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Mining Zimbabwe is the premier source of unfiltered Zimbabwe Mining News. Our core focus is the Zimbabwe Mining Industry, trends, new technologies being developed and used to improve this crucial sector, as well as new opportunities and investments arising from it.

Mining Zimbabwe's sole purpose is growing and empowering the Mining Industry and highlighting all its challenges as well as putting forth expert solutions

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Innovate and Impress at Exhibitions





In today's competitive market, miners and mining companies are constantly seeking ways to improve production and at the same time reduce operational costs.

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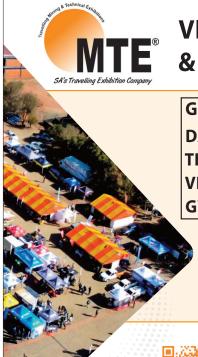
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The Worst is Now Over for the PGM Sector: Government

The Minister of Mines and Mining Development has stated that the worst is now over for the Platinum Group Metals (PGM) sector, as the global outlook for these minerals appears slightly brighter compared to recent months, despite miners still facing local pressures



s global PGM prices fell, local platinum miners were already grappling with high costs at home due to increased royalty fees, which rose from 2.5% to 7%, and elevated power tariffs, hiked from 9.86 cents per kWh to 14.21 cents per kWh.

Ryan Chigoche

Cornered by these challenges, local miners had to pause billion-dollar expansion projects, with expansion plans also put on hold.

Speaking to Mining Zimbabwe at a recent event in the capital, Minister Winston Chitando said, "The worst is over for the PGM sector amid softening global prices," expressing optimism that Zimbabwe did not see any mine closures due to the global price pressures.

"All minerals are cyclical. Prices go up, prices go down. What is crucial during a downturn is if operations continue without closure, then that is a success. Some have closed elsewhere. So, when you weather a dip like this and maintain production and infrastructure, continue expansion and optimization, it speaks to a resilient platinum sector," Chitando added.

The PGM sector remains a vital contributor to the national economy, generating USD 2.1 billion in 2023. It represents approximately 25% of the country's total exports, highlighting its crucial role in economic prosperity.

The global platinum group metals market was valued at USD 18.50 billion in 2023 and is projected to reach USD 29.69 billion by 2032, growing at a CAGR of 5.4% during the forecast period (2024–2032).

Platinum Group Metals consist of six noble, precious metallic elements: platinum (Pt), palladium (Pd), rhodium (Rh), ruthenium (Ru), iridium (Ir), and osmium (Os). Known for their exceptional catalytic properties, resistance to tarnish, and high melting points, PGMs are indispensable in various industrial applications. Platinum and palladium, for instance, are extensively used in catalytic converters to reduce vehicle emissions.

However, PGM prices are notoriously volatile, prone to fluctuations driven by geopolitical tensions, disruptions in supply

chains, and fluctuations in market demand.

So, when you

weather a dip like this

and maintain production

and infrastructure,

continue expansion and

optimization, it speaks to a

resilient

platinum sector -

Hon Chitando

This volatility poses significant challenges for industries reliant on PGMs, such as automotive and electronics

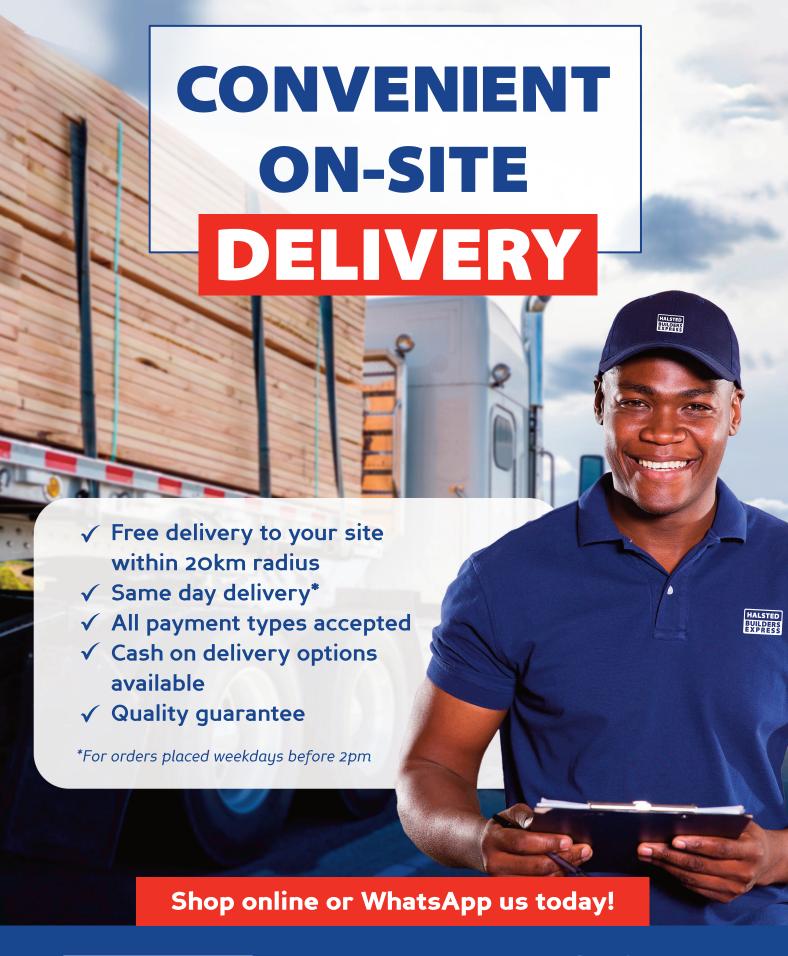
manufacturers, which require stable budgeting and long-term planning.

For instance, palladium prices were projected to be USD 1,950 per ounce in the first quarter of 2022, USD 2,000 per ounce in the second quarter, and averaged USD 2,025 per ounce for the entire

year.

However, by 2024, the price of palladium had dropped by 40%.













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Muzarabani Oil and Gas Exploration License Renewed for Three Years



In a significant development for Zimbabwe's energy sector, the government has renewed Special Grant (SG) 4571, a license for oil and gas exploration held by Geo Associates, an 80%-owned subsidiary of the Australia Stock Exchange-listed Invictus Energy.

This renewal extends for another three years, facilitating continued exploration and potential development in the Cabora Bassa area, positioning Zimbabwe as a promising player in the global energy landscape.

Background and Legal Framework

The renewal of SG 4571 falls under Zimbabwe's Mines and Minerals Act 12:05, which governs large-scale exploration activities.

According to the Act, energy minerals such as coal bed methane, natural gas, oil, and uranium are explored under Special Grants (SG), while other minerals fall under

exclusive prospecting orders (EPOs). The maximum exploration area is capped at 65,000 hectares, with an initial tenure of three years, renewable for an additional three years, subject to demonstrated exploration needs.

Invictus Energy's Plans and Progress

Invictus Energy's exploration efforts have yielded promising results. The recent interpretation of the Cabora Bassa 2023 2D Infill Seismic Survey (CB23 survey) identified multiple amplitude-supported prospects in the Dande Formation, suggesting significant gas accumulations. This positions Zimbabwe as a potential key player in global gas production.

Scott Macmillan, Managing Director of Invictus Energy, emphasized the significance of these discoveries saying

"The newly mapped amplitude-supported prospects in the Dande Formation revealed through the CB23 Seismic Survey are very exciting."

These prospects, located at relatively shallow depths of less than 1,200 meters, offer cost-effective exploration opportunities through straightforward vertical drilling methods. Integration of Mukuyu well data has reinforced prospect validity, with sidewall cores from Mukuyu-2 currently undergoing analysis to confirm essential reservoir properties.

Blanket Mine Production Increases 19%

Blanket Mine reported a 19% increase in production during the second quarter of 2024 compared to the same period in 2023, Caledonia CEO Mark Learmonth announced.

By Rudairo Mapuranga

According to Learmonth, robust production continues at Blanket Mine, with half-year production increasing by 13 percent this year compared to the first half of 2023.

"Q2 2024 gold production at Blanket was 20,773 ounces, a 19% increase from the 17,436 ounces produced in Q2 2023," Learmonth said.

"H1 2024 gold production at Blanket was 37,823 ounces, a 13% increase from the 33,472 ounces produced in H1 2023. 2024 gold production guidance at Blanket is reiterated at 74,000 to 78,000 ounces."

Commenting on the production increase, Learmonth added:

"Blanket Mine continues to provide a solid foundation for growth as we prepare to become a multi-asset gold producer. Production in the first half of 2024 was excellent and has exceeded our expectations. We remain on track to hit our annual production target of 74,000 to 78,000 ounces of gold."

Unki Mine's Production Decreases by 7percent

During the second quarter of 2024, Anglo American Platinum (Amplats)-owned Unki Mines reported a 7% decline in platinum group metal (PGM) production compared to the corresponding period last year. This decrease was attributed to operations in a lower-grade section, as detailed in the company's second-quarter report.

PGM production also decreased by 3% during the first half of 2024, totalling 117,500 ounces compared to 121,500 ounces in the previous year.

"Unki's production decreased by 7% to 54,700 ounces due to mining through a planned lower-grade section. Despite the lower grades, adjustments in stope width are anticipated to restore grades to normalized levels in the second half of the year," Amplats said.

Platinum production decreased by 9 percent during the second quarter of 2024, amounting to 25,700 ounces compared to 27,200 ounces in the second quarter of 2023. Additionally, platinum production decreased by 4 percent in the first half of 2024 compared to the previous year.

Palladium production also saw a 7 percent decrease during the second quarter of 2024 compared to the same period last year, while rhodium decreased by 4 percent over the same period.

Amplats' total PGM production in Q2 2024 decreased by 2 per cent compared to Q2 2023, totalling 921,000 ounces. However, it marked a 10 per cent increase from Q1 2024, reflecting early-stage progress in operational excellence efforts at Amandelbult.

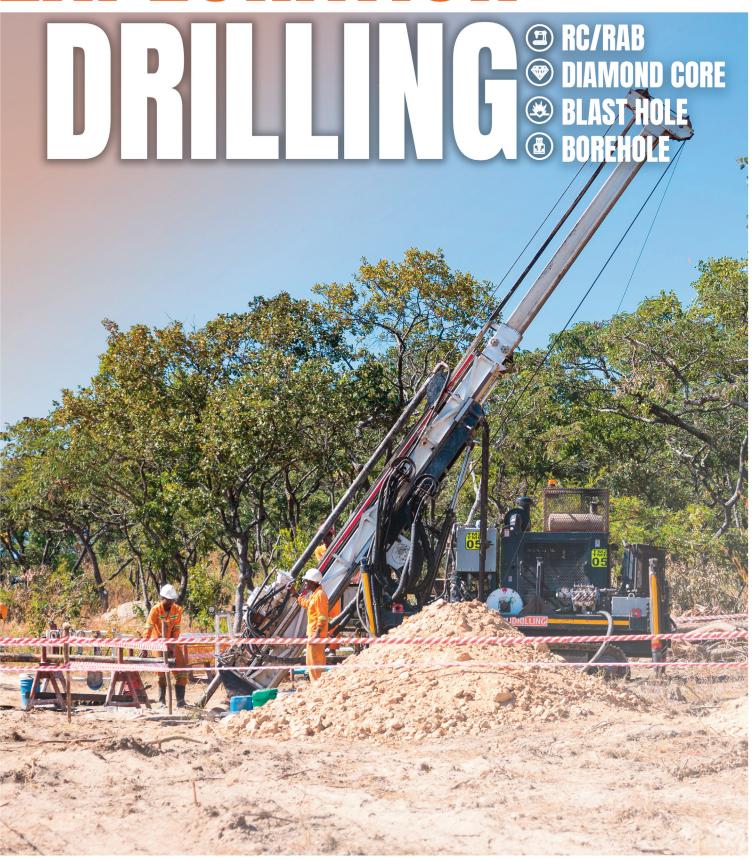
Total Amplats nickel production increased by 20 percent to 7,300 tonnes, and copper production increased by 18 percent to 4,600 tonnes due to higher throughput following the release of work-in-progress inventory.

Amplats' PGM sales volumes (excluding trading) increased by 14 per cent to 1,266,100 ounces, supported by higher refined production and a draw-down of finished goods.

The average Q2 2024 realized basket price of \$1,419 per PGM ounce was 18 percent (or 20 percent in ZAR terms) lower than Q2 2023, primarily due to a 37 percent lower rhodium price and 31 percent lower palladium price.

EXPLORATION





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KMC's Phase 2 Processing Plant Commissioning Moved to September



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350,000 tonnes of

The commissioning of the Kamativi Mining Company (KMC) lithium mine's Phase Two processing plant has been moved to September from the initial schedule of July 2024, a press release seen by Mining Zimbabwe revealed.

By Rudairo Mapuranga

The 300.000 tonnes per annum spodumene concentrate processing plant has been rescheduled to September 2024 from the initial July deadline.

According to Kamativi, the rescheduling highlights the challenges faced by the company in meeting its ambitious timelines.

"Construction of the Kamativi Mining Company's (KMC) Phase Two processing plant is making headway, with completion now scheduled for September 2024. KMC had initially projected to complete Phase Two construction by June 2024, with a trial run set for July 2024," KMC stated.

The company admitted encountering an unforeseen change in maritime transport, leading to a delay in the installation process. This admission underscores the unpredictable nature of logistics and its impact on project timelines.

"While we had not anticipated delays in

the final stages of Phase Two construction, we encountered an unforeseen change in maritime transport, leading to a 'slight delay' in the installation process of the project. We have therefore deferred Phase Two commissioning to September 2024," KMC explained.

"Following construction, the commissioning phase production of 2.3 million commences. This phase tonnes of ore, producing involves rigorous testing and verification of the spodumene concentrate, processing plant's systems, and that concentrate machinery, and processes to ensure they function as intended. It's the final checkpoint before we operationalize our Phase Two

> The projected output indicates the significant scale of this expansion and its

spodumene plant," KMC elaborated.

potential impact on the market.

"Thereafter, we anticipate the Phase Two project to deliver its first output during the last quarter of 2024. The designed ore processing capacity for Phase Two is set to process two million tonnes of ore into 300,000 tonnes of spodumene concentrate per annum," KMC noted.

KMC said the successful implementation of Phase One sets a strong precedent for the expected outcomes of Phase Two.

Phase One of the processing plant, commissioned on 23rd December 2023, before official commissioning by His Excellency, President of the Republic of Zimbabwe Cde Dr. Emmerson Mnangagwa on Friday, 12th April 2024. Phase One has a production capacity of handling 300,000 tonnes of ore, producing 50,000 tonnes of spodumene concentrate per annum," KMC recalled.

According to KMC, when the plant is complete, it will have a combined annual production capacity of 2.3 million tonnes of ore, producing over 300,000 tonnes of spodumene concentrate.

"When both phases of our processing plant are complete, we will have a combined annual production of 2.3 million tonnes of ore, producing 350,000 tonnes of spodumene concentrate, and that concentrate will be exported," KMC added.

KMC has heeded the call by the government to contribute to the vision of achieving an upper-middle-income economy by 2030.

"As an investor, KMC is playing its part to contribute to Vision 2030 through lithiumrelated value chains. We have heeded the call by the Government of Zimbabwe to promote beneficiation, and we are delighted to share that we submitted our beneficiation plan to the Ministry of Mines and Mining Development," KMC asserted.

This international partnership highlights the global nature of the mining industry and the strategic importance of KMC's operations.

"Kamativi Mining Company (KMC) is a Joint Venture (JV) operated and controlled by Sichuan PD Technology Group, a subsidiary of a Chinese listed entity, Yahua Group. The local Joint Venture Partner is Kamativi Tin Mines Limited, wholly owned and controlled by Mutapa Investment Fund through Defold Mine (Private) Limited. Yahua Group is ranked 5th in the world for being a top lithium hydroperoxide and explosives supplier. The Group has over 6,000 employees in 70 subsidiaries distributed throughout Australia, China, Ethiopia, Namibia, New Zealand, and Zimbabwe," KMC explained.

"Last year, KMC completed construction of



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13. MINING ZIMBABWE • EDITION 73

A new lease of life as Hwange Colliery re-energises with a US\$50M Coal Mine Partnership



Hwange Colliery Company Limited (HCCL), a key player in Zimbabwe's mining sector, is making significant strides towards recovery and growth through strategic partnerships and innovative restructuring.

The latest development, a US\$50 million joint venture with Chinese firm Zhong Jiani Investment (ZJI), is set to reinvigorate the company and position it as a leading producer of coking coal in the region.

Strategic Partnership for Coal Production

The collaboration between HCCL and ZJI aims to establish a new underground coal mine in Hwange, Zimbabwe. This ambitious project is expected to produce 80,000 tonnes of coking coal monthly, with a projected lifespan of 25 years. The joint venture, which sees HCCL holding a 23% stake with plans to increase to 33%, and ZJI owning the balance, represents a significant investment in the region's mining industry. The revenue generated will fund the construction of a coke oven battery, further boosting production capabilities.

Eng. Munashe Shava, the administrator overseeing HCCL's reconstruction, highlighted the importance of this venture for the company's recovery. He noted that HCCL had been burdened with numerous value-eroding activities, and this strategic partnership was a critical step in transforming the company from a loss-making entity into a profitable one.

Comprehensive Restructuring for Sustainable Growth

In addition to the joint venture with ZJI, HCCL has undergone a significant restructuring, resulting in the creation of seven independent companies. These include the Hwange Mining and Processing Company, Hwange Property Company, Hwange Medical Company, Hwange Zambezi Agriculture Company, Hwange Lubimbi Energy Company, Hwange Khula Fund, and the joint venture with ZJI. This restructuring is designed to boost production, streamline operations, and unlock significant value for shareholders.

Akim Mutiti, the technical project consultant, emphasized the progress made in the 3-Main North project, with substantial investments in exploration, shaft development, and the construction of a washing plant. The washing plant, which is nearing 90% completion, will process coal for high-quality coke production, essential for industrial smelters

Leveraging Regional Demand and Strategic Partnerships

HCCL's turnaround strategy also includes leveraging new business opportunities and partnerships, such as the US\$1.5 billion Dinson Iron and Steel project. This collaboration is expected to significantly boost domestic and regional demand for coking coal, allowing HCCL to achieve an annual production target of 1.2 million

tonnes through underground mining joint ventures.

The Dinson Iron and Steel plant, located in Manhize, is projected to produce 600,000 metric tonnes of steel products in its first phase, increasing to about five million tonnes per annum. This substantial demand for coke will be met by HCCL's increased production, supported by technological efficiencies and strategic partnerships.

Impact of the Just Energy Transition on African Coal Mining

The importance of coal mining in Africa, particularly in countries like Zimbabwe, cannot be understated. While the global push towards renewable energy is crucial, it is essential to recognize that African nations have historically contributed minimally to global pollution. For these countries, coal remains a vital resource for economic development and energy security.

The just energy transition must consider the unique needs and circumstances of African countries. For Zimbabwe, utilizing its coal reserves responsibly can drive industrial growth, create jobs, and support the nation's energy needs. The investments in coking coal and the development of efficient mining and processing facilities, as seen in HCCL's initiatives, are crucial steps towards a balanced and equitable energy transition.

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Sanctions and Zimbabwe's High-Risk Profile Deterring Miners from Listing on Local Capital Markets



Market analysts say that the authorities must do more to attract local mining companies to list on the local capital markets, giving local investors, such as pensioners and asset managers, an opportunity to invest in the mining sector.

Zimbabwe's local mining sector accounts for 13% of the country's GDP, with the sector investing upwards of US\$1.5 billion in capital projects over the past three years. An additional US\$456 million is lined up to boost production.

Despite these massive investments, only two mining companies are currently listed on the Victoria Falls Stock Exchange:
Padenga and Caledonia, with Bindura Nickel Corporation (BNC) still under a trading suspension.

Most of these mining companies, which are foreign, are listed on foreign bourses believed to be deeper pools for raising funds compared to the two local bourses. Current legislation allows for companies to have dual listings, but most local mining companies have not explored that option yet.

Finance expert Tinotenda Murove said the Zimbabwe Stock Exchange must create an environment that enables asset managers and pension funds to invest in the local bourse.

"The mining sector provides a really good opportunity for pension funds and other asset managers to create sustainable

wealth for Zimbabwean citizens since the sector has proven resources. An accessible pathway for locals to invest, either through the mining houses and exploration companies having secondary listings on the local bourses or listing debt instruments locally, would help a lot and tap into a capital base that has lately been going to the limited options of equities and real estate," said Murove.

A major factor deterring foreign mining companies from listing on the local capital markets is the sanctions attached to Zimbabwe and the country's status as a high-risk nation.

"The risk of operating in a country that's been slapped with sanctions is that not many companies want to be involved with such a country. In the case of Zimbabwe, the sanctions are targeting certain individuals, so if the mining companies go public, those sanctioned individuals can actually end up investing. This will result in the companies being fined by the United States. As a result, many companies don't want that risk, so they try to create some sort of divide in terms of liability."

To circumvent the sanctions, financial analyst Farai Mtutu suggested the introduction of depository receipts, enabling local investors to invest while protecting companies from liabilities.

"So I think one way to actually circumvent that problem has been to issue what are called Zimbabwean depository receipts. Those actually allow people to invest in those foreign companies, foreign mining businesses, without those businesses taking on the additional liabilities that would be associated with sanctions," said Mtutu

One key reason for listing on a stock exchange is to raise funds. In Zimbabwe, the Victoria Falls Exchange has struggled to attract capital lately. Companies are struggling to raise foreign currency just for working capital, leaving much less available for investments on the Victoria Falls Exchange.

Policy inconsistencies also contribute to the overarching country risk associated with Zimbabwe. Foreign companies operating in the country do not know what's going to happen to stock balances beyond 2030, the timeline for the multi-currency regime. This policy uncertainty deters investors from putting money on the Victoria Falls Exchange, especially if it's offshore.

A recent example is that the VFEX used to offer an incentive where listed companies would get most of their funds through favorable foreign currency retentions, but the authorities soon backtracked in a policy flip-flop. Since the incentive was removed, additional listings on the Victoria Falls Exchange have been limited.

Mtutu added that the ZSE should introduce more incentives to lure big mining companies to the local exchanges.

"The VFEX can put as many incentives as they want, or as they can, but I think that there needs to be corresponding action on a macro level. We need to de-risk the country. Until then, it's going to be difficult to call on international investors to come into Zimbabwe because those are the people that will come with capital. The capital that the VFEX needs is not local. It's mostly international, and we need to get our economics right, our politics right, to make sure that there's an influx of FDIs that comes onto the VFEX," he said.

According to the Chamber of Mines, the mining sector requires US\$12 billion in funding. Some experts believe that these miners are not listing because there just isn't enough capital in the Zimbabwean market for their projects.

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Defold Mine in Strategic Mineral Exploration and Investor Partnerships



Defold Mine Pvt Ltd, owned by the government through the Ministry of Mines and Mining Development and now under the Mutapa Investment Fund, is setting the stage for a transformative approach to mineral exploration and investor collaboration in Zimbabwe.

Under the leadership of acting general and par Manager Wilfred Tanyanyiwa, Defold Mine is dedicated to prospecting and exploring strategic mineral resources across the nation.

Speaking to Mining several benefits, including Zimbabwe, Tanyanyiwa access to a diverse portfolio of Defold emphasized mineral resources, strategic Mine's expansive locations with high mineral operations and potential and partnerships ambitious future plans, with a company that prioritizes stating that it is currently sustainability,community prospecting and exploring development. for strategic minerals in an endeavor to ensure the country benefits from the green energy transition.

He said his company has various minerals within its mining portfolios, including gold, chrome, lithium, beryllium, and gemstones, among others.

"Defold is actively prospecting and exploring for strategic mineral resources across the country. We currently hold various mining titles in chrome, gold, and lithium. In Mashonaland West, we have a

reservation covering 500,000 hectares with occurrences of gemstones, beryllium, graphite, and many other minerals yet to be explored. Our chrome deposits are located in Guruve and Mahamara, near Lalapansi."

Defold Mine's mandate is not to mine directly but to identify prospective areas and partner with investors. This strategic focus has already borne fruit through engagements with international

investors, including the Yahua
Investors partnering
Group.
with Defold Mine can expect

"Defold is currently
engaged in strategic
partnerships with
various international
investors, one of which is
Yahua Group. These
ty partnerships are designed
to ensure mutual growth
and development.

Importantly, our agreements include community development programs that involve skills transfer to locals, ensuring that the communities around our mining operations benefit directly from our activities," Tanyanyiwa added.

According to Tanyanyiwa, what sets Defold Mine apart is its unwavering commitment to sustainable mining practices and community development.

He said Defold's strategic focus on

exploration, investor partnerships, and community development positions it as a pivotal player in Zimbabwe's mining sector, offering a promising future for both investors and the nation.

"Our commitment to sustainable mining practices and community development is a key differentiator. We prioritize environmental sustainability and have implemented robust measures to minimize our ecological footprint. Additionally, our focus on skills transfer and local community development ensures that our projects contribute to the socioeconomic growth of the regions in which we operate," Tanyanyiwa said.

For investors, partnering with Defold Mine offers several compelling benefits.

"Investors partnering with Defold Mine can expect several benefits, including access to a diverse portfolio of mineral resources, strategic locations with high mineral potential, and partnerships with a company that prioritizes sustainability and community development. Our transparent and ethical business practices provide a solid foundation for long-term, profitable collaborations," he emphasized.

Looking ahead, Defold Mine has an ambitious expansion plan.

"We have an ambitious expansion plan that includes further exploration of our existing mineral reserves and the acquisition of new mining titles. Our goal is to become a leading player in Zimbabwe's mining sector, contributing significantly to the country's economy. We are also exploring opportunities to integrate value addition into our operations, which will enhance the profitability and sustainability of our projects," Tanyanyiwa stated.

A cornerstone of Defold Mine's strategy is its robust community development initiatives. "Our community development initiatives are integral to our operations. We ensure our partners invest in educational programs, healthcare facilities, and infrastructure development in the communities surrounding our mines. By providing skills training and employment opportunities, we aim to uplift these communities and ensure they benefit from our presence in the region," he said.

Minerals Transit Insurance

Minerals Transit Insurance provides cover for minerals such as lithium, chrome, copper, platinum when being transported in and outside the country.

The policy provides cover on an 'all risk' basis inclusive of physical loss and theft. There are however certain things not covered like confiscation, nationalization, requisition or destruction of load by or under the order of any government or its related departments.

Factors affecting premium

There are several factors that affect the premium to be paid including:

- a. Whether this will be a once-off transit or there are ongoing transits. A once-off transit usually attracts a higher insurance rate compared to an annual policy for multiple transits.
- b. The limit any one carry per transit and where applicable the estimated annual carry limit.
- c. The mode of transport used. For example, rail is generally deemed to have less risk for theft, hi-jack or similar risks and

is often faster than road.

- d. Destination. For instance, a road shipment going to a port in Mozambique will be deemed to have a lower risk compared to one going to China by ship.
- e. Past losses experienced. Have you had any past transit losses and what risk management changes have been made to minimise similar losses occurring now?

It is important to notify if the company is outsourcing transport for the shipment to third party contractors as some polices will need to be endorsed to include them.

Claims

Once cover is in place, if a claim occurs the following documentation is often required for claim processing:

- a. Completed claim form
- b. Police report if an accident or theft occurred.
- c. Copy of documentation showing the value of the load damaged/stolen/ destroyed and recovered (where applicable).
- d. Other supporting documents that

maybe required on a case-by-case basis.

Once documentation is submitted, an independent assessor is appointed to verify the loss and once they have completed their process they submit their report to the insurer leading to settlement of the claim.

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Tichaona Chihambakwe is the Head of Business Development and Marketing for Firstlink Insurance Brokers.



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Government to Unveil US\$10 Million for Chrome and Gemstone Miners in September



n an effort to promote chrome and gemstone Artisanal and Small-scale Miners (ASM) in Zimbabwe, the government will unveil a US\$10 million funding scheme to boost production and ensure responsible mining, announced Minister of Mines and Mining Development, Hon. Winston Chitando.

Speaking at the Zimbabwe Miners Federation (ZMF) AGM and Conference held at Hippodrome in Braeside, Harare, Minister Chitando announced that President Emmerson Mnangagwa will unveil a US\$10 million facility fund for the non-gold ASM sector in September.

"Before the end of September, there will be an initial US\$10 million facility specifically for equipping non-gold production. This facility is designed for miners, including those in the chrome and gemstone sectors. It will be launched by His Excellency, the President, on the day it is announced. All the mechanisms have been concluded, and we are just finalizing a few details before it goes to His Excellency," Chitando said.

Minister Chitando emphasized that for chrome miners specifically, this facility means they can apply for funds to equip their operations. However, the launch of this facility will come with some rules and policies.

"One key rule is that all chrome ores cannot be traded freely. If you have chrome and want to sell it to a company,

particularly those known for smelters, you must inform us.

"In some cases, miners are being undercut or eliminated by unfair practices, which is unacceptable. Therefore, a mechanism will be put in place to ensure that if you are a miner, you can only sell chrome ores with the transaction overseen by the MMCZ (Minerals Marketing Corporation of Zimbabwe)," he said.

According to the Minister of Mines, the physical ore does not have to go to the MMCZ.

"We do not want to create any protests. If the ore is at your mine and you normally sell it to a buyer, your paperwork must go to the MMCZ before the buyer can move it. The MMCZ will confirm that you are being paid fairly. Once confirmed, you can proceed with the transaction," Chitando said

This mechanism serves as a legal safeguard against fraud and is there to protect chrome miners.

Chrome miners have been crying foul of predatory chrome buyers who were purchasing ores with over 40 percent chrome content at less than US\$25, leaving miners in abject poverty.

The US\$10 million facility presents numerous advantages for the ASM sector:

Enhanced Production Capacity

The facility will enable miners to acquire modern equipment, enhancing their production efficiency and output.

Fair Market Practices

By routing transactions through the MMCZ, miners are assured fair prices for their ores, protecting them from exploitative practices.

Economic Empowerment

Increased earnings from fair sales will improve the economic conditions of miners, contributing to the up liftment of the ASM community.

Responsible Mining

The funding will support miners in adopting responsible and sustainable mining practices, benefiting the environment and communities.

Regulated Market

With MMCZ oversight, the market for chrome and gemstones will be more regulated, ensuring transparency and accountability.

The initiative by the Minister of Mines and Mining Development will undoubtedly be welcomed by chrome miners, who have long suffered from unfair market practices.



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Top 10 Mining Deals by Value over the Past Five Years



he advent of the Second Republic, championed by its mantra "Zimbabwe is open for business," has spurred significant investment in Zimbabwe, particularly in the mining sector.

By Rudairo Mapuranga

The government is optimistic that the country will achieve upper-middle-income status by 2030, largely due to increased investment in the mining value chain.

Over the past five years, numerous significant deals have been signed by companies aiming to boost mining revenue and foster sectoral growth and development.

Below is a list of the top 10 projects by value and significance signed in Zimbabwe over the past five years:

Karo Resources (Platinum Group Metals)

Karo Platinum is the latest low-cost, open-pit PGM asset under construction on the Great Dyke in Zimbabwe. A joint venture between Karo Mining Holdings (85%) and Generation Minerals (15%), this project has an initial lifespan of 17 years, with less than 10% of its 23,903 ha project area utilized to achieve this duration. The project, valued at US\$4.2 billion,

involves developing a platinum mine and refinery in Mhondoro-Ngezi, which is set to significantly enhance Zimbabwe's PGM production.

Zimplats (Platinum Group Metals)

In 2021, Zimplats signed a US\$1.8 billion deal aimed at expanding its mining operations. This includes the development of new mines and the expansion of processing facilities to increase platinum production.

Zimplats said US\$386.2 million is primarily for the development of the Mupani mine. The Base Metal Refinery (BMR) plant, which will cost US\$200 million, is designed to have the capacity for local PGM base metal refining. This project is expected to create

direct jobs and at least 1,000 indirect jobs.
Additionally, Zimplats plans to construct a
110 MW solar power plant at a total cost of
US\$201 million. An expanded smelter is
projected to cost US\$280

low-cost, open-pit PGM asset

under construction on the Great

Dyke in Zimbabwe. A joint

venture between Karo Mining

Holdings (85%) and Generation

Minerals (15%), this project has an

Karo Platinum is the latest development of the

Hartley mine will require US\$289 million.

Tsingshan Holding Group (Steel and Ferrochrome)

initial lifespan of 17 years, with Tsingshan Holding less than 10% of its 23,903 ha Group, a Chinese project area utilized to achieve company, signed a US\$1 this duration. billion deal to establish a steel plant and ferrochrome smelter in Zimbabwe. Tsingshan's Dinson Iron and Steel Company will initially produce 600,000 metric tons of carbon steel annually. Additionally, Tsingshan has made substantial investments in Zimbabwe, including in ferrochrome, coking coal, and lithium mining, and has constructed a 50-megawatt thermal power plant at Dinson to meet 20% of its electricity needs.

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Bravura Holdings (Platinum, Lithium)



Bravura Holdings, owned by Nigerian billionaire Benedict Peters, is investing \$1 billion in a platinum mining project in Selous and developing a state-of-the-art lithium processing plant in Kamativi, aiming to significantly increase Zimbabwe's platinum production.

Alrosa (Diamonds)

Russian diamond giant Alrosa signed a US\$400 million deal for the exploration phase to mine diamonds in Zimbabwe, particularly in Manicaland Province.

Zhejiang Huayou (Lithium)

Valued at US\$422 million, Australia Stock Exchange-listed company Prospect Resources sold the Arcadia Lithium Mine to Huayou Cobalt, which has established one of Africa's largest lithium hard rock processing plants, and the world's third largest.

Caledonia Mining Corporation (Gold)

Caledonia Mining Corporation acquired Bilboes Gold for nearly US\$60 million with plans to increase gold production at its Blanket Mine. Exploration for additional gold mining projects is ongoing.

Kuvimba Mining House

Kuvimba acquired various mining concessions in the last five years, including Freda Rebecca Gold Mine, Shamva Gold Mine, Jena Mines, Great Dyke Investments, Sandawana Mines, and Zimalloys, for a value just under US\$0.5 billion. The government holds a 65% stake in the company, having paid US\$1.6 billion for a 35% stake earlier this year.

Sinomine Resource Group (Lithium)



Sinomine Resource Group acquired Bikita Minerals, one of Zimbabwe's largest lithium producers, for US\$180 million, aimed at enhancing lithium production to meet the growing demand, particularly in the electric vehicle market.

Mapinga Mines to Energy Park (Mining Value Chain Project)

Integrated Mining and Energy Production, Total Value US\$13 billion.

The Mapinga Mines to Energy Park project aims to integrate mining activities with renewable energy production, contributing to sustainable development and energy security in Zimbabwe. Construction of the US\$13 billion mine-to-energy industrial park in Mashonaland West Province is progressing, with investors awaiting finalization of administrative processes to commence implementation. The Government, along with two Chinese investors—Eagle Canyon International Group Limited and Pacific Goal Investment—signed a memorandum of understanding paving the way for this project along the Harare-Chinhoyi road.

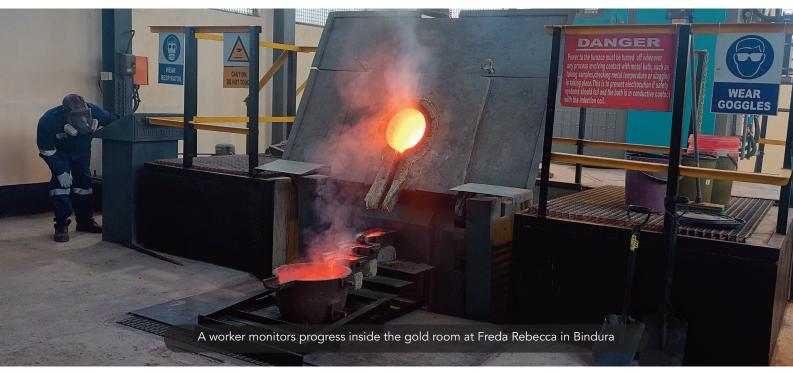
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Inside the Gold Room at Freda Rebecca Gold Mine



In Mid-july, Mining Zimbabwe joined media practitioners on a tour of Freda Rebecca Gold Mine, owned by Kuvimba Mining House (KMH) under the oversight of Mutapa Investment Fund. The tour aimed to highlight that transparency and accountability are paramount in processing gold bullion.

By Rudairo Mapuranga

The Gold Room at Freda Rebecca

The Gold Room at Freda Rebecca plays a crucial role in the gold production process, adhering strictly to international standards on responsible sourcing and mining guidelines.

Smelting and Bar Formation

The journey of gold at Freda Rebecca begins with the smelting process, where bullion undergoes careful heating to separate impurities and achieve a specific composition. Temperature controls and chemical treatments ensure the gold is refined to a composition typically consisting of 85% gold and 10% silver, among other trace elements. Once smelting is complete, the molten alloy is poured into molds to form bars. Each pour is meticulously monitored to maintain consistency and quality. The newly formed gold bars are then allowed to cool and solidify under controlled conditions to prevent imperfections.

Sampling and Final Processing

After solidification, the gold bars undergo a final process where each bar is marked to denote its origin and authenticity. A drill bit is used to extract a uniform cross-section sample from each bullion bar, ensuring representativeness. This sample weighs precisely 67 grams and is meticulously weighed and recorded to three decimal places. Each bullion bar is assigned a unique ID, and crucial details such as weight, production date, time, and personnel involved in the smelting process are meticulously logged into the Constack software. Hard copies of this data serve as a redundant backup, signed for accuracy and completeness.

Security and Transportation

Upon marking and recording, the gold bars are carefully handled and placed into bullion boxes. These boxes are subject to strict security measures, including surveillance cameras, ensuring the integrity and traceability of each shipment. Once secured, the bullion boxes are transported to the nearby helipad, for transportation.

Final Journey to Fidelity Gold Refinery

From the helipad, the bullion boxes are airlifted to the Fidelity Gold Refinery. Fidelity, known for its stringent standards and procedures, processes the gold further, ensuring it meets international market requirements for purity and quality. This final step verifies that the gold from Freda Rebecca, sourced and processed under the auspices of Kuvimba Mining House, adheres to the highest industry standards.





De Beers poised to maintain diamond industry dominance post-Anglo American departure

In the ever-evolving landscape of the diamond industry, the announcement of the separation between renowned miner Anglo American and De Beers marks a significant milestone.

However, far from signaling a decline, De Beers, under the leadership of its CEO Al Cook, is poised to maintain its stronghold on the diamond market well into the future.

According to Cook, with a legacy spanning 136 years, De Beers has been at the forefront of the diamond trade, shaping the industry's trajectory and establishing itself as a global leader. He said his vision and steadfast commitment to excellence underscore De Beers' unwavering dedication to maintaining its position as the premier diamond company worldwide.

"De Beers has led the diamond industry for more than a century. We have unparalleled expertise, outstanding assets across more than 20 countries, a unique sales model, and an iconic brand synonymous with diamonds. I am confident that we will remain the diamond leader for the next century.

"Today's announcement from Anglo

American opens up new possibilities under new ownership. But some things will not change. We will continue to deliver value for all our stakeholders, including our partners in Botswana, South Africa, Namibia, Canada, Angola, and other countries. In particular, we look forward to finalizing our transformational agreement with the Government of the Republic of Botswana, who hold a 15% ownership interest in De Beers

"Later this month, we will present the new strategy for De Beers. Diamonds remain some of the most desired products around the world, and I am excited by the opportunity we have to bring their magic to a new generation. With the ongoing recovery in rough diamond demand, and such a positive outlook for the sector, I feel very confident in our future," Cook said.

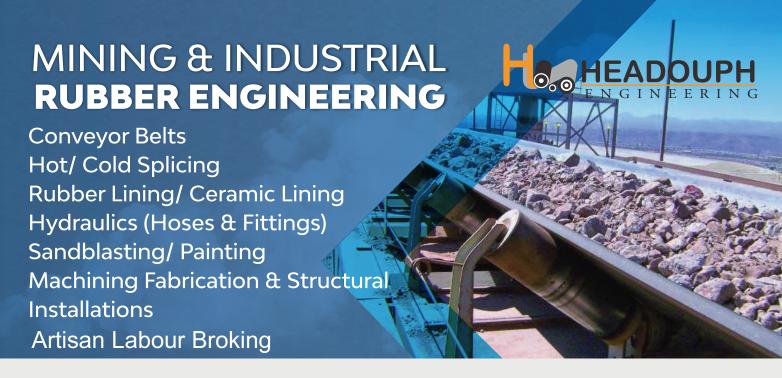
Central to understanding De Beers' continued success is recognizing the pivotal role played by Cecil Rhodes in its establishment. Rhodes, a prominent figure in the diamond trade and the founder of De Beers Consolidated Mines, laid the foundation for the company's enduring legacy. His vision and strategic foresight laid the groundwork for De Beers' ascent to

prominence, setting a precedent for excellence that continues to guide the company to this day.

Looking ahead, Cook's anticipation of presenting a new strategy for De Beers signals a bold and forward-thinking approach. In an era where diamonds remain coveted symbols of elegance and prestige, De Beers is well-positioned to leverage its unparalleled expertise, extensive assets, and iconic brand to captivate a new generation of consumers.

Furthermore, with the resurgence of demand for rough diamonds and a promising outlook for the sector, De Beers stands poised to capitalize on emerging opportunities and solidify its status as the preeminent authority in the global diamond market.

While the separation from Anglo American represents a new chapter in De Beers' storied history, it by no means diminishes its status as the industry leader. With Al Cook at the helm, De Beers remains steadfast in its commitment to innovation, sustainability, and excellence, ensuring its continued dominance in the diamond industry for generations to come.



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Fidelity Enhances Gold deliveries

FIDELITY GOLD REFINERY WITH MOBILE BUYING UNITS, STRONGER ASM RELATIONSHIPS



idelity Gold Refinery (FGR), the country's sole operating gold buyer and exporter, is set to revolutionize gold acquisition by introducing mobile buying units. By strengthening partnerships with artisanal and small-scale miners (ASM), these initiatives aim to increase gold deliveries and promote responsible mining practices across Zimbabwe.

Speaking at a vital mining stakeholders workshop in Kadoma, hosted by the Ministry of Mines and Mining Development and the Zimbabwe Miners Federation (ZMF), FGR ASM Manager Mr Francis Maidza said the sole gold buyer was aiming to increase its coverage by introducing more gold buying centers while also introducing mobile gold buying units.

"We aim to increase our coverage with more buying centers across the country, currently at about 17 centers and 80 buying agents. Introducing mobile gold buying units is also part of our strategy to enhance coverage," Maidza stated.

Ensuring Traceability and Clean Gold

According to Maidza, FGR is committed to developing a robust traceability system to track gold from mine to market, ensuring it is responsibly sourced.

"Globally, traceability is becoming critical to ensure gold is not sourced from conflicted areas. Fidelity is working towards full traceability and accreditation, such as with the Dubai Commodity Exchange, to secure favorable prices. Currently, we are about 60% towards our 2025 target," Maidza explained.

Formalizing ASM Operations

The FGR ASM Manager said his company is dedicated to formalizing the ASM sector to promote responsible sourcing and adherence to mining guidelines. He emphasized the need for government support in funding small-scale mining projects to foster sector growth.

"At Fidelity, we cooperate with other regulated bodies and continue working with regulatory authorities in the gold value chain to minimize gold leakages. We aim to see more artisanal small-scale mines being formalized. Responsible sourcing is crucial, and we need to ensure the origin of the gold we receive," Maidza

Government Collaboration and Policy Advocacy

Maidza urged stakeholders to leverage recent policy changes, such as the elimination of VAT on gold sales to FGR, to enhance gold deliveries and improve

liauidity.

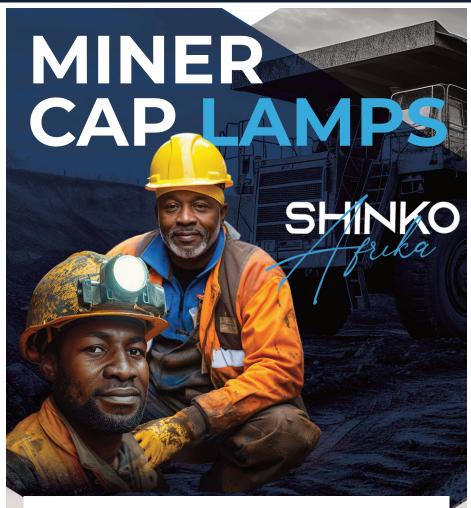
"I'm sure you all noticed the Statutory Instrument issued last week, which scrapped VAT on all gold sales to Fidelity Gold Refinery. We should take advantage of this by bringing more gold to Fidelity, thereby freeing up working capital," he

Addressing Sector Challenges

FGR continues to address various challenges within the gold sector, including power supply issues and the need for a legal framework to manage violations in gold trading operations. "Power supply has been a significant issue, as one of our colleagues from ZETDC highlighted. However, the first two months of the year saw a decline in deliveries due to rising water tables. Formalizing the small-scale mining sector is essential since it accounts for nearly 60% of our gold," Maidza remarked.

He also highlighted the importance of anti-money laundering measures and improving cooperation with the Minerals Marketing Corporation of Zimbabwe (MMCZ) and other stakeholders to combat challenges in the gold sector.

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Jena to tripple production

Mutapa Investment Fund, the country's sovereign wealth fund, through its wholly-owned Kuvimba Mining House (KMH), is looking to triple production at its gold mine in Silobela, Jena Mines, to significantly boost the company's contribution to Zimbabwe's gold output.

Currently, Kuvimba delivers 10 percent of the country's gold to Fidelity Gold Refinery (FGR) and aims to double that contribution in the coming years.

Speaking to Mining Zimbabwe, KMH head of the gold cluster, Patrick Maseva-Shayawabaya, noted that Jena Mines is under-explored. The company plans to undertake extensive exploration to enhance the resource base, potentially increasing production from the current 30 kgs to 100 kgs of gold per month.

"Jena Mines, like Freda, is also underexplored. However, indications suggest that when we conduct further exploration, we'll have a much larger resource. We currently have 7 million tonnes of ore in the inferred category. We need to improve the confidence in that ore body by doing more exploration. Once we do that, the current production capacity of 30 to 35 kgs of gold per month could increase to as much as 100 kgs per month," he said.

According to the KMH head of the gold cluster, in the short term, Kuvimba plans to increase Jena's processing capacity to jump from 30 kgs to 50 kgs per month. This involves upgrading the processing plant to handle more ore, ultimately aiming to achieve a production rate of 100 kgs per month

Maseva-Shayawabaya emphasized the strategic importance of these developments, stating, "By boosting our exploration efforts and upgrading our processing capacity, we are not only enhancing Jena Mines' output but also contributing to the national goal of increasing gold production. This aligns with our broader vision of maximizing the value of our mining assets and supporting Zimbabwe's economic growth."



Lithium Battery Manufacturing:

A crucial need for Zimbabwe

Lithium battery manufacturing is increasingly recognized as a vital industry for the future of energy and transportation world over making Zimbabwe a key player as it hosts the key mineral at various locations countrywide. With the growing demand for electric vehicles (EVs) and renewable energy storage solutions, the need for efficient and sustainable battery production is more urgent than ever.

As the world moves toward a greener future, establishing and expanding domestic lithium battery manufacturing capabilities can significantly enhance economic growth, job creation, and environmental sustainability.

What is driving the demand for lithium batteries?

Several key factors drive the demand for lithium batteries. Primarily, the rapid expansion of the electric vehicle (EV) market is a significant driver. EVs offer numerous advantages over traditional vehicles, including reduced emissions, lower operating costs, and advanced technological features. This market expansion is supported by governments' incentives, strict emission regulations, and

increasing consumer demand for eco-friendly transportation options.

In addition to the EV market, the widespread use of portable electronic devices such as smartphones, tablets, and laptops has heightened the demand for efficient and durable batteries. As these devices become more integral to daily life, the need for reliable power sources grows. The shift towards renewable energy sources, such as solar and wind power, also necessitates effective energy storage solutions to manage intermittent power output. Lithium batteries, with their high energy density and long cycle life, are ideally suited for these applications.

Who is leading the way in lithium battery manufacturing?

Countries with strong technological expertise, abundant raw materials, and supportive government policies such as China are leading the way in lithium battery manufacturing.

Zimbabwe and several African nations are very much behind when it comes to developing their capabilities to secure a foothold in this critical industry.

Eng. Isago Mangwane, Director of In TechPower, emphasized the importance of establishing domestic manufacturing capabilities: "Reliance on a small number of international suppliers may result in vulnerabilities such as supply disruptions, price volatility, and geopolitical threats." By developing local production, countries can reduce their dependency on imports, create jobs, and stimulate technological innovation.

Where are the key challenges?

The global supply chain for lithium and lithium-ion batteries faces numerous challenges and risks. Concentrating lithium production in a few countries presents supply vulnerabilities and geopolitical risks. Environmental risks associated with lithium extraction and processing, such as pollution, habitat destruction, and water usage, further complicate the situation. Supply chain bottlenecks, including transportation delays and limited refining capacity, exacerbate these issues.

Moreover, the rising demand for lithium-ion batteries due to the EV market and renewable energy storage needs strains the supply chain, potentially leading to shortages and price volatility. Ethical concerns regarding labour conditions in mining regions, especially in the Democratic Republic of Congo, underscore the need for more socially and sustainably responsible sourcing strategies. Addressing these issues is crucial for ensuring a stable and sustainable lithium supply chain in the long term.

Why is domestic manufacturing essential?

Establishing domestic or regional manufacturing capabilities for lithium batteries is essential for ensuring supply chain security. By boosting domestic production, Zimbabwe and other African countries can reduce their dependency on imports, create jobs, and foster technological innovation within their economies. Localized manufacturing also promotes more environmentally friendly practices by reducing transportation emissions and improving battery recycling and waste management.

Mangwane asserts, "Countries must have local or regional lithium battery manufacturing capacity to guarantee supply chain security. Localised manufacturing can result in more environmentally friendly practices, enhance energy security, and position nations to lead in the expanding green energy industry."

How can we achieve sustainable lithium battery manufacturing?

Achieving sustainable lithium battery manufacturing requires a collaborative approach among governments, industries, and stakeholders. Governments should implement supportive policies and provide incentives for research and development in battery technologies while ensuring robust environmental regulations to minimize ecological impact. Industries need to focus on sustainable sourcing of raw materials, invest in advanced recycling technologies, and innovate in energy-efficient manufacturing processes.

Stakeholders, including academic institutions and non-profits, should promote knowledge sharing and workforce training to drive technological advancements and maintain a skilled labour force. Mangwane highlighted the importance of collaboration: "Sustainable battery solutions can minimize environmental impact through the use of eco-friendly materials and recycling processes, contributing significantly to global sustainability efforts."

Technological innovations

Recent technological advancements in lithium battery manufacturing hold the potential to enhance efficiency, reduce costs, and improve performance. Innovations such as high-energy-density, high-power-density, and longer-lifespan batteries exemplify these advancements. Solid-state batteries, incorporating solid lithium metal anodes and solid ceramic electrolytes, offer increased energy densities and enhanced safety. Improved lithium-air and lithium-sulfur batteries provide higher energy storage capabilities.

Mangwane notes, "Innovations in battery technology, such as accelerated charging speeds and longer battery life facilitated by nanotechnology and innovative electrode materials, pave the way for higher-performing, more affordable, and more efficient lithium batteries."

Environmental considerations

Lithium battery manufacturing involves several environmental considerations, including high energy consumption, potential pollution, and resource extraction impacts. Enhancing mining procedures, increasing battery component recycling rates, and developing more efficient, less-polluting production methods can mitigate these environmental impacts. Utilizing renewable energy sources in manufacturing operations can further reduce the environmental footprint of lithium battery production.

Lithium Battery Production a Pipe Dream Without Investing in Power Production - Chabata

Zimbabwe must invest in power generation to facilitate value addition in mining, emphasized Dr. Phillip Chabata, Director of Calling Her Children Home.

Speaking to Mining Zimbabwe at the Africa Investment Leaders Forum and Awards 2024 in Harare recently, Dr. Chabata stressed that successful investment in mining value addition hinges on the country's commitment to energy production.

"Successful mining investment in the country requires us to collectively agree on the necessity to progress. Progress entails prioritizing power generation. For instance, the production of lithium batteries will not materialize without dedicated efforts in power production," Chabata remarked.

Dr. Chabata highlighted Zimbabwe's abundant mineral resources, specifically coal bed methane (CBM), which could potentially power the entire African continent for 200 years if harnessed for energy production, marking it as an initial step towards value addition.

"We have the potential to generate power in Zimbabwe due to our rich reserves of coal bed methane gas (CBM). Prioritizing power generation is crucial with CBM. We possess the technology and ample CBM reserves. Research conducted by Americans has confirmed that Zimbabwe's CBM reserves can provide power to the entire continent of Africa for over 200 years," Chabata elaborated.

He proposed that Zimbabwe commence with generating at least 10,000 MW, sufficient to support mining activities and enable the production of lithium batteries.

"Imagine if we could generate 10,000

megawatts; we could achieve numerous objectives and even export surplus power. This energy would drive mining operations and empower us to manufacture lithium batteries, which demand substantial energy. Without adequate power, the prospect of producing lithium batteries will remain elusive," he emphasized.

Chabata advocated for leveraging public-private partnerships and attracting foreign investments to finance essential infrastructure for power generation. He also emphasized the importance of government policies that promote sustainable energy initiatives and explore renewable energy sources to complement CBM.

Conclusion

Lithium battery manufacturing is not only a crucial component of the evolving green energy landscape but also a significant driver of economic growth and sustainability for Zimbabwe and Africa at large. By addressing supply chain challenges, investing in technological advancements, and fostering collaborative efforts among governments, industries, and stakeholders, the lithium battery manufacturing sector can thrive. As Mangwane concludes, "Lithium batteries play a critical role in shaping a more sustainable future, and by working together, we can ensure a prosperous and environmentally responsible industry."

The future of lithium battery manufacturing in Zimbabwe and Africa is bright, with significant potential for growth and innovation. By taking strategic steps to enhance domestic production capabilities, countries can secure their energy futures, create high-quality jobs, and lead the transition to a more sustainable world.



Kuvimba Introduces Mineral Transparency and Accountability System



Kuvimba Mining House (KMH), owned by the Mutapa Investment Fund, the country's sovereign wealth fund, has implemented mineral accountability and transparency software at its gold processing units.

By Rudairo Mapuranga

This initiative aims to ensure that the gold produced aligns with international standards on responsible sourcing and mining guidelines.

KMH's gold cluster has partnered with Comstack to enhance accountability, transparency, and responsible mining in its operations. This partnership will be implemented across the gold cluster and extended to other clusters in the future.

KMH ranks among the top five in Africa for the installation and operationalization of this system. It aims to comply with EU guidelines and the OECD's five-step framework, emphasizing transparency and due diligence in maintaining a clean and accountable supply chain.

KMH CEO Trevor Barnard has articulated the company's vision to mainstream accountability and transparency through traceability systems. He highlighted the step-by-step process engaged to streamline these systems, ensuring old systems are updated, and skilled personnel effectively monitor and manage them.

The partnership with Comstack, a UK-based company, is crucial for ensuring transparent gold marketing systems. This collaboration between local and international institutions underscores KMH's commitment to maintaining transparency and accountability in their gold operations.

Speaking to Mining Zimbabwe, Barnard said, "Our business model involves taking mining investments and operationalizing mines across various mineral groups. Some mines are not operational, while others are new resources that have been recently uncovered. We ensure these mines can run sustainably and long-term, creating wealth and better livelihoods for Zimbabweans.

"Our operating model is divided into four clusters: gold, bulk commodities, platinum group minerals, and energy minerals. Today, you will visit one of our gold mines, Freda Rebecca, to look at the traceability of our product. We also have chrome assets and iron assets, a large platinum asset, and a significant lithium resource at the Sandawana Lithium Mine.

"In the gold cluster, we are the largest gold producer in Zimbabwe, producing over 300 kilograms of gold monthly. Freda Rebecca is our primary mine, with other operations at Shamva Gold Mine and Jena Mine. Additionally, we have assets like Elvington and Homestake contributing to our gold sector.

"In bulk commodities, we have chrome assets through Zimbabwe Alloys. We're processing chrome concentrate and enhancing further beneficiation. In the platinum group minerals cluster, we have the Great Dyke Investment, a significant resource we're working to develop. Lastly, in energy minerals, our lithium assets are among the top hard rock lithium resources globally. We're negotiating partnerships to develop a processing plant to produce and export lithium concentrate and take further beneficiation steps.

"Our traceability system, developed by Comstack, ensures our gold production is traceable from mine to market, ensuring confidence in our legitimacy. This system provides regulatory compliance, transparency, quality control, sustainability, and ethical sourcing, ensuring we operate in a sustainable and efficient manner. It gives us a competitive advantage and market access, vital for our business."

Zimbabwe to Establish More Mining Offices, Crack Down on Claim Grabbers - Chitando



n an effort to streamline the processing of mining titles, the government of Zimbabwe says it is set to promote stable growth and development in the artisanal and small-scale mining (ASM) industry by establishing district offices in provinces with the highest numbers of mining applications.

By Rudairo Mapuranga

According to the Minister of Mines and Mining Development, Hon. Winston Chitando, more district offices will be established to provide easier access for miners.

"I can assure you that more district offices

will be rolled out. Some will be operational soon, ensuring easy access for all miners to the services they require," Chitando said.

The Minister emphasized that, in addition to the measures already announced, the government is exploring other avenues to further capacitate the ASM sector.

"The government is exploring other options to further capacitate the artisanal and small-scale mining sector. This is to ensure it plays its rightful role in moving towards the 2030 vision, increasing our GDP, developing our country, and doing so in a sustainable manner according to your ways and dreams," Chitando stated.

Minister Chitando also issued a stern

warning to those involved in unscrupulous acts of generating fake mining titles. He highlighted the government's commitment to investigating and dismantling these illegal activities.

"It is very important that we maintain discipline and order in the application and maintenance of mining titles. Your executives, when we met, said they are aware of some cases where certificates are being generated to dispossess some miners of their mining titles. This is against the Mines and Minerals Act.

"We decided to meet next week... to obtain evidence and discuss all the causes. This problem is known, but it is not allowed, and it will not be accepted. I asked to meet again with the executive on Thursday, and each province should present cases of such indiscipline. Your executives mentioned that some provincial mining offices work with certain individuals to dispossess miners. Bring the evidence, and whatever evidence you provide will be thoroughly investigated, and action will be taken. This is not acceptable," Chitando concluded.

Government promised the introduction of a mining cadaster system which would eliminate any new ownership disputes. This has not yet materialized years after the announcement.

A cadastre system provides clear and publicly accessible information about the status, ownership, and location of mining claims. This transparency helps prevent misunderstandings and fraudulent claims. The system includes detailed geospatial data and maps that clearly define the boundaries of each mining claim. Every action taken within the system is logged, ensuring traceability and accountability for all stakeholders. This reduces the likelihood of corruption and arbitrary decision-making.

A cadaster system helps prevent boundary disputes between neighboring claimants and protects against predatory fraudsters. In Zimbabwe Fraudsters often target high-performing small-scale gold mines with fraudulently acquired mining titles, falsely claiming ownership of the mines in an attempt to take over.

MINING: EMERGENCY PREPAREDNESS

Mining emergencies are critical situations that require immediate response to ensure the safety of miners and minimise damage to equipment and infrastructure. Emergency preparedness therefore becomes a critical consideration when planning and operating a mine of whatever size. This involves planning and implementing measures to ensure that miners and mining operations can respond effectively to emergencies.

In this article we will share some key components of mining emergency preparedness which mining companies may adopt and implement to deal with emergencies and we will deal with the most common one in this article.

FLODDING:

Water ingress can occur from underground water sources or surface water infiltration. Flooding can trap miners and damage equipment. An example of such is the 2019 Battlefields-Kadoma disaster where about 32 miners were trapped with the majority losing their lives.

FIRES

Fires can occur due to equipment malfunctions, electrical faults, or flammable material. This poses a significant risk due to limited ventilation and the presence of combustible materials mines.

EXPLOSIONS:

Often caused by the accumulation of flammable gases like methane or coal dust. Explosions can cause catastrophic damage and loss of life example of the 1972 Hwange colliery disaster which claimed over 400 lives.



Mr A Magawa (Right) standing with a colleague as part of the Mine Rescue Team at the Battle Fields in Kadoma – Feb 2019 FLOODING DISASTER

CAVE-INS AND COLLAPSES:

Structural failures in tunnels or shafts can trap miners and cause injuries. In January 2024, we had such an incident at the Redwing Mine in Penhalonga. These can be triggered by natural seismic activity or human error e.g pillar-robbing lack of proper shaft support.

HAZARDOUS GAS LEAKS:

Gases such as methane, carbon monoxide, and hydrogen sulphide can accumulate and pose a threat to health and safety. Gas monitoring and proper ventilation are crucial to managing gas levels.

EQUIPMENT FAILURE:

Mechanical or electrical failures can lead to accidents and disruption to mine operations.

Here are some of the measures that mines can adopt to prevent loss of lives, reduce damage to property, environmental damages as well as minimise interruptions to the mine operations.



AMOSA Institute of OSHE (AIOSHE) Conducting First Aid Training at Pickstone Mine Chegutu

TRAINING EMERGENCY RESPONSE TEAMS

Each mine should have competent first aid teams to provide immediate assistance. This is a legal requirement. Another team to be trained is a team of fire fighters. These teams will be required to conduct regular emergency drills to ensure miners know evacuation routes and procedures.

MINE SPECIALISED RESCURE TRAINING:

Each mine will also need to train specialized rescue teams to conduct search and rescue operations in hazardous conditions and training in the use of self-contained breathing

apparatus (SCBA) for rescue operations in areas with poor air quality. Training in Incident Command System (ICS) will help ensure effective coordination during emergencies

The above trained teams will need to conduct simulation drills to practice responding to various emergency scenarios. Regular drills, recommended monthly, will help ensure preparedness and identifying areas for improvement.

Training is importance and a must. It helps in following ways;

- Preparedness: Ensures that miners and responders are ready to act quickly and efficiently during emergencies.
- **Safety:** Reduces the risk of injury and loss of life by equipping miners with the knowledge and skills to handle emergencies.
- Compliance: Ensures adherence to regulatory requirements and industry standards.
- **Continuous Improvement**: Regular training and drills help identify gaps in emergency response plans and improve overall safety practices.

MEMBERSHIP / PARTNERSHIPS:

I also encourage all mine of whatever size to join and becomes members of associations like the Chamber of Mines, Mine Rescue Association, the National Fire Control Association (NIFCA) and the likes. These associations help and give assistance during disaster times. Mines operating in the same areas may also form partnerships to collaborate in times of emergency.

COMMUNITY INVOLVEMENT:

Mining companies should always not leave the communities where they have mining operations whenever doing emergency preparedness planning and response strategies.



From Left: Eng E Gwatidzo, Deputy CGME – Eng Paswavaviri and Mr A Magawa (AIOSHE) at Jena Mine 2022

HARNESSING TECHNOLOGY IN EMERGENCY PREPAREDNESS

This may be expensive for small operations however very much life-saving. It involves integrating advanced tools and systems to enhance the safety, efficiency, and effectiveness of responses to potential emergencies in the mining sector. This will involve use of Real-Time Monitoring and Data Analytics with sensor networks and data analytics platforms.

Mining companies may also implement robust communication systems like wireless mesh networks which ensures reliable communication between underground miners and surface teams, even in remote areas. Mines can also make use of automated alert communication systems which can sent messages via multiple channels (e.g., text, email, intercom) to ensure rapid dissemination of information during an emergency.

The use of drones and robotics is becoming increasingly popular and of use in the modern mining operations. Drones equipped with cameras and sensors can be used to quickly survey and assess conditions in hazardous or hard-to-reach areas without putting human lives at risk.

Geographic Information Systems (GIS) provide detailed maps and spatial analysis capabilities that are crucial for planning and executing emergency responses, evacuation routes, and resource deployment.

By leveraging technology, mining operations can better anticipate and mitigate risks, leading to improved safety for workers and enabling quicker decision-making and response to emergencies. Modern technology will also reduce the burden on human operators and allow for more efficient use of resources during an emergency.

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MMCZ Introduces Departments to Curb Mineral Leakages

The country's sole minerals marketing agent, the Minerals Marketing Corporation of Zimbabwe (MMCZ), has established monitoring and inspectorate departments responsible for curbing mineral leakages, MMCZ General Manager Dr. Nomsa Moyo said.

By Rudairo Mapuranga

Speaking at the Parliamentary Portfolio Committee on Mines and Mining Development induction workshop held in Bulawayo in mid-July, Dr. Moyo elaborated on the comprehensive measures MMCZ has undertaken to combat mineral leakages.

According to Dr. Moyo, the measures include setting up roadblocks, conducting random loading inspections, and performing mineral assays to ensure minerals are not under-declared or undervalued.

Dr. Moyo also emphasized that the MMCZ is not only focusing on immediate enforcement measures but is also investing in long-term solutions.

"The Corporation is capacitating and leading in the funding of the Ministry of Mines and Mining Development Metallurgical Laboratory to achieve international accreditation," she said.

Additionally, MMCZ has been instrumental in the construction of weighbridges across Zimbabwe to facilitate accurate weight verification.

"Funding the refurbishment and construction of weighbridges is crucial to enable accurate weight verification in all towns," Dr. Moyo noted.

The MMCZ Acting General Manager further explained that personnel have been deployed at major mineral production sites to directly monitor activities and prevent leakages. This includes platinum group metals (PGM) producers such as Zimplats and Mimosa.

"Deployment of MMCZ personnel at major producers' sites is a significant step towards curbing leakages," she said.

Dr. Moyo also highlighted the collaborative efforts with other government agencies to combat mineral leakages.

"We are holding quarterly consultative meetings and joint operations with relevant government arms such as ZIMRA, MFFU, ZRP, RBZ, and MMMD," she said.

The efforts to eradicate mineral leakages, according to Dr. Moyo, are also complemented by awareness campaigns aimed at educating artisanal and small-scale miners (ASM) on responsible mining practices.

Mineral Resource Accounting

Ensuring that all exported minerals are fully accounted for is a key focus area for MMCZ.

According to Dr. Moyo, the exercise involves conducting pre-shipment and loading inspections, mine audits, and roadblocks as mandated by SI 109 of 1983.

"We are committed to verifying weight declarations to prevent under-declaration of tonnage produced and exported," Dr. Moyo explained.

She said sampling export consignments and conducting independent mineral analysis to verify producer declarations are also part of these efforts.

Continued on the next page>>

Forms of Mineral Leakages and Possible Solutions

Under-declaration of Cargo

- Ensuring accurate reporting of the minerals' quantity.

False Declarations of Mineral Type, Quality, or Grade

- Preventing fraud in export documents.

Loading Fraud

- Detecting cases where a different, higher-value product is loaded.

Connivance between Producers and State Agencies

- Combating organized crime.

Use of Forged Export Documents

- Identifying and preventing document forgery.

Transfer Pricing between Inter-related Companies

- Addressing the manipulation of pricing between related entities acting as

producers and buyers.

Marketing Function

Dr. Moyo discussed the MMCZ's marketing strategy, emphasizing that Zimbabwe, as a small to medium producer, is a price taker rather than a price setter.

"The Corporation markets directly to consumers in most cases," she said.

However, in some markets, MMCZ uses agents to overcome language and cultural barriers or to secure favorable payment terms.

The Corporation has also adopted Environmental, Social, and Governance (ESG) principles in its projects, including Corporate Social Responsibility (CSR) initiatives such as land rehabilitation programs and school building projects in Mashonaland West.

"Our commitment to ESG principles is reflected in our projects and initiatives across the country," Dr. Moyo added.

Challenges and Achievements

According to Dr. Moyo, MMCZ and the miners they represent face several

production challenges, including shortages of foreign currency, limited lines of credit, and unplanned electricity outages.

"These challenges significantly impact our operations and the overall productivity of the mining sector," Dr. Moyo said. Market challenges such as depressed international commodity prices and negative country perceptions also pose significant hurdles to MMCZ as the sole minerals marketing agent in the country.

It has been established that some policy inconsistencies, delayed budget approvals by the Treasury, and lack of cooperation from other government arms further complicate the Corporation's efforts to function effectively.

However, despite these challenges, MMCZ has made notable achievements, including successful cases of curbing mineral smuggling and developing new markets globally.

"Our compliance with good corporate governance practices has been instrumental in these successes," Dr. Moyo stated.

Over US\$2.5 Million Needed for Finalization of Cadastre System – Ministry of Mines



The completion of the Mining Cadastre and information system requires over US\$2.5 million, the Parliamentary Portfolio Committee on Mines and Mining Development was informed.

By Rudairo Mapuranga

At the Committee induction workshop held in Bulawayo over the weekend, Permanent Secretary in the Ministry of Mines and Mining Development, Mr. Pfungwa Kunaka, articulated that the finalization of the Cadastre has been delayed due to funding challenges, lack of vehicles and power outages.

"There is an issue with the finalization of the cadastral system as opposed to the actual disbursement of resources," Kunaka said. "The problem we currently face is that we have not yet launched and operationalized the cadastral system. However, regarding the allocation we have been receiving year in and year out, there has not been a problem. We have been spending what is allocated in the budget."

Kunaka emphasized that while the Ministry has been efficient in utilizing its budget allocations, the challenge lies in completing the necessary steps to operationalize the Cadastre system.

"For 2024, the allocation we have and the balance we had for 2023 have been disbursed at the moment. So, we do not have a history of failing to spend for the

cadastral system," he said. "The issue is the exercise we need to complete, which is the implementation of the cadastral system."

The Ministry's goal now is to verify the data being input into the system. "We require equipment, which costs about US\$2.5 million," Kunaka noted. "We also need to carry out other tasks such as data verification, which will be funded in local currency because it involves our personnel going to the field."

Additionally, Kunaka pointed out that electricity problems have hindered the process.

"We have faced problems with electricity, and we want to find alternative power sources so that this computer-aided system can work without much interruption," he said.

"Data capture has also been affected by power outages, resulting in other expenses."

Embracing Technology, Collaboration, Human Capital Development, and Commitment to Safety Highlighted at the ZINIRE AGM



Running under the theme "Managing Fall of Ground into the Future," the Zimbabwe National Institute of Rock Engineering (ZINIRE) Annual General Meeting and Symposium attracted rock engineers and stakeholders from across the country, including representatives from nine international companies providing rock engineering solutions.

By Rudairo Mapuranga

The ZINIRE AGM and Symposium underscored the vital contributions of the rock engineering industry, spanning from urban infrastructure foundations to natural resource extraction. These efforts often go unrecognized, yet they are fundamental to modern society's infrastructure

Numerous critical issues were raised during the symposium, particularly the challenges of ground control and rock stability as mining projects delve deeper into complex, high-risk geological environments.

Speaking at the event, guest of honor Eng. Brighton Daka, who is also the Head of Mining at Mimosa Mining Company, noted that despite challenges, the bullish response to gold prices has led to the opening and reopening of several mines. This continuity has pushed operations to greater depths, mining in more fractured, complex, and stressed rock masses. Even

in the platinum industry, operations continue under rugged and highly fractured conditions despite softening prices.

Increased Risk of Falls of Ground

Eng. Daka emphasized that as mining operations advance towards ore body limits, the risk of falls of ground (FOG) significantly increases. Fault zones and associated blocky and complex ground conditions make FOG one of the top mining risks. Unforeseen ground failures can result in loss of life, operational disruptions, and loss of public trust.

"Even at shallower depths, the risk of falls of ground significantly increases as we mine towards the ore body limits. Fault zones and complex ground conditions make FOG one of the top mining risks. The potential consequences of unforeseen ground failures are dire, including loss of life, disruption of operations, loss of social license to operate, and loss of public trust. Additionally, there are many indirect consequences, such as the impact on the future potential of affected individuals, the grief of families who have lost loved ones, and the broader loss felt by the community and nation," Daka said.

The Human and Social Impact

Eng. Daka highlighted that the consequences of ground failures extend

beyond immediate physical and financial losses. The affected individuals, their families, and the broader community all suffer significant losses. This underscores the need for continuous efforts to eradicate falls of ground, as emphasized by the Chamber of Mines and the Zimbabwe Miners Federation.

"The Chamber of Mines and the Association of Small-Scale Miners continually emphasize the need to eradicate FOG. The Chamber of Mines' 2022 annual report noted that 'out of the 179 fatal accidents reported for that year, falls of ground contributed to 32% of the total number of fatal accidents.'
Unfortunately, FOG continues to be the

Unfortunately, FOG continues to be the leading cause of fatal accidents in the mining industry," he said.

Embracing Collaboration and Innovation

The symposium highlighted the importance of collaboration within the rock engineering community. Sharing ideas and uniting for a common purpose are essential for addressing the challenges ahead. Innovation and technology, including real-time monitoring systems and Al-powered analytics, play a critical role in enhancing ground control workflows.

"Use these proven models, such as the IIoT model, to facilitate this transformation. This will enable endless possibilities for improving your models, methods, productivity, and the safety of your operations. Mining 4.0 has commenced. The solutions are readily available with specialized support. The benefits and options are endless, and the power of data-driven decision-making will simplify many redundant, repetitive, overengineered, and expensive tasks. There is no better time to transform JIT to technical decision-making using the Internet of Things and data analytics," said Keagan Carlisle of Groundwork Consulting.

The Role of Technology

Digital technologies are rapidly integrating into ground control workflows, providing tools for detecting early signs of instability and predicting failure modes. Virtual reality simulations allow for stress testing support designs, making these advancements invaluable to the industry.

"One of the most exciting developments on the horizon is the rapid integration of digital technologies into our ground control workflows. From real-time monitoring systems that detect early signs of instability to Al-powered analytics that predict failure modes with uncanny accuracy, to virtual reality simulations that allow us to stress-test our support designs, these tools are evolving at an astounding pace. It is up to us, the rock engineering community, to embrace these technologies to eliminate FOGs and make our work easier. Our field is dynamic and continually evolving, requiring continuous learning, unlearning old ways, and better integrating new approaches," said Daka.

The Need for Continuous Learning

Rock engineering is a dynamic field that requires continuous learning and adaptation. Embracing new techniques, unlearning outdated methods, and integrating various approaches are crucial for ongoing development. The field's foundation in research and development ensures that practitioners continue to learn from each other's successes and setbacks.

"Rock engineering is a young field anchored in strong research and development. Techniques and applications continue to evolve, and we learn from each other's successes and setbacks for continued development and inspiration. However, technology alone is not the

answer. We must continue investing heavily in building relevant human capital and institutional knowledge to leverage new capabilities fully. This means training the next generation of rock engineering experts, fostering a culture of continuous learning and improvement, and breaking down silos between mining engineering and related disciplines," said Ope Muranda, a student from Midlands State University.

Investing in Human Capital

Daka emphasized that technology alone cannot solve all challenges. Investing in human capital and institutional knowledge is essential for leveraging new capabilities. Training the next generation of rock engineering experts and fostering a culture of continuous improvement are vital steps toward future success.

"As the rock engineering community, we face unprecedented challenges and opportunities. One of these opportunities is the collaboration we demonstrate today, coming together to exchange ideas and enhance our unity of purpose. Innovation and technology cannot be ignored in our deliberations. Rigorous risk management and a relentless focus on safety are essential in developing tangible and workable solutions for the mining industry," he said.

Breaking Down Silos

A key message from the symposium was the importance of breaking down silos between technical departments and related disciplines. Collaboration and teamwork are essential for achieving safety and operational excellence in mining.

"Wherever we come from and whichever mines we operate, let us break down the silos between technical departments and related disciplines and work as one team. Most importantly, we must maintain an unwavering commitment to safety as the key pillar guiding our decision-making. Every design choice, operational procedure, and investment in new technology must be evaluated first for safety to protect those who do the difficult and dangerous work of extracting and shaping the earth's resources," Daka said.

Commitment to Safety

An unwavering commitment to safety must guide all decision-making processes. Every design choice, operational procedure, and investment in new technology should prioritize safety to protect those working in the field.

The Importance of Collaboration with OFMs

The symposium also emphasized the importance of collaboration with original equipment manufacturers (OEMs) and support element suppliers. Continuous engagement and benchmark visits are crucial for bringing usable and appropriate solutions to the field.

"Our discussions today must include the collaboration and synergies required with original equipment manufacturers (OEMs) and support element suppliers to bring usable and appropriate solutions to rock engineers. Continuous engagements and benchmark visits are crucial," said ZINIRE President Rinias Tirivabaya.

The Role of Independent Consulting Engineers

Independent consulting engineers play a vital role in providing impartial assessments of designs and practices. Their involvement ensures safety, optimizes resource extraction, and enhances overall operational effectiveness.

"We also need to grow the number of independent consulting engineers to offer impartial evaluations of our designs and practices for the safety of lives, equipment, and optimal resource extraction," Tirivabaya added.

Conclusion

Despite formidable challenges, the symposium concluded with optimism. By harnessing the power of collaboration, innovation, technology, and a culture of safety, the rock engineering community can build a future where mining operations achieve unparalleled stability and safety.

"The challenges in managing FOG are formidable, but by harnessing the power of collaboration, innovation, technology, cultivating a culture of safety, talent management, and elevating the importance of ground control, we can build a future where our mines, tunnels, and infrastructure operate with unparalleled stability and safety," ZINIRE President Omberai Mandingaisa said in his closing remarks.

Zimbabwe Extends Lithium Beneficiation Plan Deadline as Producers Seek More Time



The government of Zimbabwe has relaxed its deadline for lithium producers to submit beneficiation plans as only three companies have so far submitted their plans.

Ryan Chigoche

The initial deadline for the submission of the beneficiation plan was March 31 this year, but the government had to extend it as miners requested more time from the Ministry of Mines to consult their head offices, which are outside the country. They also stated that they needed more time to come up with annual budgets that incorporate beneficiation.

Before the beneficiation directive, lithium miners were producing lithium concentrate, but the government seeks to tap into substantial mineral revenue that can be earned from the production of battery-grade lithium, leveraging the growing demand for the clean energy mineral.

Currently, the value chain is focused on lithium ores, and the government has banned the export of lithium ores as the country now has sufficient concentration capacity where lithium ores can be processed into lithium concentrate.

Speaking on the sidelines of an event in the capital today, Mines and Mining
Development Minister Winston Chitando said they have now called on all lithium producers to amend the lithium sulfate facilities in the country, which will see the ban on exporting lithium concentrate.

"The lithium value chain starts with ores. Then, after that, you go into concentrate. After that, you go into lithium sulfate or lithium hydroxide, whichever way. And there

is the next level where you are now ready to go into battery making or the manufacturing of certain consumables."

"Now, the government has called on all the lithium companies to establish lithium sulfate facilities. Instead of sending the concentrate outside, we will now be upgrading them to lithium sulfate as a minimum investment. That will take time. While that is happening, the concentrates are being shipped," Chitando said.

However, he added that not every lithium producer will be able to produce lithium sulfate as it needs volumes.

To date, only three players have already submitted proposals to establish plants to process up to lithium sulfate, with one of them being the Mapinga Mines to Energy, where lithium sulfate plants will be established.

Once that is achieved, the Minister said the export of lithium concentrates will be banned as there will now be a plant that is able to process lithium sulfate.

The Mapinga project, among other things, also has plans to manufacture a number of products, including but not limited to solar panels, a stage the government said will result in a ban on exporting lithium sulfate.

Finance Minister Mthuli Ncube ordered lithium businesses to submit plans for beneficiation plants before obtaining licenses in order to increase government revenue. Zimbabwe, the country with the greatest lithium reserves in Africa, is set to make a big impact on the global lithium market with a number of lithium mining

operations already underway.

Zhejiang Huayou Cobalt, one of the miners, had stated that it will investigate the possibility of producing battery-grade lithium locally "only when the construction and economic conditions are right." According to Huayou, Zimbabwe lacks the natural gas, sulfuric acid, and dependable renewable energy sources necessary to

create lithium suitable for batteries.

Some of the largest hard-rock lithium reserves in the world, found in Zimbabwe, have drawn over \$1 billion in investment

from Chinese miners, such as Sinomine Resource Group, Zhejiang Huayou Cobalt, Chengxin Lithium Group, Yahua Group, and Canmax Technologies.

Last year, the value of lithium exports managed to offset the decline in gold and PGM revenue at US\$878.44 million, according to Zimstat data. In the first quarter, lithium exports were at US\$76.3 million.

Zimbabwe has struggled for years to get PGM miners to refine the metals locally. The PGM miners, who ship concentrates to South African refineries, say Zimbabwe does not generate enough electricity or minerals to support the huge capital outlay for building refineries.

With the PGM market currently experiencing weakening prices, Minister Chitando reiterated that the worst is now over for the platinum sector as prices are slowly picking up given the cyclical nature of all minerals.

"Now, you see, all minerals are cyclical. The prices go up, the prices go down. What is very important when you hit a mineral dip, when the price has softened, if you manage to continue operating and you have not closed, you are a winner, you have succeeded. The worst is now over for the platinum industry because the price is starting to come up."

He concluded by saying Zimbabwe has a very strong mining sector as no company closed during the dip in prices.









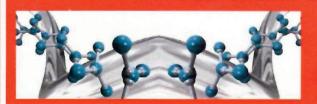




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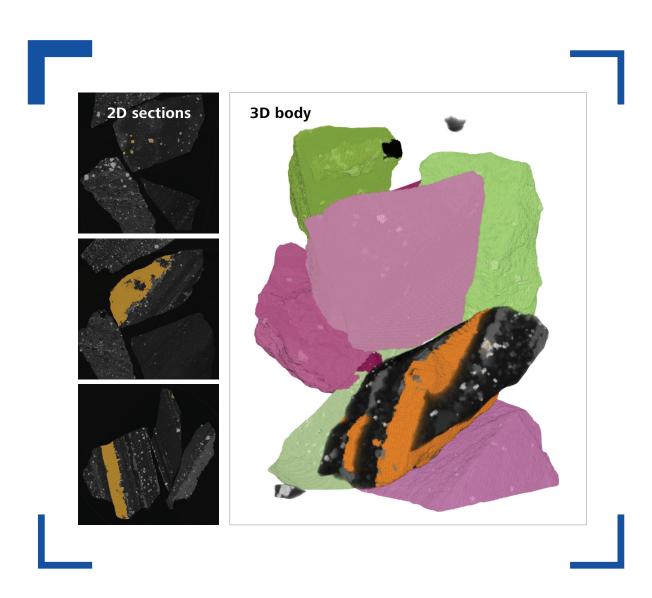
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