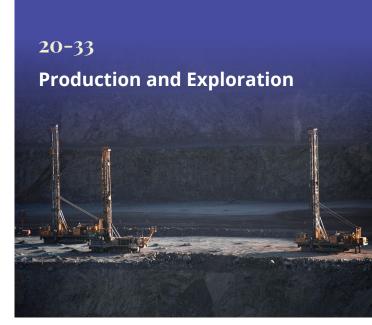
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### A review of Mongolia's political and economic environment

Political transition has been a recurring theme for Mongolia since it became a democratic nation in 1990, and the last 18 months have been no different. Following the parliamentary elections in 2024, pro-mining Prime Minister Luysannamsrain Oyun-Erdene was re-elected, only to be ousted in a vote of no-confidence only a year later, and succeeded by Gombojavyn Zandanshatar.

With a new Prime Minister came a new Minister of Industry and Mineral Resources, Damdinnyam Gongor. In an interview with GBR, Minister Gongor outlined his ambitious plans for the mining industry in the coming years, looking to capitalize on the global mining boom and increased interest in minerals. He revealed: "Although the exploration sector has been relatively slow and almost paused in recent years for many reasons, this will change through the amendments I am submitting to parliament. Mongolia's ambition is to transform from being primarily a supplier of raw materials into a processing country. As a country rich in copper, it is our destiny to add value by, for example, building the smelter as part of Erdenet Copper Mine."

Furthermore, to increase the number of investors coming to Mongolia, the government is looking to accomplish IPOs for two of the largest state-owned companies, Erdenes Tavan Tolgoi and the Erdenet Mining Corporation.

While there are no further elections in the country expected until 2027, the change in leadership has caused many in the mining industry to reevaluate their positions. Tsolmon Adiya, CEO of the Mongolian National Rare Earths Corp (MNREC), said: "Despite the changes in leadership at the top government level, the efforts to repair the country's reputation and attract mining investment in the exploration stage have remained constant, but with little success. This indicates that the Government of Mongolia needs to take decisive actions in changing the investment deterrent policies so that the country remains competitive among investors."

Mining industry leaders hope that Prime Minister Zandanshatar will continue with the supportive rhetoric and policy initiatives of his predecessor. There are already early signs that this is the case. "The newly formed Government has expressed its intention to focus on attracting foreign

investment. The second phase of the Oyu Tolgoi project, cross-border railway construction, and announced mega projects create favorable prospects for future investment," outlined Erdenetuva Ganbold, executive director of the Mongolian National Mining Association (MNMA).

Modernizing the mining industry is also a stated priority of the new government. Previous issues with community relations and irresponsible practices have tarred the image of mining in Mongolia, and improving mining practices will be a key to unlocking the mineral wealth of the country going forward. "There is strong rhetoric from the government around green mining and sustainability, as it is a global priority. However, the biggest barrier is political continuity. With administrations changing every 2-3 years, long-term strategies are often disrupted or reset, which hinders progress," lamented Gantulkhuur Bekhbat, CEO, MMS Engineering.

As part of this effort for modernisation, the government is undertaking an airborne geophysical surveying project to map the entire geology of Mongolia and the first-ever aerial mapping survey of Ulaanbaatar at a 1:1000 scale.

One of the main contractors in this effort is Geosan, a Mongolian company specializing in such surveys. "With significant advancements in technology, the government aims to expand exploration activities to attract foreign investment. However, the newly formed government has announced plans to significantly reduce the budget to address inefficient spending, and next year's exploration budget is now under review, with discussions about substantial cuts underway," revealed Algirmaa Ikhbayar, CEO of Geosan.

Only time will tell how Prime Minister Zandanshatar will reform the mining industry, and until his first parliamentary session in the Autumn, many mining executives are worried about the future prosperity of the industry, particularly if such budget cuts in exploration come to fruition.

One major concern is the government's plan to hold up to 50% of ownership in deposits without providing compensation to private stakeholders. Nyamtseren Bataa, managing partner of law firm Snow Hill Consultancy, detailed: "From a legal perspective, this is problematic because it places

the Government in a position where it shares both the profits and losses of mining projects without bearing the risks involved. The Government should consider alternative approaches, like offering preferred shares or royalty options instead of direct ownership."

Instead of such policies, she believes creating reform and regulation with Mongolia's competitive advantages in mind would be much more beneficial for mining. "Some of these advantages include untapped natural resources, proximity to major economies like China, a young and educated workforce, and a stable democratic system," expanded Bataa.

Working alongside the government to help both develop policies that support mining and to modernize the industry is the MNMA. Through their efforts, Mongolia became the 13th country to adopt the Mining Association of Canada's Towards Sustainable Mining (TSM) initiative. "We have signed an MoU with the Ministry of Industry and Mineral Resources to begin implementing the TSM standard, which is a significant step forward from the 'Responsible Mining Code' developed and implemented by MNMA eight years ago," revealed Erdenetuya Ganbold.

Localized implementation of these standards will be important. As Tsolmon Gonchig, CEO and co-founder of technology consultant TrigTeq, pointed out: "The Canadian standard that the MNMA is promoting includes over 100 years of experience dealing with Indigenous communities. We should localize such frameworks and apply them in a culturally appropriate way. Failing to do so could lead to conflict and disruption."

These political developments form the backdrop for Mongolia's broader economic trajectory, which remains heavily tied to mining.

#### The Economy

Mongolia's economy grew at a comfortable 4.9% in 2024, though a decline from the 7.2% in 2023. This is mainly attributed to the dzud (harsh winter) that heavily affected the agricultural sector. Growth is expected to be 6.6% in 2025, and remain roughly similar in 2026 and 2027 due to the growth in the mining and transportation sectors, according to the World Bank.

This has left Mongolia in a sound es the difficulty of settling trades, not financial position to expand its key industries. "As of June 2025, Mongolia's foreign exchange reserves stood at approximately US\$5.2 billion. The Bank of Mongolia is supporting efforts to increase this figure to US\$5.5 billion. A key element is improving the monetization of revenues from state-owned mining enterprises, particularly Erdenes Mongol," highlighted the governor of the Bank of Mongolia, Bvadran Lkhagvasuren.

A key milestone in the economic development of Mongolia has been the return of US\$ correspondent banking to the country. "This development reflects Mongolia's alignment with international regulatory and anti-money laundering standards and strengthens global confidence in our financial system," continued Lkhagvasuren.

The positive sentiment of the Bank of Mongolia has been echoed throughout the financial sector. Interim CEO of the Mongolian Stock Exchange, Dulguun Basandavaa, shared: "The return of US\$ correspondent banking reduc-

just for commodities but for the capital markets as well. The absence of US\$ correspondent banking in the past has made it difficult for Mongolian companies to engage in trade and capital market activities."

Mining continues to play a starring role in the economy of Mongolia. The European Bank for Reconstruction and Development reported a year-on-year growth of 21.1% in the sector in their 2025 Transition Report, stating that it is responsible for 35% of Mongolia's GDP and 95% of total exports. This is due to a surge in production from the country's largest mine, Oyu Tolgoi, but growth is found across the entire mining value chain.

Mongolia's Trade Development Bank reported that exports have doubled in the last five years, reaching US\$11.8 billion by Q3 2024, and mineral products make up 87.4% of exports in this time period. Furthermore. Around 70% of the Foreign Direct Investment (FDI) in Mongolia is directed into mining. "Mongolia's economy remains heavily



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Bayasgalan Dalaijamts CEO INVESCORE FINANCIAL INSTITUTION



Ovu Tolgoi was the first mine to introduce true international standards to Mongolia, and that had a ripple effect across the industry. Many companies have enhanced their operations to meet the high standards they set.



dependent on the mining sector. The findings emphasize a critical point: Mongolia's long-term economic development hinges on attracting foreign investment and accelerating growth in its mining and geological sectors," attested Yondon Gelen, general director of the publicly owned Erdenet Mining Corporation.

There are many opportunities for investors looking to enter Mongolia. Capital Markets Mongolia (CMM), a research and advisory firm, organizes investment events across the world to connect stakeholders to the Mongolian ecosystem. "One key opportunity for foreign investors is that competition in Mongolia's mining sector is still relatively low. Many mining projects are still in their early stages, which means investors can enter at a very attractive valuation. The government has increasingly shown interest in developing new mining projects, with copper and rare earth elements being particularly high-priority areas," emphasized Zolbayar Enkhbaatar, CEO of CMM.

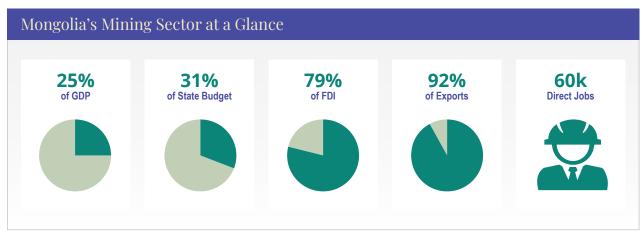
His opinion is shared by many in mining, including the junior companies that will be a vital part of Mongolia moving forward. Gan-Ochir Zunduisuren, managing director of Asian Battery Metals, believes: "Mongolia has been off the radar of international investors for a while now, even though the country has matured. This has led to less capital entering the country. I believe Mongolia is underestimated on a global scale, particularly in the context of the energy

The role mining plays in Mongolia's economy is only expected to grow and evolve in the next few years. "Historically, there has been some skepticism about mining in Mongolia, often due to misunderstandings about its role in the economy. However, with recent changes in government, particularly with the younger generation now in office, there is a shift towards a more development-oriented approach," shared Zorigtsaikhan Tumenzorigt, director of business development of FLS Mongolia, a global leader in mineral processing equipment.

Many of Mongolia's current challenges are not new, and thus, mining is well-prepared to meet them. Mark Gabel, CEO of the equipment provider MSM Group, said: "All challenges in Mongolia are manageable, and there are many opportunities that arise from operating here. 15 years ago, Mongolia's GDP per capita was around US\$1,000, and today this is at US\$6,000. Once the country manages to unlock the full potential of its mineral wealth, this could increase further towards US\$10,000 and beyond."

Additionally, despite the geopolitical situation in the wider world and the effect it has had on many economies, Mongolia could be positioned to benefit and emerge as a major regional player before the end of the decade. "Geopolitical events, especially the tensions between major global powers, present more opportunities for Mongolia's mining industry. As the world increasingly focuses on securing critical minerals, Mongolia's vast reserves place it in a strong position," highlighted Surakhbayar Galsan, CEO of local consultancy company BlackRock Partners.

With vast mineral reserves and a young workforce, Mongolia stands to benefit from global demand for critical minerals, provided political continuity and investor-friendly policies are maintained.



Source: Capital Markets Mongolia



# Damdinnyam Gongor

Minister of Industry and Mineral Resources **GOVERNMENT OF MONGOLIA** 

Although the exploration sector has been relatively slow and almost paused in recent years for many reasons, this will change through the amendments I am submitting to parliament.

#### Can you give an overview of the mining sector's perfor- sible mining not just damaged the environment but also mance and its importance to Mongolia?

Mongolia's mining sector accounts for 95% of total ex- mistakes, a rehabilitation fee must be paid in advance. The ports, 75% of industrial production, and contributes 35% ministry will implement new measures such as speeding to the national GDP. In 2024, our coal mines experienced a booming period, exporting 83 million t; however, prices are declining this year. Therefore, Mongolia is taking measures to adapt to falling prices and intends to offset the declining coal revenue by increasing gold and copper production. Additionally, we are optimistic that copper exports will rise to 1.9 million t this year, up from 1.5 million t in 2024.

#### What are the goals of the Sovereign Wealth Fund?

integrity of the extractive industry in the national economy and the livelihoods of our people. In the coming years, when people see monetized dividends in their named ac- successfully tripled its export volume in just five years. count, which comes from natural resource revenue, they will realize the role of the mining industry in their day-today life and lessen the hostility towards mining activities.

#### How will changes to the Mineral Law and the Foreign Investment Law affect the mining industry?

As a nation of nomadic herders who have worshiped Mother Nature for centuries, it is natural to have different opinions and debates on the pros and cons of the mining Second, Mongolia's ambition is to transform from being industry.

tors to do business in Mongolia. We are going to amend the Mineral Law, which currently involves excessive bureaucracy. At the same time, holding an exploration license requires little effort from companies that are not actively to provide a safe and secure supply of electricity and waexploring, which prevents our nation from exploring our ter. We are going to announce the international tender full potential. In addition, we are planning to allocate parts selection as soon as the feasibility study finishes in the of the royalty fee directly to local governments. Receiving part of the royalty tax from the mining companies will help local governments to solve their priorities and create advantages compared to the non-mining provinces.

#### Can you outline the government's Gold-3 initiative?

We have established a new working group within the ministry to launch the Gold-3 program. Sadly, in the past, several gold mines neglected their rehabilitation. Irrespon-

damaged the reputation of the whole sector. To avoid past up the allocation of licenses and permits, including working with local governments to strengthen support for gold production.

#### How will the Ministry help foster investment and more exploration in mining?

Mongolia has always been open to fair business. For instance, in January, the Mongolian government signed a US\$1.7 billion investment agreement with Orano, the French Nuclear Group, to utilize our uranium resources The Mongolian Sovereign Wealth Fund will enhance the not only for our profit but also to contribute to the global transition to clean energy. Another example is that Mongolia exported 83 million tons of coal in 2024. Our coal sector

#### What are the Government's goals for the mining industry in the coming years?

We will increase funding for geological surveys to discover new resources like Oyu Tolgoi or Erdenet. Although the exploration sector has been relatively slow and almost paused in recent years for many reasons, this will change through the amendments I am submitting to parliament. primarily a supplier of raw materials into a processing As Minister, I am committed to encouraging real inves- country. As a country rich in copper, it is our destiny to add value by building the smelter as part of Erdenet copper mine. On top of the existing railway, expansion of the Erdenet power plant and sewage facilities was completed coming months.

> The second metallurgical project is the construction of a steel smelter based on an iron deposit in the Darkhan province. Moreover, our government is going to accomplish the IPO launch of state-owned companies such as Erdenes Tavan Tolgoi and Erdenet Corporation in the near future. This is the top priority of the cabinet, which will be an incredible opportunity for investors in the capital market.

- INTERVIEW



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Our goal is to align with global trends by gradually introducing internationally recognized responsible mining standards.



# Erdenetuya Ganbold

**Executive Director** 

MONGOLIAN NATIONAL MINING ASSOCIATION (MNMA)

# What have been some of the most important recent developments and initiatives?

The Association has been actively engaged in policy advocacy, international cooperation, and promoting responsible mining initiatives. With the Government of Mongolia declaring industrialization as a priority and restructuring the Ministry of Mining and Heavy Industry into the Ministry of Industry and Mineral Resources, new opportunities have opened to define and implement broader sector policies. Within the framework of the industrialization policy, 14 mega projects are planned for implementation, including the official launch of the strategically significant Gashuunsukhait-Gantsmod cross-border railway project under Mongolia-China cooperation. The Government has also signed an investment agreement with Badrakh Energy and France's Orano Mining, marking an important step toward attracting foreign investment, increasing budget revenues, creating jobs, introducing new technologies, and expanding international cooperation. By opening up opportunities for uranium extraction, Mongolia has made a decision aligned with global trends.

# How would you assess Mongolia as a destination for investment into mining?

Mongolia is endowed with strategically important natural resources, and its mining sector accounts for over 70% of foreign direct investment. While the economy is heavily dependent on

the exports of a few commodities, the country aims to diversify its products, develop domestic processing capabilities, and produce higher-value-added end products. The newly formed Government has expressed its intention to focus on attracting foreign investment. The second phase of the Oyu Tolgoi project, cross-border railway construction, and announced mega projects create favorable prospects for future investment. However, legal and regulatory instability and challenges in achieving social consensus remain key risks for investors. Under such circumstances, adopting international standards and ensuring multi-stakeholder participation can help demonstrate that Mongolia is a reliable, long-term partner for

#### What impact will international partnerships have on Mongolia's mining sector in the coming years?

We are working to develop strategic partnerships with international organizations and industry associations to introduce best practices, standards, and innovations in the mineral resources sector. In China, we signed an MoU with the China Mining Association to enhance investment, share expertise, and boost exports. With Canada, Mongolia became the 13th country to adopt the Mining Association of Canada's Towards Sustainable Mining (TSM) standard, and has begun promoting and localizing it domestically. In Chile, we have established strategic-level cooperation with the Chilean Mining Association, while also exchanging policy information and best practices in responsible mining with other associations worldwide. These efforts are designed to strengthen Mongolia's mining competitiveness, and responsibly bring mineral resources into economic circulation.

# What progress has been made in ensuring that Mongolia's mining industry conducts business responsibly?

We have signed an MoU with the Ministry of Industry and Mineral Resources to begin implementing the TSM standard, which is a significant step forward from the 'Responsible Mining Code' developed and implemented by MNMA eight years ago. We are contributing to the development of the Consolidated Mining Standards Initiative (CMSI) based on TSM. Our efforts include evaluating current levels, tailoring the standard to regional specifics, proposing effective implementation solutions, and actively engaging with the global TSM family.

# Can you outline the MNMA's plans and strategies moving forward?

Our goal is to align with global trends by gradually introducing internationally recognized responsible mining standards. In addition to responsible mining standards, we are actively working to introduce a Responsible Exploration Standard, a crucial step toward managing extraction properly after exploration and establishing a sound basis for community relations.

With the growing use of green energy, advanced technology, and automation across all stages of exploration, mining and processing, workforce preparation is becoming a top priority. We are collaborating with the government and international organizations to balance the supply and demand of skilled professionals. The success of Mongolian engineers in the global mining and mineral sector is an advantage, and we are implementing the Global Network of Mongolia's Mining Minds project to support skills, experience, and knowledge exchange.

As part of Mining Week 2025, we are inviting specialized experts to share international best practices for managing sovereign wealth funds. Since Mongolia has already established such a fund to ensure equitable distribution of resource benefits to all citizens, expert recommendations on effective management will be invaluable. We will also discuss aligning domestic investment criteria with international standards to overcome current challenges.



# Enkhtuvshin Lunden

Vice-Chairperson
AUSTCHAM MONGOLIA

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To advance evidence-based policymaking, we commissioned an independent study to examine how the tax environment—particularly copper-related tariffs—affects the viability and efficiency of copper projects.



# Can you provide an overview of the work of AustCham?

AustCham Mongolia is a non-profit organization committed to representing the interests of Australian and international businesses operating in Mongolia. Established in 2013, it has become a key platform for promoting bilateral trade, investment and cultural exchange between Australia and Mongolia. Today, AustCham Mongolia has more than 60 members, with the majority engaged in the mining sector. As such, the Chamber plays a pivotal role in shaping the industry through advocacy, networking, innovation, and support for CSR initiatives.

We regularly organize industry innovation workshops and a Professional Speaker Series to highlight and support the Mongolian mining sector, while

also creating meaningful collaborations through our activities. For example, to advance evidence-based policymaking, AustCham Mongolia commissioned an independent study by PwC Mongolia LLC to examine how the current tax environment—particularly copper-related tariffs—affects the viability and efficiency of copper projects. The Chamber has actively shared these findings with government officials and industry stakeholders, consistently advocating for a fairer and more supportive policy framework for the copper sector.

# What are some of the challenges currently faced by the members of AustCham?

AustCham Mongolia members, especially in the mining sector, face challenges such as regulatory uncertainty, complex taxation and royalty regimes, currency fluctuations, labor and skills shortages, and the pressure to adopt new technologies while operating sustainably. Misinformation targeting foreign investors also remains a concern.

The Chamber supports its members through advocacy with government and industry stakeholders, as well as by facilitating networking, knowledge sharing and partnerships. We also promote innovation and CSR best practices to strengthen sustainable business operations. For example, AustCham has issued public statements on the Foreign Investment and Taxation Laws, and recently presented research on copper royalties to policymakers and industry leaders to help create a more stable investment environment.

# What is the significance of the connection between Australia and Mongolia, and how can collaboration between the two increase in the years to come?

Australia and Mongolia share strong ties through mining, education and investment, with Australia recognized as a trusted partner in skills development and sustainable resource management. Strengthening collaboration in areas such as renewable energy, technology transfer and vocational training will further deepen economic links and create long-term benefits for both nations.

# What steps need to be taken to unlock it and increase the portfolio of mining projects in the country?

Mongolia's rich geological potential can only be fully unlocked through a stable

and transparent regulatory environment, consistent taxation policies, and streamlined licensing processes that give investors long-term confidence. At the same time, developing local talent, improving infrastructure, and embracing innovation will be critical to attract and sustain new projects. Strengthening collaboration between government, industry and communities will ensure that resource development is both responsible and beneficial for the wider economy, helping Mongolia expand its mining portfolio and remain competitive globally.

#### How important are community relations to the mining industry in Mongolia, and how can companies ensure they are conducting business responsibly?

Community relations are vital to the mining industry in Mongolia, where local trust and acceptance are essential for sustainable, long-term operations. This year alone, we have witnessed several cases and incidents that underscored the importance of dialogue and transparency. In response, AustCham has taken a strong public position to encourage greater community understanding.

I believe companies can ensure responsible business practices by engaging openly with local communities, respecting cultural traditions, investing in social and economic development, and upholding the highest environmental and social standards. Building genuine partnerships with stakeholders not only reduces risks but also creates lasting, shared value for both communities and the industry.

# What are the chamber's goals, plans, and strategies for the coming year?

In the coming year, the Chamber will continue to host its Professional Speakers Series, networking events, and flagship gatherings such as the Gala Ball and Australia Day celebrations, while also actively participating in major industry platforms like Mining Week and MinePro. Our strategy is to grow membership, enhance collaboration with government and industry stakeholders, and provide a stronger voice for our members—particularly in mining, innovation and sustainability. Ultimately, our goal is to ensure AustCham remains a trusted platform for driving investment, knowledge exchange, and long-term partnerships between the two countries.

INTERVIEW INTERVIEW ·



# Byadran Lkhagvasuren

Governor **BANK OF MONGOLIA** 

Mongolia's banking sector is undergoing a major transformation to foster diversified ownership and strengthen corporate governance.

# of Mongolia in the mining industry?

As of June 2025, Mongolia's foreign exchange reserves stood at approximately US\$5.2 billion. The Bank of Mongolia is supporting efforts to increase this figure to US\$5.5 billion. A key element is improving the monetization of revenues from state-owned mining enterprises, particularly Erdenes Mongol LLC.

The government's 'Gold-3' initiative, building on previous gold purchase programs securing around 20 t/y, is a flagship policy backing this goal. The Bank of Mongolia plays a crucial role in promoting responsible and sustainable gold mining in the country. We collaborate with banks, regulators, and international partners to enforce high ESG standards throughout the gold supply chain. A significant achievement in this area is the establishment of regional assay laboratories in ASGM (artisanal and small-scale gold mining) zones, ensuring certified producers receive fair pricing aligned with the to support growing trade and investment. A key milestone London Bullion Market Association benchmarks.

Our commitment to ethical supply chains is further underscored by joining the World Gold Council's 'London Principles' and partnering with the Swiss Better Gold Association and Argor-Heraeus SA. These partnerships enable responsibly mined Mongolian gold to access global jewelry markets, providing financial incentives for local miners.

### What recent reforms are shaping Mongolia's banking

Mongolia's banking sector is undergoing a major transformation. Amendments of the Banking Legislation in 2021, introducing a 20% ownership cap per shareholder and requiring joint-stock company structures, aim to foster diversified ownership and strengthen corporate governance. Despite initial challenges, the compliance deadline has been extended to 2026. Furthermore, the Bank of Mongolia is promoting a more inclusive environment, attracting foreign investment through the 2023 Law on Specialized Investment Banking and aligning the financial regulatory framework with the Basel Framework Pillar 2. Coupled with recent sovereign credit rating upgrades by major agencies, these reforms strengthen resilience and enhance Mongolia's appeal to investors.

#### What are the Bank of Mongolia's macro-financial priorities in the current global environment, and how is the country managing external risks?

Our primary focus remains on maintaining price stability and financial stability. Rising geopolitical tensions and supply transparency.

Can you provide an update on the activities of the Bank chain disruptions challenge cross-border financial flows and trade, introducing greater uncertainty and cost pressures for domestic producers. Mongolia recognizes the strategic importance of deepening economic and financial ties with trading partners and multilateral institutions to build resilience.

> One of the most significant macro-financial trends we are navigating is the continued 'higher-for-longer' interest rate stance adopted by major central banks around the world. This global shift has increased the cost of external borrowing and placed constraints on refinancing options for sovereign issuers. Despite these challenges, Mongolia has demonstrated sound fiscal management and debt strategy, successfully refinancing segments of its sovereign bond portfolio with no major external maturities until 2026.

> Enhancing the country's international financial infrastructure remains one of the priorities. Improving the resilience and efficiency of cross-border payment systems is essential in this regard is the recent re-establishment and expansion of correspondent banking relationships. This development reflects Mongolia's alignment with international regulatory and anti-money laundering standards and strengthens global confidence in our financial system.

#### Can you outline the plans, goals, and strategies of the Bank of Mongolia moving forward?

Looking ahead, the Bank of Mongolia is committed to maintaining price and economic stability while safeguarding the overall soundness of the financial system. While inflationary pressures may persist in the short term, we expect inflation to gradually decline and return to target by early 2026. On the growth front, we expect the economy to expand by around 6% in 2025, supported by a robust recovery in the mining and agricultural sectors. In this context, the Bank will continue to pursue a cautious yet adaptive policy stance. We are closely monitoring both global uncertainties and domestic economic trends, and we remain actively engaged in managing credit growth and external sector risks.

The Bank of Mongolia is committed to supporting foreign investment in the banking sector, advancing the regulatory framework for sustainable and green finance, and strengthening climate risk assessment and stress testing across the financial system. We are placing a strong emphasis on developing payment systems, improving credit information infrastructure, bolstering legal protections for financial consumers, and prioritizing public financial literacy and policy



Dulguun Basandavaa Interim CEO MONGOLIAN STOCK EXCHANGE

#### Could you provide an update on the last 18 months at the Mongolian Stock **Exchange?**

The Mongolian Stock Exchange (MSE) has two main functions: capital markets and commodities. Since lanuary 2023, we have traded over 50 million t of coal and mineral ores. Trading activity surged in December 2023, supported by strong coal prices and increased market participation. However, the nature of trading has changed since then, especially with coal prices in China affecting the market. For 2025, the trading volume has been relatively low compared to the first half of 2024.

#### How do you view the recent return of US\$ correspondent banking?

The return of US\$ correspondent banking is a very positive development for the market. It reduces the difficulty of settling trades, not just for commodities but for the capital markets as well. The absence of US\$ correspondent banking in the past has made it difficult for Mongolian companies to engage in trade and capital market activities.

#### Since the mineral and investment laws have been reviewed, what impact have these changes had?

The amendments to the mineral law and foreign investment law are significant steps forward, but they have not caused any major disruptions. In my view, while the legal amendments may not be groundbreaking, they provide a positive signal to international investors.

#### Could you outline the plans for the growth and expansion of the Mongolian **Stock Exchange?**

In March, we launched a four-phase plan that focuses on the commodity exchange. The first phase has already been completed, which involved amending six regulations and improving the settlement terms for commodities. The second phase focuses on improving the quality of the products. The third phase addresses warehouse management to reduce delivery delays due to weather and geographical challenges. The final phase will introduce commodity futures, allowing traders to hedge their risks.





#### Actions will speak louder than words

Economic mismanagement is something that has persistently troubled Mongolia, and current authorities aim to avoid repeating past mistakes, promising to implement a series of programs and reforms that will help maintain macroeconomic stability, with fiscal consolidation critical to this.

One of the largest changes to the Mongolian legal landscape was the introduction of the sovereign wealth fund, more commonly referred to as the Chinggis Fund. The Fund is composed of three accounts: Future ment has been completing master de-Heritage Fund, Development Fund, and Savings Fund, with revenue from several major mining corporations transferred to it. To date, the Future Heritage Fund has generated around 4 million MNT. The overall Fund's revenues will come from many sources, including a 34% royalty on mineral resources. By 2030, it is predicted that Minerals Law and Foreign the Fund could reach 18 trillion MNT (US\$5 billion).

Despite the clear benefits to citizens, there is still concern that the Fund will be mismanaged by the government, the populous being wary of previous wrongdoings. "For a country like Mongolia, which is highly dependent on commodities like coal and copper, it is important to save and invest the profits wisely when the market is favorable, rather than spending them all immediately," explained Capital Markets Mongolia's CEO, Zolbayar Enkhbaatar.

As part of the government's action plan running from 2024-2028 and Mongolia's Vision 2050, most of the country's FDI will be put towards 14 mestic industry.

Erdenes ITP is in charge of one mega project, building six Industrial Technology Parks (ITPs) to increase the amount of processed products Mongolia exports. Currently, 90% of Mongolia's mining goods and commodities are exported raw. "Our main achievevelopment plans for all six ITPs. These plans outline each park's competitive advantages, resource potential, domestic and international supply chains, and the types of products that can be produced and exported," highlighted Munkh-Ider N., CEO of Erdenes ITP.

### **Investment Law**

Over the past several years, two Mongolian laws in particular have been in the spotlight when it comes to the min-Foreign Investment Law have needed reform for several years, however, parliament has never come to a conclusive should look.

"The government has been preparing and discussing the draft Minerals Law for years without final approval. The lack of a stable legal environment has created uncertainty, and while the government has made efforts to attract investment, the frequent changes make it difficult for foreign investors to plan long-term," explained Nyamtseren Bataa, managing partner of Snow Hill Consultancy.

InvesCore Financial Group (ICFG) has been observing how the proposed changes will affect investor sentiment toward Mongolia. "One of the focuses of the proposed legislation currently under discussion is to make it easier for foreign state-owned companies to invest in Mongolia. This is a step in the right direction, but I believe the government should also explore broader opportunities for private sector companies," outlined Bayasgalan Dalaijamts, CEO of ICFG.

Progress may have been slow, but companies are noticing that the proposed changes are encouraging investors. BlackRock Partners has been working with many different stakeholders in mining to support investment, promote innovative policy, and build mega projects, aimed at boosting do- trust with communities. Surakhbayar Galsan, CEO, stated: "The updates to the Minerals Law and Foreign Investment Law are a positive development. Although progress has been slow, the revisions send a good signal to international investors, indicating that Mongolia is taking steps to improve its regulatory framework."

> However, according to Galsan, words are not enough. He continued: "The real impact will depend on how effectively they are enforced on the ground. The amendments provide a foundation for future improvements, and I am optimistic that over the next few years, we will see tangible progress."

For now, the updates to these laws remain on paper, and this is hurting the mining industry. "There have been some instances where projects and investments have been put on hold due to the uncertainty around these laws. ing industry. The Minerals Law and the Some large transactions have even been canceled as investors remain unsure about the regulatory environment," declared Shaukat Tapia, counagreement on how the updated laws try managing partner of PwC Azerbaijan and Mongolia.

> Together, these reforms, initiatives, and investments set the stage for a more resilient, sustainable, and globally competitive mining sector in Mongolia.

# Regulatory Environment



"While some regulations are too strict, the biggest challenge is the inconsistency between national and local regulations. Even if a project is approved at the national level, local authorities sometimes reject or halt projects."

Sambuudorj Erdenebat, CEO, GLOGEX



"The biggest challenge remains securing the social license to operate and overcoming the policy uncertainty surrounding mining regulations. Despite these obstacles, investors continue to see Mongolia as a promising place to invest due to its rich mineral resources."

Surakhbayar Galsan, CEO, BLACKROCK PARTNERS



"Mongolia has significant potential for new copper discoveries, and this could drastically increase production over the next few decades. However, the tax and licensing policies are currently blocking progress, and these need to be revisited to encourage exploration and investment."

Dagva Myagmasuren, CEO, QUALIFIED MANAGEMENT CONSULTING



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Shaukat Tapia Country Managing Partner PWC AZERBAIJAN AND MONGOLIA

#### Can you provide an update on PwC in Mongolia?

A beneficial development was the Orano uranium deal, which many clients viewed positively, although the sovereign wealth fund law remains a concern. This law has been criticized for being counterintuitive to the investment-friendly environment that many hoped for. Currently, the country is on pause, with the government adjusting to new ministers and officials. Despite these challenges, the rise in commodity prices, particularly gold, has helped miners by improving the viability of previously unprofitable projects.

# What are some of the challenges faced by the mining industry in Mongolia right now?

One significant challenge is the labor shortage. Workers prefer to go abroad, particularly to countries like South Korea, for short-term stints rather than take up jobs in mining. To address the labor shortage, the industry will need to improve the health and safety standards within mining operations.

#### How are Mongolian CEOs approaching ESG issues and green financing?

ESG practices in Mongolia have been steadily advancing, with new legislation and reporting frameworks introduced in the banking and corporate sectors. As a result, we are seeing improved transparency and growing investor interest in sustainable projects. However, despite rising interest in green financing, many companies find it too expensive and complicated due to the fine print in the agreements.

What are the proposed changes to Mongolia's minerals law and foreign investment law, and what impact do you think these will have on the industry? There have been some instances where projects and investments have been put on hold due to the uncertainty around these laws. The new government's proposed changes, including the sovereign wealth fund law and the foreign investment law, have created confusion. We hope the government can provide a more consistent and transparent regulatory framework to help Mongolia remain competitive in the global mining industry.



Nyamtseren
Bataa

Managing Partner

SNOW HILL
CONSULTANCY

# What are some of the challenges that companies face in navigating Mongolia's legal framework?

The Government has been preparing and discussing the draft minerals law for years without final approval. The lack of a stable legal environment has created uncertainty, and while the Government has made efforts to attract investment, the frequent changes make it difficult for foreign investors to plan long-term. Legal reforms like the sovereign wealth fund and tax regulations have also contributed to this uncertainty.

## What is your opinion on the Chinggis Fund and its potential impact on the mining industry?

The sovereign wealth fund law has a noble goal of distributing national wealth to citizens, however, I believe the Government has taken the wrong approach in implementing this. The Government plans to hold up to 50% interest in strategic deposits without providing any compensation in return. Any form of expropriation should not be accepted. From a legal perspective, this is problematic because it places the Government in a position where it shares both the profits and losses of mining projects without bearing the risks involved. If the Government continues with the current approach, it could send a negative signal to investors, as it creates uncertainty around ownership and control of mining projects.

# With the upcoming legislative sessions in Mongolia, what changes are you expecting that will impact mining?

The mining industry is closely watching three major laws: the minerals law, the foreign investment law, and tax regulations. The Government's hesitance to provide tax incentives due to budget deficits is a concern. We are hopeful that the Government will make necessary changes, such as eliminating minimum equity requirements for foreign investors and providing tax incentives that have been critical to the mining sector. Additionally, the government has promised to improve interactions between mining companies and local communities, which is another key area that could benefit from regulatory support.



Munkh-Ider N. CEO ERDENES ITP

#### What is the primary goal of Erdenes ITP?

Around 90% of Mongolia's exports are mining goods and commodities. However, over 90% of those exports are in raw form. This presents one of the greatest challenges for our economy: its vulnerability to global commodity price fluctuations. To stabilize this critical sector, we must shift toward producing value-added, technology-driven, and innovative products. Our mission is to develop a network of Industrial and Technology Parks (ITPs) that will transform raw minerals into value-added products. By building processing facilities, attracting investment, and creating industrial clusters, we aim to anchor long-term economic stability and innovation in Mongolia.

A key focus of our strategy is to develop a solid legal framework that supports both international and domestic investors in the mining sector.

#### What progress has been made on the ITPs so far?

Our main achievement has been completing master development plans for all six ITPs. These plans outline each park's competitive advantages, resource potential, domestic and international supply chains, and the types of products that can be produced and exported.

Alongside planning, we have already started on the critical infrastructure required to make these parks operational. This includes land development, energy and utility design, and logistics corridors to connect production with markets.

### In what way will the proposed legislative updates impact the mining industry and Erdenes ITP?

Key amendments we are pursuing include revisions to the mineral law, particularly the fees associated with mineral use and processing. We aim to offer incentives that make processing and refining within Mongolia more attractive. Our company is working with parliament to amend the Industrial Park Framework Law to improve conditions and offer better options for both domestic and foreign investors. Another critical element is royalty reform. We are advocating for royalties to be levied at earlier stages of production, which would incentivize companies to invest in in-country processing capacity rather than exporting unprocessed minerals.



Ujin Munkhbaatar Mongolia talent

**NETWORK** 

#### What have been the most in-demand services from mining companies?

One major area of demand is recruitment, especially for entry-level and mid-level positions. We developed an HR tech platform that helps companies hire faster and more efficiently. Additionally, the demand for executive-level recruitment is also increasing.

#### Could you explain what the 'Mother is Calling' campaign is?

Mongolia is facing a talent shortage, with many Mongolians leaving the country for opportunities abroad, especially in countries like South Korea, Australia and Japan. In response, we launched the 'Mother is Calling' campaign to attract Mongolians abroad to return and contribute to the country's development. We organized career events in Japan where we shared insights about the Mongolian labor market and job opportunities. The response has been very positive, with many showing interest in returning.

# What do you think are the characteristics of a good mining executive specific to the Mongolian market?

Due to the talent shortage, mining executives in Mongolia need to wear many hats. They must be versatile and capable of filling skill gaps within the company. Additionally, mentoring and preparing the next generation of leaders is critical. Executives must be ready to lead their teams through technological transitions, as the industry moves towards more digital and automated processes.

## Have you noticed a decline in interest in mining careers among young people in Mongolia?

There is a trend where more young people are choosing white-collar jobs such as law, business administration, or IT, and fewer are entering skilled trades or field roles in mining. Universities and colleges in Mongolia have seen a decrease in students interested in technical or vocational fields like mining. However, companies like Transwest Mongolia are addressing this by offering apprenticeship programs that provide hands-on training and a salary while students work.





#### The powerhouses of Mongolian mining

Mongolia's mining industry stands at a pivotal moment. Long anchored by coal, which continues to dominate exports and deliver tangible benefits to citizens, the sector is now experiencing a surge of investment and development in copper and other base metals. From state-run giants upgrading their operations to juniors advancing world-class deposits, the country is positioning itself as a reliable supplier of resources.

#### Coal

It may not be as glamorous as precious metals or as topical as critical minerals, but coal, in both coking and thermal form, remains vital to many economies. Mongolia's coal production is expected to remain steady in 2025 at around



Riad Faour President and CEO **PROGESYS** 

We reached a major milestone at Oyu Tolgoi earlier this year with the start of production underground and recent deliveries at the concentrator. The mine achieved record copper production in March in line with the underground ramp-up plan.

80.5 million t/y in 2025 and coal makes up 65% of Mongolia's exports with an export value of roughly US\$4.2-US\$4.7 billion. The landlocked country has a 7% global share in the global coal market, and with China's demand expected to increase in the coming years, Mongolia is well-positioned with a ready customer on its doorstep.

Despite increased demand from the world's largest coal importer, prices are still expected to drop around 8-9% in 2026 and 2027. Global consumption continues to decline while mines are increasing production, leading to stockpiles and overall cheaper market prices for coking coal.

Within Mongolia, however, the coal industry is thriving, with key developments benefiting the country and its citizens. In 2024, there were large dividend payouts by one of the largest coal producers in Mongolia, Erdenes Tavan Tolgoi. The company previously operated at a deficit but just recently turned a profit of MNT 4.3 million, with the estimated payout around MNT 350,000 per shareholder. Around 90% of Mongolian citizens, including children as young as 12, are shareholders, as well as the government of Mongolia, which owns 73% of the state-run company.

For private companies, while the economics of coal may be more of a concern, the pipeline of new projects is strong. Investors have not been turned away from coal, particularly coking coal, due to its indispensable nature in steel production. "Investor sentiment has evolved over the years. Today, there is a more nuanced view from investors who recognize both Mongolia's geological potential and the operational challenges. For those willing to take a long-term, responsible approach, the opportunity remains compelling," said Samuel Bowles, CEO of coal junior Aspire Mining.

Aspire Mining's Ovoot coking coal project is one of the most promising in Mongolia, with all major technical and permitting milestones complete. The JORC-compliant coal resource and coal reserve estimate position Ovoot as a longlife and high-grade deposit, and the company has focused on building strong ESG fundamentals over the last couple of years. Bowles outlined: "We have expanded our sustainability team and invested in the training and development of our employees to equip them with knowledge of best practices

in this space. We have also deepened our engagement with host communities through more frequent consultations and by the nation's flagship mine, Oyu Tolgoi. Currently, the support of community events. Based on community needs assessments, we have directed social investment toward jobs, training, and local enterprise support."

infrastructure to ensure a smooth transition from exploration to development and eventually production. This has included the Erdenet Rail Terminal, which will connect the conveyor, measuring 8 km. mine to both foreign and domestic markets.

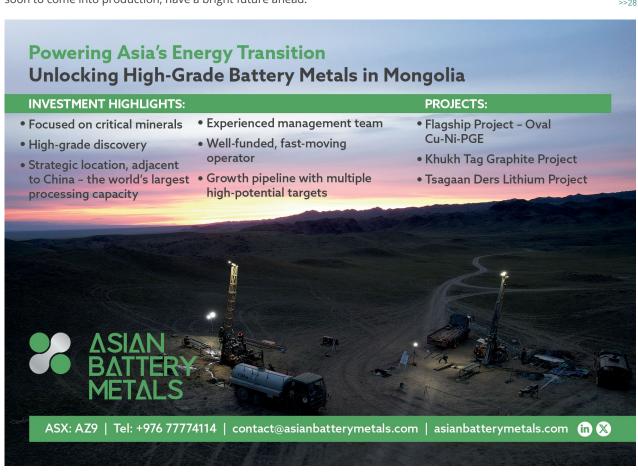
ing the rail terminal itself and infrastructure between the terminal and the mine to support trucking operations. We started with a high-level concept design, combining Western best practices with what is acceptable locally, and included environmentally friendly solutions," shared Will McManus, COO of O2 Mining, a mining services company that has been heavily involved in the development of this infrastructure.

The importance of copper cannot be understated. As the world turns to clean energy solutions, the metal is enjoying increased demand and a reflective increase in price, with analysts predicting that prices in 2025 could reach as high as US\$6.80/lb. As Mongolia is expected to produce roughly 1.7 million t at a market export value of US\$5.2 billion, both soon to come into production, have a bright future ahead.

The copper scene in Mongolia is constantly evolving, led mine is transforming from a project to a full-scale operation. 98% of its expansion is now complete, which will triple the output and build on a 54% production increase in H1 Aspire Mining has also been working on the surrounding 2025 compared to the same period in 2024. Critical infrastructure has been installed in the last 18 months, including two new ventilation shafts and the world's second-largest

This is just the beginning of the transformation at Oyu Tol-"Over the past 18 months, we have sped up work, covergoi, with many more projects and upgrades soon to come. "As we ramp up, we will have four block caves underground, with the first being completed and two more currently being developed concurrently, whilst operations continue. Between 2028 and 2036, we will be producing 500,000 t/y of copper on average," highlighted Deirdré Lingerfelder, the company's CEO, continuing: "This will involve upgrading our concentrator and having two primary crushers underground. We are currently at 1.3 km underground, with the possibility of expanding another 400 m deeper."

As the company looks to move to this next phase, it will also explore expanding its ESG initiatives, leading by example for Mongolia's electrification. "Being in the copper business, which exists to try and electrify the world, we need to ensure we have our own house in order, even in a country that is majority powered by coal-fired power stations. We the headline-grabbing mines of the nation, as well as those are committed to being carbon neutral by 2050. We have



· INTERVIEW



Ovu Tolgoi's journey is one of long-term purpose—delivering value for Mongolia, supporting the energy transition, and leaving a lasting impact for generations.



# Deirdré Lingenfelder

**OYU TOLGOI** 

# updates from Oyu Tolgoi in the last

Ovu Tolgoi is in the midst of a historic transition from a surface mine and mega project to a full-scale, integrated operation. With 98% of the underground expansion complete, we expect a 54% output increase in the first half of 2025 compared to the same period in 2024. Looking ahead, our goal is to produce an average of 500,000 t/y of copper between 2028 and 2036. To enable this, we have delivered critical infrastructure, including an 8 km conveyor (the world's second largest), two new ventilation shafts, and we are finalizing a new underground primary crusher. Technologically, Oyu Tolgoi is among the world's most advanced mines, with a digital twin and an Al-driven asset health monitoring system that allows us to optimize performance and reliability.

#### Can you outline the social and infrastructure programs at Oyu Tolgoi and the surrounding community?

Our 'Creating Prosperity Together' strategy anchors our commitment to Mongolia's development, embedded from the frontline to the Board level. Around 600 of our 800 suppliers are Mongolian, and for three consecutive years, we have been recognized as Mongolia's Top Enterprise, reflecting our taxes, social investments and ESG efforts.

Since 2015, Ovu Tolgoi has contributed US\$70 million through the Gobi Oyu Development Fund and the Oyu Tolgoi

What have been some of the major Catalyst Fund for Khanbogd Development (US\$50 million over five years). These investments have supported over 520 projects, including roads, new schools, kindergartens, and a state-ofthe-art community space.

> Khanbogd has undergone a remarkable transformation in the past three years. Looking ahead, we will expand our focus beyond South Gobi to Ulaanbaatar's ger districts. Our goal is that 50% of employees will be based in Khanbogd, reducing fly-in-fly-out rotation and strengthening family life.

#### What have been some of the most significant sustainability initiatives recently at Oyu Tolgoi?

Transparency is central: we hold open dialogues with civil society organizations three to four times a year to address concerns directly. Water stewardship is critical in South Gobi. We recycle 87% of our water—using four times less than comparable mines globally—and monitor local water alongside herder communities, even though our operational source is separate from theirs.

As a copper producer supporting global electrification, we are committed to becoming carbon neutral by 2050. This includes renewable energy projects, one of the world's largest battery-electric underground fleets, and rehabilitation of degraded land. We have pledged 100 million trees under the President's Billion Trees Initiative. with more than 20 million already

#### How can Mongolia attract more investment to its mining industry?

Mongolia has a strong foundation, but predictability is key. Investors and shareholders look for regulatory stability and timely decision-making. In block cave mining, where upfront capital investment is immense, confidence in governance is essential. Foreign direct investment grows from trust. Transparent, constructive dialogue among companies, governments, the workforce, lenders, and civil society is the cornerstone of building Mongolia's reputation as a mining destination.

Mongolia's demographics are another advantage. It has a young, skilled population and proximity to China, the world's largest copper consumer. Even at peak production, Oyu Tolgoi will only supply about 6% of China's demand, underscoring the opportunity for further investment. Mongolia has also advanced its ESG standards, positioning itself well as requirements rise globally.

#### What is your evaluation of Mongolia as a mining jurisdiction, given its geology and geopolitical position?

Mongolia has exceptional geological potential, especially for critical minerals, and greater exploration could diversify exports beyond copper and coal. The country has also developed strong ties with China, Russia, Australia, UK, US, Canada, India, Japan, and South Korea, creating additional opportunities for exploration partnerships and economic growth.

#### Can you outline the plans for Oyu Tolgoi in the coming years?

As we ramp up production, underground block cave development continues alongside operations. Upgrades to the concentrator and two new underground crushers are advancing. We are already operating 1.3 km underground, with scope to go deeper.

Beyond production, growth will mean smarter ways of working, investing in our people, and strengthening infrastructure and assets. Exploration potential on our licenses is constantly being evaluated. Ultimately, Oyu Tolgoi's journey is one of long-term purpose-delivering value for Mongolia, supporting the energy transition, and leaving a lasting impact for genera-



# Yondon Gelen

General Director **ERDENET MINING** CORPORATION

Mongolia hosts world-class ore deposits, including Oyu Tolgoi and EMC. Deposits of this scale rarely occur in isolation, indicating strong potential for further large-scale discoveries.



#### Can you give a brief history of **Erdenet Mining Corporation?**

Erdenet Mining Corporation (EMC) holds a unique and significant place in Mongolia's industrial history. Before the establishment of the city of Erdenet and the commencement of mining operations, the Erdenet Ovoo deposit was discovered in 1963 by a joint team of Czechoslovakian and Mongolian geologists. The PFS projected a 34-year mine life and the development of a city to support a population of approximately 15,000. Today, we are proud to be in our 47th year of continuous operation, with the city now home to over 150,000 residents.

Over the past decade, EMC has made substantial investments in geological research and exploration. In 2024, Australian consulting firm RPM Global conducted a bankable feasibility study on the confirmed geological resources we have identified. Their findings estimate the Erdenet mine's remaining operational lifespan at 55 years. We have steadily expanded our production capacity. In December 2024, we completed the expansion of our ore processing capacity to 40 mil-

#### future development, and what reforms or initiatives have supported these plans?

First, we aim to develop and utilize our newly discovered mineral resources at low cost and with high profitability. Second, we are upgrading our ore mining and processing technologies. Third, we have planned the construction of a copper concentrate smelting plant. The necessary feasibility studies and legal documentation for this project have already been approved. For its development, EMC has independently allocated US\$68 million in funding.

#### What makes Mongolia well-positioned to attract investment and expand its role in the global mining

Mongolia's long-term economic development hinges on attracting foreign investment and accelerating growth in its mining and geological sectors. Mongolia hosts world-class ore deposits, including Oyu Tolgoi and EMC. Deposits of this scale rarely occur in isolation, indicating strong potential for further large-scale discoveries.

In terms of workforce development, major operations such as Oyu Tolgoi and EMC are deploying some of the most advanced mining technologies available globally. This not only contributes to economic growth but also plays a vital role in building the capacity and expertise of Mongolia's workforce. Mongolian professionals are widely recognized for their ability to learn quickly and adapt to new technologies, systems, and environments—an attribute consistently acknowledged by international partners and industry leaders.

#### How can Mongolia create a more stable and competitive environment to attract foreign investment in mining?

In Mongolia, with its rich nomadic cultural heritage, fostering harmonious and mutually beneficial relations competitiveness.

between herders and mining companies remains a significant challenge. Even after foreign investors obtain exploration licenses, they often encounter local resistance that impedes geological exploration. A stable, reliable, secure, and mutually beneficial legal framework is fundamental to attracting foreign investment. The government is preparing to amend What are EMC's key priorities for the Foreign Investment Law during the upcoming autumn parliamentary session. However, concerns persist that these amendments may not fully address existing deficiencies and could unintentionally introduce new

At the Mongolian Economic Forum, I emphasized the issue of elevated mineral resource royalty rates, especially in the copper sector. Erdenet Mining Corporation's investment capacity, innovation, and development have been adversely impacted by the current 20% royalty rate. This excessive burden significantly undermines Mongolia's competitiveness in attracting foreign investment to its copper industry.

#### Where is EMC headed under its long-term development plan?

At the heart of EMC's strategy is a threefold objective: to continuously expand geological reserves, to efficiently develop existing resources using cost-effective technologies, and to elevate the level of mineral processing by producing value-added final products. To implement this vision, EMC has initiated large-scale investment projects, most notably the development of a comprehensive production and technology park. As part of this initiative, a copper concentrate smelting facility is under development alongside several downstream processing plants. Substantial progress has also been made in establishing critical infrastructure at the site, including water supply systems, power distribution, roadways, and railway

Furthermore, EMC plans to launch an international open tender in the third quarter of this year to select a contractor for the construction of the copper smelting plant. The company's long-term ambition is to manufacture high-value, technology-intensive products from its cathode copper—such as copper wires, cables, nano-copper powder, tubes, and plates—thereby strengthening EMC's global market

INTERVIEW INTERVIEW ·



# Gan-Ochir Zunduisuren

**Managing Director ASIAN BATTERY METALS** 

I see Mongolia as a mature mining jurisdiction, and over the last 15 years, we have implemented all the laws required for the full mining life cycle.



# Colin Moorhead

**Managing Director XANADU MINES\*** 

It is great for Mongolian exploration that a foreign company such as ours can explore a project and then secure a deal.

#### What have been the most significant updates from What is your financing strategy, and what is investor Asian Battery Metals over the last 18 months?

under review. Over the last year, the Oval Ni-Cu-PGE project has established itself as our flagship; it is where we have focused most of our efforts and resources. This is because at the end of 2024 we discovered a mass of sulfide company and the quality of our assets. We will continue at the Oval intrusive project, proving the commercial value to work with this strategy. Working in Mongolia is more of the project with very rich mineral components.

Since the first drill hole, we have intercepted massive sulfides in 7 drill holes in four locations, with two zones close to being connected. This is quite an exciting development. We have drilled deeper recently, confirming the mineralization extends to 193 m below the surface, which is a good indication that the system has the potential to extend at depth. Currently, we are conducting the first electromagnetic surveys on the property, hoping to discover similar targets and prioritize the correct areas of the land.

# have found work well in Mongolia?

We have mostly concentrated on porphyry copper and coal, which rely on larger regional geophysics work to help define resources. The type of mineralization we are now dealing with requires more focused results and thus different types of electromagnetic surveying and interpretation of this data. For example, we used a software called Profus to interpret the downhole electromagnetic survey from Canada. This is a new way to bring this data to life.

#### What is the permitting process like in Mongolia, and how can it be improved?

In the last 20 years, the permitting process across the world has changed dramatically, with a greater focus placed on all the various stakeholders involved in a mining project. Mongolia is no different in this. I see the country as a mature mining jurisdiction, and over the last 15 years, we have implemented all the laws required for the full mining life cycle. The system has been tested and proven over time, showcased by the number of new mining projects coming online in this period. Of course, there are complications along the way, but in my opinion, it is manageable if you are proactive. resource drilling and potentially a scoping study.

# sentiment like towards juniors in Mongolia?

Currently, our Khukh Tag and Tsagaan Ders projects are Over the last few years, there is no doubt that capital market sentiment toward juniors has not been the easiest. However, over the last 12 months, we have conducted two capital raises, demonstrating the resilience of our cost-efficient than in other jurisdictions, meaning we can accomplish more for every dollar we raise. Asian Battery Metals is also very agile when conducting our exploration, which has reduced our overall administrative costs.

Mongolia has been off the radar of international investors for a while now, even though the country has matured. This has led to less capital entering the country from capital markets. I believe the country is underestimated on a global scale, particularly in the context of the energy transition. We have great geological potential, as showcased by Oyu Tolgoi being one of the only Are there any particular exploration technologies you major copper projects coming into full production in the last 10 years.

#### Where should the attention of the new government be focused to improve the mining industry?

Globally, when commodity prices rise, states often look to raise rents and royalties on mining operations. I believe that in order to make Mongolia competitive on the world stage, the government should look to adopt a counter-cyclical approach, meaning that when commodity prices rise, we look for a larger market share rather than higher state revenue. This would entail a sophisticated and wellthought-out royalty scheme and also long-term stable support of policy.

# What are your plans for Asian Battery Metals for the

Our strategic goal for our upcoming exploration is to show the full potential of the mineral system at the Oval project. We have shown that we have a high-grade system, but we now need to address the quantity of the resource. Once this is defined, we hope that in 2026 we will move toward

### What is the latest news and updates from Xanadu son included geochemistry and geophysics to identify tar-

Approximately 6 months ago, we completed the Pre-Feasibility Study for our Kharmagtai project alongside our partpletion of our scoping study, gaining a 50% share in the Kharmagtai JV, as well as A\$12.8 million for 19.4% interest in the company. Our PFS described a large open-pit copper-gold project, which will produce approximately 75,000 30 years. The project, therefore, has very promising finanlast half year to Zijin.

for the project, which is a pressing issue in the South Gobi. The deposit remains open at depth, and there exists significant potential for a discovery below the studied open pit, backing of Zijin to develop the mine cooperatively. allowing for a potential underground future.

# at Kharmagtai?

I believe you only get one chance to make a first impression, and therefore, exploration companies like us need be authentic, be clear in your plans, and back your words the country. up with actions. Xanadu Mines has done a very good job at this through our in-country management, and a lot of What improvements can be made to make Mongolia effort has been put into maintaining good relations with local communities. Gaining a legal license to operate is I believe the tender system needs improvement, because usually straightforward, but a social license is just as imit is difficult to raise money to buy and secure land. Also, portant and is integral to moving a project forward.

#### What progress has been made on the Red Mountain and Sant Tolgoi projects?

large copper-gold anomaly that extends beyond 13 km. It **years?** differs from Kharmagtai, as it is a series of smaller, higher-grade targets rather than large bulk-tonnage. About a currently at 92% ownership, they can now begin to shape year ago, we conducted some drilling on the property, and the company in their vision. The next step for Kharmagtai there are plans to follow up on that in the rest of 2025.

Sant Tolgoi is a new project for Xanadu Mines in the northwest of Mongolia. It is a magmatic nickel-copper system with significant prospectivity, but has a very short field season due to the weather and altitude. Our last field sea- holders involved.

gets, which we will explore further in the coming summers, with a maiden drilling program.

#### ner Zijin. Zijin invested US\$35 million following the com- How will the Bastion takeover bid affect Xanadu Mines and the Kharmagtai project?

Xanadu Mines is a small, Australian-listed exploration company with a business focus on finding copper-gold deposits, particularly in Mongolia. Our strategy was always t/y of copper and 165,000 oz/y of gold for the best part of to drill the resource, conduct the scoping study, use this to attract a funding partner, and then produce the PFS to cials and has allowed us to pass over operations for the progress through permitting. Our shareholders are looking to have a liquidity event and move on to the next dis-On the ground, we have been exploring water sources covery. The transaction with Bastion will replace the current management of the Kharmagtai project with a strong operational and political positioning in Mongolia, with the

The Bastion takeover will be good for Kharmagtai, as the project will have both significant Mongolian ownership, as How is Xanadu Mines managing community relations well as partnering with Zijin, who have extensive experience developing large mines. It is also great for Mongolian exploration that a foreign company such as ours can explore a project and then secure a deal. Hopefully, this to put a lot of effort into this. The best way to do this is to leads to an increased level of foreign entities investing in

### more attractive for junior companies?

being able to advance and then trade properties with a clear understanding of the tax system would benefit projects at all stages.

### Red Mountain is an advanced exploration project with a Looking ahead, what are your plans for the coming

A lot depends on the Bastion takeover bid. Given they are is clearly the Detailed Environmental Impact Assessment (DEIA) and Feasibility Study, which will support a confident investment decision. This decision totals about US\$1 billion, and if it is made, it will be a net positive for all stake-

\*Xanadu Mines was acquired by Bastion Mining, GBR SERIES | MONGOLIA MINING 2025 a subsidiary of Boroo, in July 2025.

INTERVIEW ·



**Uchral Otgonbaatar** CEO **MONGOLIAN COPPER** PROSPECTING GROUP (MCPG)



Openness, honest speech, and open, competitive access for all around the globe to licenses are at the top of the list of what foreign investors desire.



committed 100 million trees as part ing and processing technologies. Third,

planted," added Lingerfelder.

Nationalized company Erdenet Mining Corporation, which owns the Erdenet copper mine, has long been at the heart of change in Mongolia. Czechoslovakian and Mongolian geologists discovered the deposit in 1953, following now has an estimated resource life of 55 years, and the city has a population of 97,000, signifying that Erdenet will be a part of Mongolia's mining and social landscape for years to come.

been undertaken by the company to upgrade the mine and its facilities. In December 2024, the ore processing goal is, firstly to develop and utilize our

of the President's Billion Trees initia- we have planned the construction of tive, and in 2025, we reached a total of a copper concentrate smelting plant 20 million trees and trees equivalent and for its development, EMC has independently allocated US\$68 million in funding," explained Yondon Gelen, general director of the company.

A further 2 million t/y is expected to be gained from these upgrades by 2026, and the long-term development plan has been officially approved by a which the city of Erdenet emerged. It government bill that covers operations until 2031. Gelen expanded: "At the heart of EMC's strategy is a threefold objective: to continuously expand geological reserves, to efficiently develop existing resources using cost-effective To prepare for this, lots of work has technologies, and to elevate the level of mineral processing by producing value-added final products."

The junior mining copper scene capacity of their mill was expanded to is also experiencing changing tides. 38 million t/y with one SAG mill and Xanadu Mines completed the PFS on two ball mills. "Our future work's main its Kharmagtai project alongside its strategic partner Zijin. This proved that newly discovered mineral resources the project has enormous potential. "It at low cost and with high profitability. is a large project that could become Second, we are upgrading our ore min- one of the 10 biggest copper mines in the world, so there were many complex planning considerations," said Julien Lawrence, managing director of O2 Mining, which was engaged on the project as the study manager for nearly two years.

> As described by the PFS, it will be a large open-pit copper-gold project, producing around 75,000 t/y of copper and 165,000 oz/y of gold. Given the current commodity prices of these two metals, the project has promising financials. Whilst day-to-day operations were passed over to Zijin following the study, Xanadu Mines continues to assist the Chinese mining major with in-country support, governmental relations, and aiding in conducting environmental studies.

> The changing landscape of Mongolia's copper sector took another turn in 2025, with Bastion Minerals launching a takeover bid for Xanadu Mines. Bastion's bid reflects rising investor appetite for long-life copper assets. "The Bastion takeover will be good for Kharmagtai as the project will have both significant Mongolian ownership, as well as partnering with Zijin, who have extensive experience developing large mines. It is also great for Mongolian exploration that a foreign compa

ny such as ours can explore a project and then secure a deal. Hopefully, this leads to an increased level of foreign entities investing in the country," emphasized Colin Moorehead, managing director of Xanadu Mines.

Moorehead continued: "The next step for Kharmagtai is the Detailed Environmental Impact Assessment and Feasibility Study, which will address any remaining fiscal questions and support a confident investment decision. This decision totals about US\$1 billion, and if it is made, it will be a net positive for all stakeholders involved."

For Asian Battery Metals, the Oval Ni-Cu-PGE project has established itself as its flagship exploration property, with most of the company's efforts and resources focused there. At the end of 2024, the company discovered a mass of sulfide, proving the commercial viability of the project and its rich mineral components. "We have drilled deeper recently, confirming the mineralization extends to 193 m below the surface, which is a good indication that the system has the potential to extend at depth. Currently, we are conducting the first electromagnetic surveys on the property, hoping to discover similar targets and prioritize the correct areas of the land," revealed Gan-Ochir Zunduisuren, managing director of Asian Battery Metals.

The company is bullish on the advantages of operating in Mongolia. "Working in Mongolia is more cost-efficient than in other jurisdictions, meaning we can accomplish more for every dollar we raise. Asian Battery Metals is also very agile when conducting our exploration, which has reduced our overall administrative costs," added Zunduisuren.

Being more cost-efficient will help more juniors enter the market and suggests that even in six to 12 months, the project pipeline for Mongolia's copper hopefuls may look very different from what it does today.

A newer entrant into the copper space is the Mongolian Copper Prospecting Group. Despite only being established in 2021, the company has ambitious plans for its 11 exploration licenses and 2 mining licenses. The company recently completed detailed geological surveys of one of its exploration properties, and has no plans of stopping anytime soon. "Our role in the global supply chain will only grow. But opportunity is not sufficient. We need to show the world that we can develop these resources responsibly. If we do it right, Mongolia can become a reliable partner in the arena of critical minerals, not just in Asia, but globally," discussed Uchral Otgonbaatar, CEO.

The company also has plans to go international, seeking a listing likely on Canada's TSX Venture Exchange. Access to the world's markets has been vital to Mongolian junior companies in the past, marking them as dedicated to transparency, international standards, and strong per-

The breadth of projects underway in Mongolia reflects a sector in transformation. The combination of geological potential, cost advantages, and improving infrastructure is drawing interest from investors and strategic partners alike. If companies continue to balance growth with responsible practices and strong local engagement, the nation could cement its role as a key player in supplying the raw materials that power modern economies and tomorrow's clean-energy future.



# Samuel Bowles **ASPIRE MINING**

#### Could you provide us with an update on the progress made by Aspire Mining?

Over the past 18 months, Aspire Mining has made significant strides in advancing the Ovoot Coking Coal Project, our flagship asset in northern Mongolia. We have completed major technical and permitting milestones, including revised JORC-compliant Coal Resource and Coal Reserve estimates.

We also advanced key infrastructure planning, notably around processing, road transportation and rail logistics, whilst continuing to build local capabilities. Importantly, we have strengthened our engagement with local communities and stakeholders, ensuring that our development approach aligns with both Mongolian priorities and international expectations.

#### What do you think the focus of the new government should be to bring more projects online?

The new government has a real opportunity to catalyze responsible mining-led growth. To do that, we believe the focus should be on three areas: regulatory clarity, permitting efficiency, and infrastructure investment. Streamlining and depoliticizing the permitting process would go a long way to reducing investor uncertainty. At the same time, clear expectations around environmental and social performance, consistently applied, will help build community trust and attract long-term capital. Investment in road, rail, and power infrastructure, especially through public-private partnerships, can also unlock value from underdeveloped or stranded assets across the country.

#### What are your key plans and milestones for Aspire Mining in the coming years?

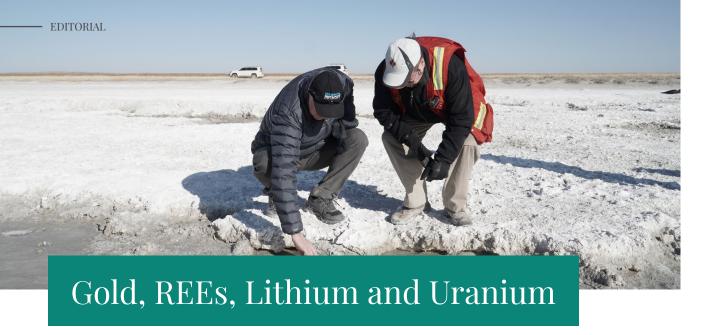
Our priority is transitioning the Ovoot Project into construction and production readiness, with first production of washed 'fat' coking coal targeted by the end of 2026. Key milestones over this period include the construction of the Coal Handling and Preparation Plant (CHPP) and the Erdenet Rail Terminal (ERT), with the contract award for these major infrastructure components expected imminently. In parallel, we will begin construction of a dual-purpose road that will benefit local communities.



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#### Mongolia's new resource map

Reliance on mining to prop up any nation's economy is a risk, and reliance on only a couple of metals and resources compounds this. With the cyclical nature of commodity prices and fluctuating demand in Mongolia's key markets. the Land of the Eternal Blue Sky is looking to diversify its portfolio of mining projects. No one doubts its rich geology, but the challenge lies in translating this potential into commercially viable projects. By attracting global investors, improving ESG standards and deploying new technologies, Mongolia is positioning itself as a competitive supplier of gold, rare earth elements, lithium and uranium to meet tomorrow's industrial and energy needs.

#### Gold

To increase Mongolia's foreign exchange reserves, ease pressure on the balance of payments and the tugrug exchange rate, and ensure macroeconomic stability, the Government of Mongolia has decided to launch the 'Gold-3' campaign nationwide.

The government expects that the campaign will increase the amount of gold sold to the Bank of Mongolia by 8 t/y. At current prices of around US\$3,300/oz, the initiative could mean over US\$900 million in extra cash flow for companies. CEO of Mongolian consultancy firm Glogex, Sambuudori Erdenebat, explained: "The Gold-3 initiative offers financial support for gold projects and opens up licenses to make it easier for local companies to operate. While this is a positive step for the gold sector, it remains demand due to Al and tech advancements. to be seen whether it will lead to increased foreign investment."

The plan aims to activate 82 untapped hard rock deposits, initiating production in areas previously protected under the 'Long Named Law'. "With the decline in coal prices, the government has started discussing programs like the Gold-3'- initiative, which needs a strong ESG focus. There is concern from the community about potential abuse in these programs, and we are helping companies navigate these challenges and communicate with the community," outlined Dagva Myagmasuren, CEO of Qualified Management Consulting (QMC).

As these new projects get up and running over the next few years, there is one company with a head start. Erdene Resource Development discovered the Khundii Minerals District a decade ago, which hosts the Bayan Khundii, Altan Nar and Ulaan gold deposits, and the Zuun Mod molybdenum-copper porphyry complex. Construction of the Bayan Khundii gold project was completed in mid-2025, with production expected to begin in Q3.

"The mine will have an annualized production of approximately 85,000 oz/y AuEg once commercial production commences later in 2025. We will also seek to extend and expand Bayan Khundii by growing the project's reserves. Higher gold prices will allow us to expand Bayan Khundii's pits to capture material that was marginal in previous studies," said Peter Akerley, president of Erdene Resource

The rising gold price has buoyed the sector in Mongolia, with a new mine about to come online and potentially dozens of exploration projects activated in the near future. "From a gold perspective, given the decline in the US\$ value and geopolitical uncertainty, the outlook is stronger than ever," continued Akerley.

#### Lithium and REEs

Mongolia may not be known for its lithium reserves, but despite unfavorable market conditions, companies are advancing with their projects, anticipating a resurgence in

Urgakh Naran is ION Energy's flagship asset. Drilling is set to start there in September 2025, after the company signed a JV with SureFQ, an Asian company with proven direct lithium extraction technology (DLE). "Just five years ago, DLE was considered impractical, but today it is a proven method, particularly in countries like China. DLE is more environmentally friendly than traditional methods like evaporation ponds, and it has a lower capital expenditure. With Urgakh Naran, the chemistry is complex, but the modular DLE technology provided by our partner is perfectly suited for the site's conditions," said Ali Haji, CEO of ION Energy.

The benefits of DLE are yet to be rates will not cover the future demand fully explored on a truly global scale, but all indicators point to it being the future of lithium extraction. "DLE defiwill likely play a bigger role in how lithium reaches the market," predicted Alan Langridge, senior vice president, mining and minerals, Eastern Region (APAC and EMEA) for engineering consultants Wood.

Wood was engaged on the Mongolian National Rare Earth Corp's (MN-REC) Khalzan Buregtei (KB) project. The REE market is growing in Mongolia, particularly as certain countries move away from China as their chosen supplier. "The United States has shown interest in Mongolia's critical minerals, especially in light of China's dominance in the sector. Mongolia's potential to supply REEs and other minerals could help diversify US supply chains," observed Nyamtseren Bataa of Snow Hill Consultancy.

MNREC has completed pilot testing on the KB project, finalizing the processes and pathways using modern technology, including SGS' Canadian laboratory. "The permanent magnet market has created quite a positive outlook for REEs. The NdPr market has been relatively stable, and dysprosium and terbium have been in demand for some time. On the other hand, REEs are a niche product with global competition; therefore, timing to enter the market is of the utmost importance," attested Tsolmon Adiya, CEO of MNREC.

The company will look to complete its feasibility study over the next 12 months, drawing a clear picture towards development for KB.

#### Uranium

On the January 17th 2025, Orano Mining, Badrakh Energy's major shareholder signed a historic investment agreement with the government Mongolia, allowing the company to being active development by the end of 2025.

As half of the 400 nuclear power plants expected to be produced in the next 25 years will be located in China, a development of this magnitude in Mongolia has not gone unnoticed on the global mining scene and is perfectly timed to meet increasing global demand. "Current uranium extraction

for nuclear fuel. Starting from 2030 onward, existing mines will not be able to meet the full demand for the nitely has a place, and over time, DLE market. Therefore, the industrial mining development of Zuuvch Ovoo will start at the right time," shared Coralie Prin, CEO of Badrakh Energy.

> With gold projects gaining momentum, REE development advancing, uranium deals being signed and lithium exploration poised to benefit from new extraction technologies, the country is laying the groundwork for a more balanced mining sector. Mongolia is moving beyond its traditional dependence on coal and copper toward a broader resource base that can better withstand commodity cycles. Whether these opportunities translate into sustainable investment and long-term value will depend on regulatory clarity, community engagement, and consistent policy support. If these pieces fall into place, Mongolia could emerge as a strategic mining hub for both regional and global markets over the coming decade.



Ali Haii CEO **ION ENERGY** 



Commodities are cyclical, and downturns in prices often make it difficult to secure investments. However, it is critical to keep moving forward during these times to capitalize on the eventual recovery.





MNREC's Khalzan Buregtei project is one of Mongolia's largest heavy rare earth ventures, with a JORC-compliant resource estimate and ongoing feasibility work. The project is advancing toward the Definitive Feasibility Study (DFS).

Once in operation, Khalzan Buregtei will supply high-value rare earth elements (Nd, Pr, Dy, Tb) to the global market.

With strong government backing and a strategic location, the project is positioned as a leading player in Mongolia's rare earth industry. MNREC is committed to sustainability, ESG standards, and local community engagement.





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INTERVIEW



# Tsolmon Adiya

CEO

#### MONGOLIAN NATIONAL RARE EARTH CORP (MNREC)



We will continue to pursue our ambition to develop a flagship REE project in Mongolia.

### What have been the most significant updates at MN- tion rights and security of mining rights, is critical. Thirdly,

Buregtei (KB) project, finalizing the processing and refining lt would be best if the topic were mandatory to learn at the pathways using modern technology. The Phase 1 mineral processing stage was finished about a month ago, and we are now proceeding to Phase 2, the concentrate refining stage. The pilot test work will be completed early next year. mentation to occur at the Bagh and Soum levels.

Secondly, we are working to finish our feasibility study to fully envision the scale of the project and its economic viability throughout its mine life. Thirdly, we have taken steps forward in our relationship with the local community and their knowledge of REEs to allow us to move KB towards development.

### How do you view the REE market and MNREC's position can easily observe that many foreign and domestic inves-

which can be used in permanent magnets. The permanent awaiting the policies to become more trustworthy and famagnet market has meant quite a positive outlook for REEs over the coming years. The NdPr market has been relatively stable, and whilst dysprosium and terbium have been in serious demand for some time.

On the other hand, REEs are a niche product with global competition; therefore, timing to enter the market is of the utmost importance.

#### What is Mongolia's position in the global REE market?

We are positioned well in terms of responsible mineral product sourcing. Mongolia has extensive experience with large-scale mining with well-set-up institutions that oversee it. On top of that, society is very active in the mining space in terms of the environmental footprint of mining. There are many CSOs and NGOs that are working to make mining better for all Mongolians. With that, there is a limited space to be irresponsible in the industry.

However, the country continues to be challenged in expanding its energy capacity, especially in renewables.

#### Where should the government focus its efforts to bolster the mining industry in Mongolia?

Firstly, the continuation of policies and their effective implementation are critical for our sector. Secondly, the sector-wide investment climate, particularly access to explora-

institutional capacity building is crucial. Not just for the A major milestone was the pilot testing for the Khalzan mining and environment, but at the local governance level. primary level of local government, so they can better implement the policies at the Bagh, Soum, and Aimag levels. It is very common for the largest gap in the policy imple-

Despite the changes in leadership at the top government level, the efforts toward reputation saving and attracting mining investment in the exploration stage have remained constant, but with little success. This indicates that the Government of Mongolia needs to take decisive actions in changing the investment deterrent policies. If you look at the past 10-15 years of history of Mongolian Mining, you tors have plateaued or ceased their investment towards KB has a combination of heavy and light earths, both of their Mongolian assets, now holding them in suspension,

#### How can Mongolia overcome its challenges in energy access?

KB is located in western Mongolia, a region that is independent from the Russian energy system. The existing transmission lines are capped and outdated for renewables. However, there is potential to generate renewable energy there and there is land to build the infrastructure. Currently, a semi-large-scale hydroelectric project is being built, highlighting the region's potential, which will help pave the way for many green energy sources. Hopefully, these will be able to provide a reliable and sizeable amount of energy to the mining projects of the region.

#### What are your plans for MNREC in the next 12 months?

We will continue to pursue our ambition to develop a flagship REE project in Mongolia. Our feasibility study will be finalized in the next 12 months, drawing a clear picture towards the development of KB. From there, we will continue towards the detailed engineering and the construction stages. We will continue to engage with the community in preparation for physical construction. With the megaprojects planned by the government, their interest in REEs is only increasing.



Coralie **CEO** BADRAKH ENERGY

#### Can you provide an update on Badrakh Energy over the last 18 months?

The active development phase of the Zuuvch Ovoo mine is expected to start before the end of the year, as soon as all administrative authorizations are granted. In parallel, Badrakh Energy intends to restart its pilot plant in order to start production as soon as possible and train the future workforce. Since the beginning of 2025, the company's teams intensively worked on the basic design of the Zuuvch Ovoo project, including the identification and selection of local suppliers and the launch of mining exploration works with domestic drilling companies. Additionally, after getting all the required authorizations, we started a delineation drilling campaign on the Zuuvch Ovoo deposit last July. It is designed to complete the database of geological information in order to qualify the underground uranium resources to a better level. The new teams we recruited will be accompanying this construction phase with 100 km of asphalt road and 100 km of electrical road, and a camp for our employees and subcontractors.

#### How will Badrakh Energy ensure that development will be conducted sustainably?

Badrakh Energy is planning to extract natural uranium using ISR technology. ISR has no creation of open pits, waste dumps, or tailings. There has been minimal use of heavy equipment, no haulage road, minimal noise, dust, and diesel emissions. There is no blasting, no earth-moving, no ore-crushing, therefore no dust is generated. Plus, the water consumption is about three to five times less than usual mining technologies.

#### How would you assess Mongolia as a mining jurisdiction and country to operate in?

Our project has been validated just in time to feed the demand from the nuclear energy producers, which is rising quickly. The successful start of our construction and later on, of our operations will be the real sign for the foreign mining community that the mining business is rising again.



Peter Akerley President ERDENE RESOURCE DEVELOPMENT

#### Could you provide an overview of Erdene Resource Development?

In 2002, Erdene Resource Development was launched privately, and in 2004, we were listed publicly on the Toronto Stock Exchange. Since then, our company has been the leading regional explorer in Mongolia, focusing on discovering large, high-grade copper and gold deposits. Approximately 10 years ago, we discovered the Khundii Minerals District in southwest Mongolia, which hosts the Bayan Khundii, Altan Nar and Ulaan gold deposits and the Zuun Mod molybdenum-copper porphyry complex. Construction of the Bayan Khundii gold project was completed in mid-2025, and gold production is set to begin in September 2025.

#### What are your goals for the upcoming year?

The development of Bayan Khundii is our major focus, with initial production scheduled to begin in Q3 2025 and annualized production of approximately 85,000 oz/y once commercial production commences later in 2025.. We will also seek to grow the project's reserves.

Beyond Bayan Khundii, the Dark Horse discovery and the Ulaan deposit, both nearby, remain underexplored and are likely to provide additional ore feed to the Bayan Khundii processing plant. Additionally, we have the Altan Nar project, located 16 km north of Bayan Khundii, which contains over 500,000 oz of gold equivalent, which remains open along strike and at depth. By the latter part of this decade, we envision two mines under production, generating up to 150,000 oz/y, while continuing to explore a region that had never before seen modern exploration.

### How do you view the evolution of Mongolia's mining laws and investment

To attract investment in the first instance, prospectors need a well-defined process to obtain exploration and mining licenses. Over the past few years, this process has become more complex with exploration licenses transitioning from a first-come-first-serve system to a tender process, limiting the number of available exploration areas. Opening more land for exploration should attract exploration capital.





#### Modernizing the Mongolian mining industry

industry emerging over the past two decades. But this does not mean that mining in Mongolia lacks sophistication. In fact, starting later has allowed many mining companies to explore technologies that have already been proven elsewhere, avoiding costly trial and error, and carefully select those most suitable for their operations. The same can also be said for equipment companies, which enter Mongolia with the latest tools, trucks, and automation solutions. This combination of fresh investment, global expertise, and a culture open to experimentation is accelerating modernization across the sector, putting Mongolia on track to become one of Asia's most technologically agile mining jurisdictions.

The MSM Group, which supplies equipment from world-leading suppliers to Mongolia's mining industry, was



Erdembayar Sukhee **Managing Director** ABB MONGOLIA

We are currently working on an e-house for an electric truck fast charging station, and have found that global mining companies like Rio Tinto are very receptive to such solutions.

Mongolia is still a relatively young country for mining, the acquired by the Jebsen & Jessen in 2025. This has given the company greater financial means to invest in modern and technologically advanced equipment.

> Mark Gabel, CEO of MSM Group, believes that Mongolia is more open to technology and modernity than other jurisdictions: "In general, Mongolian mining companies are open to trying new things. While in other jurisdictions we are seeing a trend towards standardization, the industry must adapt and try new things, which I think is happening in Oyu Tolgoi and other mining companies in Mongolia."

> On the back of the recent takeover and 20% growth in H1 2025, MSM is opening a new branch in Khanbogd to better serve the South Gobi region, with a five-year plan to double both its team and revenue.

> This willingness to adopt technology has been witnessed in all areas of the equipment sector. MMD Green Mining Solutions supply complete crushing stations and modern core sizer technologies, recently completing a project from Khan Altai Resources. "We are seeing strong interest from Mongolian mining companies in modernizing their operations. There is a growing appetite for solutions that improve energy efficiency, reduce environmental impact, and extend equipment life," explained Jonathan Cain, managing director for MMD Green Mining Solutions.

> By being open to technology, Mongolia is catching the eye of multinational companies looking to expand into new markets. Cain continued: "From our experience, the government and industry stakeholders are showing a clear willingness to engage, modernize, and welcome international expertise. For MMD, Mongolia represents a market with significant long-term potential, especially as the sector moves toward more sustainable and technology-driven operations."

> Willing adoption of technology is something that is not common across the entirety of the mining world, and some in the industry believe Mongolia's advantage lies in its culture. "Mongolian companies tend to be early adopters of technology compared to some other countries. This willingness comes from a nomadic heritage that encourages flexibility and openness to trying new things," claimed Enkhdelger Enkhbold, sales director of Barloworld Mongolia.

of Caterpillar equipment in Mongolia. The renowned OEM is celebrating its 100th anniversary this year and has constantly introduced state-of-the-art equipment to Mongolia since it entered the market in 1993.

As well as cultural heritage, Mongolia's neighbor to the south, China, is further helping the country to adapt to the modern way of mining, bringing technology and new equipment applied to Mongolia's mining projects, over the border. "The country has it may be a while until some technolseen rapid developments, partly driven by China's growing mining industry. As a result, Mongolia is in a prime position to adopt new technologies. However, the rate of adoption has been uneven," discussed Paul Boon, CEO of Akaliko, which provides hydraulic cylinders to the mining industry, adding: "The growing influence of Chinese companies, along with their expertise in electric technologies, autonomous systems, and equipment development, is pushing Mongolia's mining industry forward."

"Five years ago, most of our equipment came from Australia, the US and Europe. Now, around 30% is sourced from China, a shift driven by competitive pricing and solid quality. More importantly, demand for smart mining technology is rising, including driverless trucks, automated drills, and data-driven equipment," said Niislel Dangaasuren, TSBON's managing director, a multi-faceted equipment provider branching out into engineering services.

Erdene-Ochir Nyamdori, CEO of KARS, remarked: "Initially, companies focused on low-cost solutions, often relying on cheaper, sometimes lower-quality Chinese equipment. However, now, the emphasis has shifted toward safety and quality."

KARS recently completed a two-year project at Oyu Tolgoi and Erdenes Tavan Tolgoi, in which the latter saw them move 36 million t of coal using their equipment, equating to almost 60% of Mongolia's total coal exports.

Most technologies are imported into the country, but Mongolian equipment companies are adapting these to the specific conditions of the country. Its diverse and often harsh climate means that not all technology can be applied straight away. "To

Barloworld is the official distributor adapt to the cold weather, we equip our machines with cold-weather starting kits, proper lubricants, and heaters to maintain oils at the necessary temperatures. This ensures smooth operation in both extreme cold and heat," commented Battsengel Sharav, director of United Machinery, the distributor of Astec Industries' equipment in Mongolia.

Whilst technology is certainly being ogies are seen in the deserts and tundra that are dotted with mining projects. Transwest Mongolia, distributor of Komatsu equipment, has a large fleet of autonomous and electric equipment ready to be deployed, however, Andrew Herod, executive director, believes the macroeconomic situation of the country is preventing this: "Due to the cost and the fact that Mongolia is relatively new to the mining industry, autonomous trucks have yet to enter Mongolia. The overall economy determines whether this is a worthwhile investment, and I be-



**Tsolmon Gonchig** CEO and Co-Founder **TRIGTEQ** 

What mining companies need today is decisionmakers who understand the future, can see the potential of technology, and have the courage and vision to guide their teams through the change.





GBR SERIES | MONGOLIA MINING 2025 GBR SERIES | MONGOLIA MINING 2025 Image courtesy of Transwest



lieve that these technologies will soon enter Mongolia."

Despite this, Transwest still had its best year ever in Mongolia in 2024, more revenue generation and machine sales than ever before.

On top of the cost, Mongolia's infrastructure is also preventing some of the progress companies are looking to implement. Managing director of ABB Mongolia, Erdembayar Sukhee, explained: "Compared to other mining jurisdictions with reliable infrastructure, Mongolia is a remote country with a weak electric grid. Since ation are limited, we anticipate a future need for off-grid solutions that involve renewable energy and battery storage."

Infrastructure is something high on since 2022. Logistics companies are and modern solutions on the back of this. However, once again, Mongolia's electrical grid issues are preventing progress. "The government needs to make high-powered charging stations in more rural areas of Mongolia more accessible. In terms of the private sector, it was not economically feasible for us and our clients to adopt electric trucks until a few years ago," empha- FLS's Mongolia branch. sized Khishigbat Ganzorigt, CEO of

In 2025, ABB signed a global part-tional equipment, automation, and nership with Swedish OEM Epiroc to green solutions, driven by local adaptcombine the former's technological solutions with the latter's machines growing industry demand. The counand equipment. Epiroc, meanwhile, try's willingness to test and adopt signed a new five-year contract with Oyu Tolgoi for its drill equipment. In terms of electric solutions, however, Andrew Forster, the general manager in Mongolia, believes it may be some and regulatory consistency will detime before other mining companies termine the pace and reach of this are looking to implement this: "As transformation. If the government the industry matures, we are always working with stakeholders on the importance of collision avoidance, automation, electrification, and sustainability. Whilst Oyu Tolgoi has been proactive in this field, Mongolia will be quite a late adopter of such technology. As well as education, cost is also a preventative measure for companies exploring green technology."

Sandeep Ray, executive director of technology provider Datamine, which recently opened an office in Mongolia, commented: "Technology adopand is set to repeat this in 2025, with tion in Mongolia was relatively late, becoming essential when exploration projects matured into operational mines requiring detailed geological modelling, planning, and production solutions. Technology becomes a priority when downturns force a focus on efficiency and waste reduction."

Many technology companies globally are noticing that proof of reliability and harder times are important for a technology to be trusted. To help Mongolia's grid capacity and gener- build trust, Mongolia's mining industry is leading by example, particularly in areas such as green energy. FLS Mongolia is adopting greener practices internally to prove to its customers that this is a viable way to conduct the government agenda, with three business. "FLS is committed to net-zenew railroads built in the Gobi region ro emissions by 2030. On the local level, FLS Mongolia is taking practical looking to implement more efficient steps, such as reducing plastic use in our office, encouraging recycling, and minimizing paper usage. For our customers, we aim to help them save energy, reduce water usage, and improve their overall environmental impact. We aim to meet operational needs while advancing sustainability," discussed Zorigtsaikhan Tumenzorigt, director of business development for

Mongolia's mining sector is rapidly modernizing by embracing internaability, strategic partnerships, and advanced systems sets it apart from slower-moving jurisdictions. However, continued investment, infrastructure upgrades, workforce training, can expand grid capacity, create incentives for electrification, and foster closer collaboration between miners, suppliers, and technology providers, Mongolia could leapfrog into a leadership position in sustainable mining. The foundations are already in place, turning this potential into reality will depend on aligning innovation with long-term policy vision. ■





"Mongolia has incredible potential, especially in copper, gold and lithium. The sector has made real progress, but to attract more global investment we need one thing above all: a stable, transparent legal framework. With the right policies, the mining industry can become Mongolia's growth engine for decades to come."

Niislelkhuu Dangaasuren, Managing Director, TSBON



"There needs to be more collaboration between the business community and the government to set clear and achievable goals. This should involve revisiting the basics of what the country wants to achieve economically and socially. For the mining sector, the government must allow companies to operate freely and make decisions based on market dynamics."

Battsengel Sharay, Director, UNITED MACHINERY



"The mining industry in Mongolia faces a key challenge: exploration. To unlock more projects, we need more investment in exploration to discover new reserves. We also need to create a tax-free or low-tax environment for exploration companies, which will encourage more investment in this sector. Additionally, the local community's support is essential."

Erdene-Ochir Nyamdorj, CEO, KARS



"Mongolia's mining sector is set to play an increasingly important role in the global mining industry over the next decade. With the right investments in technology, workforce development, and sustainable practices, Mongolia has the potential to become a major global player."

Paul Boon, CEO, AKALIKO

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INTERVIEW INTERVIEW -



### Andrew Herod **Executive Director** TRANSWEST MONGOLIA



Autonomous trucks have yet to enter Mongolia, but multiple mining companies are interested in implementing a partly autonomous fleet in the coming years.



#### What progress has been made on the Transwest Mongolia Technical Institute (TMTI)?

Whilst hiring talent is not a problem right across Transwest Mongolia, it is hard to find enough tradespeople due to the size of the workforce in Mongolia and the skilled nature of the work we do. So we decided to set up the TMTI, taking on roughly 20 new apprentices each year to bring these trainees into our workforce. This provides us with a constant cycle of new employees who are already familiar with our policies and working methods.

#### Could you outline some of the recent technologies Transwest has introduced to the Mongolian market?

A lot of new technology entering Mongolia is focused on monitoring, feedback, and prognostic data connected to satellites. This allows our machines to be reviewed at any time and from anywhere in the world.

New driver interfaces can provide real-time data to workers in the field, and from a safety perspective, can use fatigue monitoring and heads-up displays in order to make sure that operators remain alert. Battery technologies are starting to enter the Mongolian market; however, the longevity of these still does not match up to a diesel engine.

# How is Transwest Mongolia looking to bring autonomous equipment to

Komatsu is one of the leading mining suppliers of autonomous equipment in the world. Due to the cost and the fact that Mongolia is relatively new to the mining industry, autonomous trucks have yet to enter Mongolia. The overall economy determines whether this is a worthwhile investment, and I believe that these technologies will soon enter Mongolia. We are exploring these opportunities with our clients, and multiple mining companies in the country are interested in implementing a partly autonomous fleet in the coming years. Autonomy provides a constant work cycle with no one in harm's way, which is an attractive proposition to mining companies.

#### What is the added value of Transwest Mongolia for your Mongolian clients?

As a Canadian-owned company, we operate based on international standards at a very high level. We train our staff to the highest level, even if they do not stay with Transwest in the long run. This applies to every department in the company and is something we have tried very hard to maintain. Transwest also tries to contribute to social issues in Mongolia, such as tree planting programs and school support. People are often surprised by how modern our offices and facilities are.

#### How has Transwest Mongolia ensured security in its supply chain?

We are very limited in terms of logistical options in Mongolia due to its geographical location, particularly now that the situation in Russia has closed that corridor from Europe, as much of our equipment comes from Germany. Through the pandemic, we maintained a close relationship with our suppliers and logistic support in the hope that this would keep us as a premier customer for them. We have not slowed down our services despite increased timelines. Transwest Mongolia has proved its ability to mold its supply chain to developing international situations.

#### What is next for Transwest Mongolia?

The government has a strategic plan to unlock the vast amounts of mineral resources in Mongolia, and it needs to ensure that its policies are in line to secure more foreign investment to create a more competitive and healthier market. We are exploring opportunities in Turkey, as it is an industrialized nation with good links to Mongolia.

Our growth this year is focused on retaining and attracting new talent to help service and support the new machines we have in the field. We will look to learn from other jurisdictions to help best serve our Mongolian clients.

Mongolia's mining industry is moving into a new era. Our role at Transwest Mongolia is to make sure that the skills, technology, and partnerships are in place to match that ambition. We are not just here to deliver machines; we are here to help build a stronger, smarter future for Mongolia's resources sector.



### Mark Gabel **CEO MSM GROUP**

Repairs are often in high demand due to the conditions of mines in Mongolia and the tough conditions, meaning that our maintenance services are required more often.

# MSM Group in 2025?

particularly strong in truck sales both to distribution and mining companies. Our mining business has grown mostly in our service offerings, and we now have over 400 technance of our equipment there.

In 2025, the MSM Group was acquired by the Jebsen & Jessen global family enterprise, giving us financial means we did not have before. Mongolia is a country where you need to operate in the long run before you are rewarded, and this is a vision we share with Jebsen & Jessen.

# ularly grown recently?

Oyu Tolgoi, it is required to have maintenance staff with specialized skills to deal with our specific solutions. For example, to improve safety, road trains are equipped with sensors and radar technology to navigate trailer tracks and underground tunnels. Repairs are often in high demand due to the conditions of mines in Mongolia and the tough conditions, meaning that our maintenance services are required more often. As more companies look to operate more efficiently across their operations, including predictive and preventative maintenance, our service offerings will continue to grow.

#### Are Mongolian mining companies receptive to deploying new technologies in their operations?

In general, Mongolian mining companies are open to trying new things. What they want is the security that if something does break down, it can be fixed quickly, making on-site support for new technologies paramount. While in other jurisdictions we are seeing a trend towards standardization, the industry must adapt and try new things, which I think is happening in Oyu Tolgoi and other mining companies in Mongolia.

#### How is labor migration affecting the Mongolian mining workforce, and how is the MSM Group responding?

This is a prevalent issue, with staff turnover in Mongolia around 20%. If someone from Mongolia goes to work in

What have been the most important updates from the South Korea for one or two years, typically, they can return to Mongolia and buy an apartment. Earning opportunities We have grown through H1 2025 by about 20%, being abroad are significantly better. In the MSM Group, we often have requests to go to Korea, and we are not necessarily opposed to losing workers temporarily for them to gain skills. As part of Jebsen & Jessen, the MSM Group now has nicians on the Oyu Tolgoi mine site for repair and mainte- access to mining companies in Australia and the US, without talent leaving the group.

#### How would you assess the current investment climate and prospects for doing business in Mongolia?

I think many of the challenges we have faced over the last few years in the country are nothing new, and we are well-prepared to deal with them. All challenges in Mon-Why has the services division of the MSM Group partic- golia are manageable, and there are many opportunities that arise from operating here. 15 years ago, Mongolia's Because we provide our own technology to clients such as GDP per capita was around US\$1,000, and today this is at US\$6,000. Once the country manages to unlock the full potential of its mineral wealth, this could increase further towards US\$10,000 and beyond. Mongolia is a country where focusing on your people and investing in the country you can run a successful business.

#### Where should the new government focus its efforts to improve the mining industry?

Awarding more exploration licenses would be beneficial for Mongolia. I think we need to explore more, find new deposits, and then focus on bringing them to production. Furthermore, instead of the government investing in the largest mining projects directly, they should let the investment be done and risk taken by mining companies, and take their cut in royalty fees. This would create a sustainable system for the government, local people, and investors.

#### What are your plans for the MSM Group in the immediate future?

We just concluded outlining our strategic five-year plan, in which we aim to double revenue and employment in this timeframe. We are looking to do this organically, with a focus on providing total solutions to our customers. Nowadays, just selling a product is not enough, as clients are increasingly looking at the total cost of ownership. I think this is where the company can further expand moving forward.

INTERVIEW



# Enkhdelger Enkhbold Sales Director BARLOWORLD

Unlike some countries where traditional mining practices are deeply entrenched. Mongolian mining leaders are open to change and eager to adopt forward-looking technologies.



#### Could you introduce Barloworld?

Barloworld is the official distributor of Caterpillar equipment in Mongolia, and this year marks Caterpillar's 100th anniversary. Caterpillar first entered Mongolia in 1993, and since 1996, the dealership has contributed to Mongolia by introducing state-of-the-art mining technology and, most importantly, by training Mongolian professionals to operate this equipment effectively. Training and development have always been central to our mission.

#### What equipments in Mongolia right now are in demand?

Mongolia's mining conditions are relaof the world due to the soil conditions, soil density, and geological profile. For this reason, the main equipment used includes rigid frame trucks, hydraulic excavators, and support equipment with lower coal prices this year, the

50-ton trucks were the standard, but the growth trend will continue. now 100-ton trucks are the main hauling equipment. Larger mining companies in Mongolia are already exploring the potential to operate at bigger volumes, which will require even larger machinery in the future.

### How do you see Mongolian mining dress environmental concerns while companies adopting new technolo-

Mongolian companies tend to be early erage, Caterpillar machines consume adopters of technology compared to approximately 40% less fuel comsome other countries. This willingness comes from a nomadic heritage that encourages flexibility and openness to trying new things. For example, Mongolia was the first in our Caterpillar Eurasia region to adopt a cloud-based mining fleet management system. Several of our customers are already How does Barloworld address the in discussions with us about adopting autonomy in their operations. Unlike ing? ing practices are deeply entrenched, Mongolian mining leaders are open to change and eager to adopt forward-looking technologies.

# Have you faced supply chain chal-

Before the COVID-19 pandemic and recent international sanctions, we had including routes through Russia and Europe, sourcing parts and materials particularly from Belgium. However, that transit route is no longer available, so all procurement now comes country. through the Tianjin port in China. This change has increased lead times for equipment and parts and has also increased the cost of some products.

#### How do you evaluate the current state of mining in Mongolia?

There has been relatively little exploration in the country, and the government is now working to revitalise exploration efforts. Mongolia is strategically located close to major markets such as China, India, and others. tively easier compared to many parts In recent years, the government has focused on developing infrastructure to improve commodity exports, including opening new ports, building railways and constructing roads. Even

such as graders and dozers. However, country has maintained high export as stripping ratios increase and mines volumes, although at lower profit margo deeper, the size of the equipment gins. This infrastructure focus and rein use is also increasing. In the past, newed exploration drive suggest that

#### How does Barloworld ensure safety and sustainability in its equipment and operations?

In recent years, Caterpillar has focused on producing equipment that consumes less fuel, helping to adacknowledging that the industry still primarily runs on diesel fuel. On avpared to major competitors. Safety is further enhanced through technology. For example, the Driver Safety System (DSS) monitors operator fatigue and distraction, issuing alerts or sending signals to dispatch systems.

# workforce challenge through train-

some countries where traditional min- When Caterpillar entered Mongolia, the country's mining industry was based on old Russian technology. Introducing modern Caterpillar machines presented a major learning curve. We therefore developed comprehensive training programs. These include technical training for mechanics and technicians to repair and maintain the equipment, and operamore diverse supply chain options, tor training to ensure the machinery is used to its full potential. Our programs have been highly successful, and Caterpillar-certified mechanics and operators are regarded as the best in the

#### What are Barloworld's future plans and strategies in Mongolia?

Mongolia's equipment market has grown rapidly in the last two to three years, with a significant influx of Chinese-manufactured machinery, especially wide-body trucks. To maintain our leadership, we need to compete more effectively in this segment while continuing to promote Caterpillar's premium equipment for large-scale mining. We will embed more technology into our offerings to help address Mongolia's workforce shortage, making machines easier to operate through guidance and sensor systems, and potentially expanding autonomous hauling systems. ■



The government's commitment to the mining sector, combined with the growth of new resources, will keep Mongolia at the forefront of global mining.



# Zorigtsaikhan Tumenzorigt

Director of Business Development **FLS MONGOLIA** 

#### Can you introduce FLS Mongolia?

FLS Mongolia now operates with 47 staff across a service shop and sales office in Ulaanbaatar. Our major projects include working with Oyu Tolgoi, Erdenet Mining Corporation, MAK, Boroo Gold, and UHG. We support clients in maintaining sustainable, long-term operations.

#### What is the current economic climate in Mongolia?

The mining sector remains the backbone of Mongolia's economy, accounting for approximately 60-70% of the country's economic output. Changes in commodity prices can have significant effects, as seen in 2008, 2014, and the downturn in 2020. The government is increasing gold exploration and supporting local firms through tax cuts and foreign investment incentives.

#### How does FLS integrate modern technology and innovation into the mining solutions?

We focus on reducing water usage, enhancing maintenance, and helping customers prevent issues proactively. By introducing modern technologies, we can help customers reduce operational costs. For example, we recently modernized the flotation section at the Erdenet Mining Corporation mine, reducing the number of cells from 67 to 22. This not only improved efficiency but also saved significant amounts of electricity.

#### What factors do your clients consider when choosing FLS?

The competition in Mongolia is tough, particularly due to the presence of Chinese companies with lower-priced equipment. But for long-term projects, durability and reliability often outweigh initial costs. FLS offers complete, high-standard solutions backed by performance guarantees. This commitment to quality, along with our strong reputation, helps set us apart from competitors.

#### What progress has the company made toward its net-zero goals?

FLS is committed to net-zero emissions by 2030. On the local level, FLS Mongolia is taking practical steps, such as reducing plastic use in our office, encouraging recycling, and minimizing paper usage. For our customers, we aim to help them save energy, reduce water usage, and improve their overall environmental impact.

#### What challenges have you encountered related to the workforce in Mongolia?

The high turnover rate in the mining sector, especially among younger engineers, is a challenge. Many people leave Mongolia for better opportunities abroad, such as in South Korea or Australia. However, one of the benefits of working for an international company like FLS is the opportunity for employees to relocate to other branches

around the world. This appeals to young engineers seeking global experience. At FLS, we try to show them that they can grow within the company. It is also important to create an environment where they feel they are making a real difference, both in their professional lives and in the larger context of Mongolia's mining development.

#### What opportunities do you foresee for FLS moving forward?

We aim to be the go-to partner for any new mining project in Mongolia. The country has a wealth of untapped resources, including gold, copper, uranium, and lithium, and as these sectors grow, FLS is ready to support their development. We are focused on longterm relationships with customers, ensuring that we are there every step of the way as new mines come online.

#### What are your thoughts on the relationship between the public and private sectors in Mongolia's mining industry?

Historically, there has been some scepticism about mining in Mongolia, often due to misunderstandings about its role in the economy. However, with recent changes in government, particularly with the younger generation now in office, there is a shift towards a more development-focused approach. The government recognizes the importance of mining for the country's growth and is working to support it through policies that encourage foreign investment and sustainability. At FLS, we have seen this shift firsthand and are excited about the potential for further collaboration between the public and private sectors.

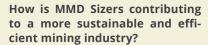
#### What are your plans for FLS Mongolia in the coming years, and how do you see the future of mining in

The future of mining in Mongolia is incredibly bright. Our focus will remain on providing high-quality solutions, modern technologies, and long-term partnerships with clients. We also plan to strengthen our position as a leader in mineral processing by expanding our capabilities and expertise. The government's commitment to the mining sector, combined with the growth of new resources, will keep Mongolia at the forefront of global mining, and FLS Mongolia will be there every step of the way to support this development.



# Jonathan Cain

**Managing Director MMD GREEN MINING SOLUTIONS** 



Our sizers operate at lower energy consumption, produce less dust and noise, and require less infrastructure compared to traditional crushing equipment. These benefits are especially important in Mongolia, where environmental impact, cost control, and site accessibility are key considerations.

We also design our equipment for long service life, which helps operators reduce waste, downtime, and total cost of ownership.

### What is your overall assessment of Mongolia as a mining jurisdic-

Mongolia is an increasingly attractive market for mining investment. Its vast mineral resources, particularly in copper, gold, and rare earths, combined with a growing focus on infrastructure and foreign partnerships, provide strong foundations for growth.

That said, there are still regulatory and logistical challenges that require ongoing attention. From our experience, the government and industry stakeholders are showing a clear willingness to engage, modernise, and welcome international expertise. For MMD, Mongolia represents a market with significant long-term potential, especially as the sector moves toward more sustainable and technology-driven operations.



Sandeep Ray **Executive Director DATAMINE** 



Andrew Forster General Manager

**EPIROC MONGOLIA** 

#### **Could you introduce Datamine?**

Datamine was established in 1981 in the UK, with a focus solely on software technology for mining and geology, particularly resource modelling and mine planning. Over the years, Datamine became known for creating many software features that later became industry standards. We sold our business in 2015 to Constellation Software Inc. (CSI), a Toronto-listed company with significant market strength in software technology across the vertical market segment.

Since becoming part of CSI, we have grown from a specialist in resource modelling and mine planning into a one-stop shop for mining technology. In the past decade, we have acquired more than 25 mining technology companies, extending our capability from pre-exploration through to production, supply chain, ESG, laboratories, and advisory services.

#### What are Datamine's goals and strategies for the next 12 months in Mongolia?

Our priority is to ensure that our Mongolian consultants reach the same expertise level as our teams in more mature markets. We aim to be a trusted advisor to our clients and not just a vendor supporting software operations. This combination of technical and cultural insight will help our clients achieve better results.

#### Could you provide an update on the last couple of years at Epiroc in Mongolia?

There have been several changes, with Epiroc solidifying a new fiveyear contract with Oyu Tolgoi, our largest customer, to supply their drill equipment. This is a big milestone for us, providing a concrete base for the company to offer our services to the project. We have altered our strategy to focus on more business outside of Oyu Tolgoi as the mining industry matures in Mongolia.

Our local subsidiary, MMEG, has also witnessed growth, providing collision avoidance systems to the Mongolian market. As we have grown in Mongolia, we have been adding to our office here; however, this presents a challenge in itself due to the competition for skilled labor in the country.

#### What measures is Epiroc taking to increase its staff in a challenging labor market?

The company has invested considerable effort in staff retention, resulting in a decrease in our turnover rate from 14% to 4%. Our biggest challenge when it comes to our workforce is that technicians either want to move overseas or work directly for Oyu Tolgoi. To help address this, we are working with our divisional HR to ensure we are an attractive employer and stay the employer of choice within Mongolia, ensuring these individuals remain with Epiroc. ■



### Building Mongolia's future mining ecosystem and workforce

Out of the 3.5 million people in Mongolia, 1.3 million make up the workforce, participation rate of roughly 63%. Despite an increase in welfare spending to increase this number, the labor participation rate and human capital index have not improved. Many Mongolians still live nomadic lives, and those who are left are increasingly choosing careers that keep them close to their families in the city. The challenge of finding labor is felt up and down the mining value chain, but is especially particularly labor-intensive.

The problem is further compounded by the lack of young people studying mining-related courses at university. "The number of graduates entering engineering programs is alarmingly low, which creates challenges for companies. There needs to be more government support, such as scholarships or early training programs, to encourage young people to pursue careers in engineering," highlighted Mandukhai Nanzad, executive director of Excelsior Energy, an Australian-Mongolian company specializing in coalbed methane projects in Mongolia.

To help attract more workers to mining, the industry in Mongolia is placing an increased focus on safety protocols and initiatives. Providing exclusive, tailored explosives and blasting services to operators and mining companies, Mera Group has over 700 employees and five factories in Mongolia. Bayarsaikhan Sampil, CEO of Mera Group,

expressed: "I believe the regulations for blasting need to be strict, as the meaning the country has a labor force risk of the materials we handle is very high. These strict regulations help keep workers safe, and those who are not committed to safety are left behind."

This is a common theme across the blasting sector. Dyno Nobel Mongolia is currently trialing electronic detonators in Mongolia, which are much safer than their manual counterpart. "At the global level, our main value is 'Zero Harm, For Everyone, Everywhere'. We have many safety and risk assessment harmful to the services sector, which is procedures in place that ensure our operators are never in harm's way. In terms of technology, electronic detonators are more precise when setting the blast design with a lower risk of misfires when compared to non-electric detonators," explained Enkhbayar Batzorig, CEO, Dyno Nobel Mongolia.

> On top of safety, training and personal development are ways in which mining companies are looking to make mining the career of choice for young professionals. An example of this is Falcon Drilling, a global exploration drilling company that has been operating in Mongolia since 2005 with a 100% local workforce. "We have a comprehensive training program that has been in place for over 10 years. All of our branches globally follow the same safety and environmental standards. We also have an environmental investment program that is closely tied to our safety protocols," discussed Undraa Purvedori, managing director of the Mongolian office for Falcon Drilling,

adding: "By creating a positive working environment and providing mentorship and support, we can help them develop into skilled professionals. It is crucial to offer young people opportunities to learn and grow, and by doing so, we can attract the next generation of mining professionals."

Another multinational company investing in its workforce is Bureau



Mandukhai Nanzad **Executive Director** EXCELSIOR ENERGY



Mongolia has a young population, with a majority under 35 years old -this makes them pro-renewable energy. The shift to renewable energy in Mongolia is necessary, given the significant air pollution caused by burning fossil fuels.

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#### Collaborative. Enjoyable. Professional.

AustCham Mongolia is a non-governmental organization established in 2013 to promote and support the interests of Australian and Mongolian businesses in the region. Since its incention. AustCham Mongolia has become a key bridge between the two countries, actively facilitating collaborations, networking opportunities. knowledge-sharing platforms, and providing a strong voice to represent its members.











Khishigbat Ganzorigt CEO **MONLOGISTICS** 

Railway transportation is much more environmentally friendly than trucking. However, 90% of commodity exports are still conducted using trucks. Through our investments in railroads, our company is contributing to a more sustainable logistics sector.

Veritas, which established a Mongolian office in 2012, and is focused on testing and analysis for the entire valservices. "At Bureau Veritas, we invest heavily in local talent development through structured training programs, mentorship opportunities, and international exposure. For example, we have Mongolian colleagues currently working with Bureau Veritas in Australia, gaining valuable global experience. This helps ensure that our employees meet international quality and safety standards," outlined Ceebu Nair, area chief executive.

Talent-swapping programs are popular among multinational companies, allowing their workforce to gain experience and higher wages abroad while remaining within the country. However, foreign companies are experiencing unique problems when operating in Mongolia. "One big challenge has been reconciling expectations between local teams and international project owners, especially around deliverables and in consistent work if the government

on capacity building for our Mongolian team," revealed Will McManus, COO of O2 Mining.

The lack of a skilled workforce has persisted in Mongolia long before the mining industry took off, but in 2025, there is a feeling that it will not last much longer. Gantulkhuur Bekhbat, CEO of Mongolian company MMS Engineering, attested: "15 years ago, Mongolia had limited engineering experience in large-scale projects, so foreign experts were essential. Since then, our local talent pool has matured significantly. Today, over 90% of our workforce are Mongolian engineers, driven by a passion for technology, problem-solving and innovation."

With time, Mongolia will develop the talent pool it needs to develop its mining industry and take advantage of the rich geology it has been blessed with. Even if the problem is correcting itself, intervention from both private companies and the government is needed to secure a stable future for mining's workforce.

Murray Mining Services, which opened its own dedicated facility in 2025, is involved in several of the large expansions currently underway in Mongolia, but the talent pool is holding back progress on these projects. "I believe the government should focus on making both workue chain and offer on-site laboratory ing and living in Mongolia more attractive, not just for foreign nationals but also for Mongolians themselves. Skilled labor is leaving due to high taxes and lower wages than abroad. If the government wants to support the mining industry, it needs to address these structural issues as a priority," said Baatar Uuganbayar, CEO of Murray Mining Services.

The government is attempting to make progress in this area, improving working conditions and introducing legislation to ease the burden on workers, particularly focusing its efforts on mining. For example, in January 2024, the minimum wage in Mongolia was raised by 20%. Furthermore, legislative changes to the working schedule made it mandatory for companies to have mining workers work 14 days on and 14 days off. "There is a high likelihood that more people will engage working styles. We have focused a lot implements additional legislation de-

signed to benefit workers," reasoned Jezioro, president and managing direc-Bayarsaikhan Bat-Erdene, CEO of local blasting company BlastTech.

However, in Bat-Erdene's opinion, the government could go even further. He added: "The government should start organizing more training programs to develop workers and bring in more international experts to learn from. Furthermore, our government should collaborate with educational institutions to expand training opportunities and prepare more people."

Aside from the government, private companies are coming up with ways to help train the next generation of Mongolia's mine workers. Redpath Mongolia is exclusively focused on the Oyu Tolgoi project alongside its JV partner DAYAN Contract Mining. Scott Hayne, senior vice president of the Canadian mining contractor, commented: "To support training, Redpath has established centers in Ulaanbaatar, Dalanzadgad and Khanbogd. Crucially, Redpath has become a Certified Training Organization in Mongolia, enabling us to issue nationally recognized underground mining and equipment operator licenses. This effectively positions us as a training institution for underground mining."

Redpath is not the only company opening training centers, with Komatsu distributor Transwest doing something similar and now having over 40 apprentices in the company. "Whilst hiring talent is not a problem right across Transwest Mongolia, it is hard to find enough tradespeople due to the size of the workforce in Mongolia and the skilled nature of the work we do. What we decided to do was set up the TMTI, taking on roughly 20 new apprentices each year to bring these trainees into our workforce," said Andrew Herod, executive director of Transwest Mongolia.

Some also see the current challenges as the potential of future opportunities. DMC Mining Services is a Canadian contractor that recently entered the Mongolian market. "For the industry, the challenge of labor shortages can be transformed into an opportunity. By investing in people, ensuring proper training, and creating clear career pathways, Mongolia's mining sector can develop a highly skilled, sustainable workforce that supports the country's long-term growth," said Michal tor of DMC Mining Services.

Mongolian Talent Network is an HR advisory and recruitment firm, specifically focused on correcting this issue. "About a year ago, we conducted an HR survey and found that one in three employees wanted to go abroad to work, study, or live. In response, we launched the 'Mother is Calling' campaign to attract Mongolians abroad to return and contribute to the country's development. We organized career events in Japan where we shared insights about the Mongolian labor market and job opportunities with Mongolians living there." highlighted Ujin Munkhbaatar, the CEO.

The campaign has been a resounding success, with plans to expand it soon to Australia and South Korea.

Mongolia's mining sector faces a persistent skills shortage, but joint efforts from government and industry through safety initiatives, training programs, and talent retention campaigns are steadily building a workforce capable of supporting the nation's rich resource potential.



Gantulkhuur Bekhbat CEO **MMS ENGINEERING** 



We are spearheading initiatives such as the Nexus Net Zero Project, which aims to integrate electric vehicle transportation and infrastructure into mining operations.





# People, Safety and Sure Supply



"We rotate personnel across our international branches and use online services to foster ongoing employment and knowledge exchange to maintain workforce continuity. This global presence enables us to keep our team engaged and productive during market downturns."

Undraa Purvedorj, Managing Director, FALCON DRILLING MONGOLIA



"We have introduced advanced equipment and technologies from abroad, meaning our explosives technology is among the best in the country. We also use top-tier software and focus on effective, people-centric management."

Bayarsaikhan Bat-Erdene, CEO, **BLASTTECH** 



"We conduct our main operations (manufacturing of explosives and blasting services) with a constant safety concern. At the global level, our main value is 'Zero Harm, For Everyone, Everywhere'. We have many safety and risk assessment procedures in place that ensure our operators are never in harm's way."

Enkhbayar Batzorig, CEO, DYNO NOBEL MONGOLIA



"Mining operations can be halted in Mongolia for two reasons: a shortage of fuel and a shortage of explosive material, neither of which the country produces. This makes the safe storage of raw materials incredibly important."

Baysaikhan Sampil, CEO, MERA GROUP



Ovu Tolgoi is proactive in testing and adopting new underground mining technologies, positioning itself at the forefront of innovation.



### Scott Hayne Senior Vice President REDPATH MINING

path's recent activities in Mongolia? Redpath's current operations in Mongolia are focused exclusively on the A key challenge remains workforce Oyu Tolgoi project, delivered through development, specifically recruiting our joint venture with DAYAN Con- and training the next generation of tract Mining (DCM). We are executing Mongolian miners. Regulatory reforms a range of underground development services on site, including lateral development, raise boring, life of mine construction, and steel set and roadway construction. A recent addition to our scope includes quality control and quality assurance, which is scheduled to run until May 2027. Our Underground Development Services and Construction Support Services consistently exceed monthly targets, with lateral development output averaging 1,100 m per month. We have secured a four-month extension on the Steel Set Installation and Roadway Construction contract, which supports the block cave development.

#### How has Oyu Tolgoi's strategic approach evolved over the last five years, particularly regarding efficiency and sustainability?

Oyu Tolgoi is recognized as a worldclass mining operation. Despite Mongolia's unique logistical and geopolitical challenges, Oyu Tolgoi has made consistent investments in infrastructure and technology. The site is proactive in testing and adopting new underground mining technologies, positioning itself at the forefront of innovation.

#### Could you share an update on Red- What have been the biggest challenges for Redpath in Mongolia over the past year?

enabling greater inclusion of women in mining have facilitated meaningful progress, and around 16-17% of our workforce is now female.

To support training, Redpath has established centers in Ulaanbaatar, Dalanzadgad and Khanbogd. Crucially, Redpath has become a Certified Training Organization in Mongolia, enabling us to issue nationally recognized underground mining and equipment operator licenses. This effectively positions us as a training institution for underground mining.

#### What does Mongolia need to do to attract more specialized international mining companies?

Mongolia must ensure regulatory stability and transparency to build investor confidence. Infrastructure improvements are also vital. Challenges around export logistics and the harsh climate have created bottlenecks in the past. Recent developments like the Tavan Tolgoi-Gashuunsukhait railway are promising, but further investment in power, water and transportation is needed.

Sustainability and ESG commitments are increasingly non-negotiable for foreign investors. Strengthening standards around community engagement long-term value for our stakeholders.

and environmental responsibility will elevate Mongolia's value proposition. Redpath integrates ESG into every aspect of our strategy. We were recently recognized as the top investor in the South Gobi region, underscoring our long-term commitment to local partnerships and excellence.

#### How are Redpath's training centers contributing to worker safety?

With over 60 years of global experience and more than 20 years in Mongolia, we are committed to helping shape a safer, stronger, and more sustainable mining future. Our safety and training efforts have yielded measurable results. Many of the Mongolian miners we have trained now work internationally.

#### What would you say is Redpath's core value proposition as a mining contractor?

Redpath's strength lies in our global experience, long-standing reputation, and commitment to high standards. Our Mongolian activities are managed by the Americas business unit, but we draw on expertise and innovation from across all Redpath operations worldwide. Workforce development is a key differentiator. We have trained tens of thousands of miners globally, including over 5,000 Indonesian nationals at the Freeport project in Central Papua. In North America, we maintain multiple partnerships with Indigenous and local communities to create job and training pathways. This expertise translates well to Mongolia's own workforce development goals.

#### Looking ahead to the future, what are Redpath's plans for Mongolia?

We remain committed to exploring new opportunities in Mongolia, particularly as regulatory and political conditions stabilize. Drilling activity, often a precursor to larger investments, is currently limited, but commodities such as copper, gold and coal remain in high demand. While Mongolia still relies heavily on China for roughly 80% of its exports, diversification efforts are underway.

In the immediate future, our focus remains on Oyu Tolgoi. We have spent over two decades contributing to this major underground block cave project. By continuing to invest in local communities and training, we believe Redpath can contribute meaningfully to Mongolia's mining future, while also securing

GBR SERIES | MONGOLIA MINING 2025 GBR SERIES | MONGOLIA MINING 2025 Image courtesy of Oyu Tolgoi (Rio Tinto)

INTERVIEW -



# Baatar Uuganbayar

#### **MURRAY MINING SERVICES**



Mongolia holds significant long-term promise, but like many resource-rich nations, realizing that potential will depend on how well governance aligns with market conditions and investor expectations.

#### Can you provide an update on Murray Mining Services?

In January 2025, Murray Mining Services (MMS) acquired our own dedicated facility to support and expand our operations culture, clear development paths, and purpose-driven work, and manufacturing capabilities. This boosts production, en- we will be in a much stronger position to attract and retain ables tailored solutions, and adds a modern training center skilled talent for the future. This pushes us to continually imfor staff development.

At MMS, we recognize that long-term sustainability requires strategic foresight and adaptability. To stay resilient, we are diversifying beyond mining, currently exploring opportunities in new industries, including construction and retail sectors.

### tery Transportation Attachment improve the mining in-use of an ERP system that helps streamline our operations, dustry?

Our Underground Electric Loader Battery Transportation Attachment is designed specifically to address three critical challenges in modern mining operations: operator safety, efficiency, and battery swap downtime. Our solution makes battery swaps safer, faster, and less physically demanding. It is already in use across Africa, South America, and the US, with strong operational results.

# What is your overall assessment of Mongolia as a mining The government should focus on making both working and

At present, Mongolia is navigating a period of uncertainty. Political instability and falling coal prices have hurt investor confidence and the economy. That said, it is not all negative. We are seeing strong global demand and record-high prices for to address these structural issues as a priority. Improving gold, copper and REEs, which has prompted a shift in focus wage competitiveness, reforming tax policies, and creating for many mining companies operating in Mongolia.

mining jurisdiction. With greater political stability, clearer regulatory frameworks, and transparency, the country is well-positioned to attract foreign direct investment. Large projects are underway, but workforce capacity and technical expertise remain key challenges. Mongolia still holds significant longthat potential will depend on how well governance aligns with market conditions and investor expectations.

# younger generations?

While salary remains a major factor, the workplace environment is becoming increasingly important to younger generations. At MMS, we foster a welcoming, supportive, and rewarding workplace. The mining industry needs to evolve by and costs. It provides locally available, high-quality solutions. ■

listening more closely to the expectations of younger professionals. If we can offer not just a good salary, but also a strong prove as employers.

#### How is MMS adopting new technologies?

We avoid untested tools that risk downtime or reduced productivity. We focus on proven technologies, many from our parent company in Australia. We adapt these technologies to In what ways will your Underground Electric Loader Bat- suit Mongolian conditions and workflows. One example is our improve planning and make data more accessible across departments. Real-time data is vital for decision-making.

> Ultimately, technology is a tool that supports our people. When it is implemented thoughtfully, it helps us work smarter, reduce waste, and improve overall efficiency without disrupting the hands-on nature of our work.

#### What should be the focus of the new government to aid the mining industry?

living in Mongolia more attractive, not just for foreign nationals but also for Mongolians themselves. Skilled labor is leaving due to high taxes and lower wages than abroad. If the government wants to support the mining industry, it needs better living standards will go a long way in retaining talent Looking ahead, Mongolia has substantial potential as a and ensuring that Mongolia can support its growing number of large-scale mining projects with a strong and stable work-

#### What are your plans for the future of MMS?

Our focus for the future is on expanding and building longterm promise, but like many resource-rich nations, realizing term sustainability. We want to ensure that MMS is not dependent on a single service or product line. Diversifying our offerings will strengthen our position in the market and allow us to better serve our clients, especially as their needs evolve. One How can mining attract more skilled labor, particularly in of our key initiatives is the development of in-house product lines manufactured at our newly established facility. We developed a product catalogue based on customer needs. This approach eliminates the need for customers to source products from overseas, reducing logistical challenges, lead times,



Julien Lawrence **Managing Director** O2 MINING



#### Can you tell us more about some of your recent projects?

On the Kharmagtai project for Xanadu Mines, we delivered the entire PFS, managed financial modelling, designed infrastructure for oxide processing and non-process infrastructure, utilities like water and power, the hydrogeology program, permitting plans, execution strategies, operational readiness, and risk assessments. We worked closely with all parties and successfully delivered the PFS in late 2024, supporting the transition to feasibility in 2025.

#### What are the main challenges of operating in Mongolia, and how have you addressed them?

The permitting process in Mongolia is well-defined once you understand it, but it involves many layers of decision-makers, from local officials and, in some instances, even the Prime Minister and President. Sometimes, the technical elements of the projects are complex, so you must invest significant time to prepare materials. If you approach it systematically and support stakeholders' understanding, you can usually be successful.

#### What are your plans for O2 Mining in Mongolia?

We plan to continue serving these projects and expand our services, including more owner's team work, environmental compliance, and permitting.



Director **DMC MINING SERVICES** 

#### What differentiates Mongolia from the other jurisdictions in which DMC operates?

Mongolia stands out for its immense mineral wealth, which accounts for a huge part of its GDP and exports. Major projects like Oyu Tolgoi are transformative to both the country's economy and the industry's global supply chain. However, the country is still shaping its regulatory and investment frameworks, and there is a strong focus on reforming laws around mining and investment. In an industry like mining, which involves long-term and complex projects, stability is key to supporting growth and development, and Mongolia is clearly making efforts to improve.

#### How does DMC ensure a growing workforce, both in terms of numbers and personal growth?

Our global model is built on structured talent development, including mentorship, continuous training, and embedding experienced international experts within local teams. This approach not only accelerates skill transfer but also ensures that high standards of safety and efficiency are maintained from the start. The challenge of labor shortages can be transformed into an opportunity. By investing in people, ensuring proper training, and creating clear career pathways, Mongolia's mining sector can develop a highly skilled workforce that supports the country's long-term growth.



# Langridge

SVP Mining and Minerals. Eastern Region (APAC & EMEA)

WOOD

#### Wood is the lead consultant for the Khalzan Buregtei REE project in Mongolia. Could you comment on the opportunities in REE and other battery metals out of Mongolia?

The engagement with MNREC's Khalzan Buregtei (KB) is driven out of Wood in Canada, with the processing expertise coming from Wood's team in Australia and additional involvement from Wood in India, making the KB project a great showcase of our global network. Wood is familiar with Mongolia, since we have been involved with Oyu Tolgoi with both engineering services and sustained capital work.

Mongolia has strong potential to develop a robust mining industry, the real question is the timeline: how quickly can that potential be realized, and can projects be made economically competitive? Global capital for mining is limited, so attracting investment is key. In Mongolia, Wood brings the credibility and reputation of a global brand, which can help projects gain more favorable attention from investors.

#### Do you have a final message?

To project proponents, I would encourage a broader view of technology, not just in flowsheet development, but in how you engage stakeholders. Once in operations, Al is the next wave. Our consulting team is already working with major miners to deploy AI technology to optimize project performance.

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COMPANY DIRECTORY —



Ceebu Nair Area Chief Executive BUREAU VERITAS

#### **Could you introduce Bureau Veritas?**

Bureau Veritas is a global leader in testing, inspection and certification, and Bureau Veritas Mongolia was established in 2012. Within the mining industry, we have diversified our services to support clients across the entire value chain. A notable example is our support for the Oyu Tolgoi mine where we provide essential services such as geochemical analysis, mine site assaying and metallurgical testing.

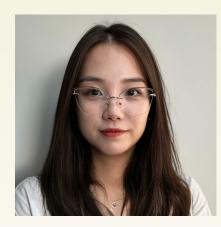
A core part of our offering is our on-site laboratory services, ensuring that all applicable laboratories hold ISO 17025 accreditation. Our teams operate on-site laboratories safely, efficiently, and accurately. We deliver expert training programs and ongoing on-site support through qualified personnel, ensuring smooth operations.

# Which services have been most in demand in Mongolia and the region in recent years?

In 2024, the mining sector contributed over 27% of Mongolia's GDP, and mineral exports accounted for 93% of the country's total exports. To support this growth, we emphasize safety and compliance in our testing and inspection services. For trade, we deliver services that verify mineral quality, such as supervision of weighing, draft surveys, sampling, pre-shipment inspections, and load and discharge inspections. There is also a marked increase in demand for sustainability and ESG compliance.

### What sustainability strategies and solutions do you offer to the mining sector in Mongolia?

We deliver independent third-party assurance for sustainability reports and ESG disclosures, verifying and validating non-financial data. Mongolia's mining sector is under increasing pressure to adopt responsible practices due to environmental concerns, and the government has implemented laws requiring environmental protection management plans. Our services directly support Mongolia's Vision 2050 long-term development policy.



Algirmaa Ikhbayar GEOSAN

Can you give us an update on the Geosan, highlighting any major projects?

We were awarded a government airborne geophysical survey project, forming part of a landmark initiative to map the entire territory of Mongolia. Most notably, we are conducting the first-ever aerial mapping survey of Ulaanbaatar at a 1:1000 scale, an achievement that stands as a defining highlight of our journey.

### What are some of the trends you are seeing in the mapping and geophysics sector?

With significant advancements in technology, the government aims to expand exploration activities to attract foreign investment. However, the newly formed government has announced plans to significantly reduce the budget to address inefficient spending, and next year's exploration budget is now under review, with discussions about substantial cuts underway.

# How can both the government and private sectors work together to unlock new exploration?

The government has shifted its policy on exploration licenses once again in recent years. Companies are now required to bid for these licenses, with some selling for as much as 10 billion MNT. However, the limited number of licenses issued each year restricts opportunities for investors and companies. If government policies stabilize and the number of exploration licenses increases, there is strong potential for significant growth in exploration activity.

# What are some of the technological developments you have seen in the last decade in the exploration and geophysics sector?

A new phase in exploration and surveying has begun with the Ministry of Mining and Heavy Industry's initiative to map the entire territory of Mongolia. For our upcoming government project, we will use heliborne electromagnetic technology as part of the survey.

COMPANY WEBSITE

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### Thank you!

We would like to thank all the executives and authorities that took the time to meet with us. Also, special thanks to our partners:

> AustCham austchammongolia.com

MNMA www.miningmongolia.mn

### **TOWARDS SUSTAINABLE MINING (TSM): A FRAMEWORK** FOR RESPONSIBLE MINING







TSM is a globally recognized standard that establishes clear performance indicators and best practices to promote sustainability in the mining sector. By upholding environmental, social, and economic responsibility, TSM ensures that mining operations contribute positively to sustainable development.

Mining companies that adopt the TSM standard are required to undergo both self-assessment and independent verification, ensuring transparency and continuous improvement. The standard is structured around nine protocols within two core frameworks, covering a total of 34 performance indicators.



#### **LOCAL COMMUNITIES AND PEOPLE**

- Indigenous and Community Relationships
- Safe, Healthy, and Respectful Workplaces
- Equitable, Diverse, and Inclusive Workplaces
- Crisis Management and Communications Planning
- Prevention of Child and Forced Labor



#### **ENVIRONMENTAL PROTECTION**

- Biodiversity Conservation Management
- Tailings Management
- Water Stewardship
- 4 Climate Change Management

**FRAMEWORKS** 



**PERFORMANCE INDICATORS** 

THE TSM STANDARD IS CURRENTLY BEING IMPLEMENTED IN 13 COUNTRIES.



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