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NEWS



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P. 20-21. HOW SENSOR-BASED SORTING CAN HELP LITHIUM MINING OPERATIONS UNLOCK UNTAPPED POTENTIAL AND MEET THE RISING DEMAND

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FOSTER HUMAN CAPITAL DEVELOPMENT BY IMPROVING WORKING CONDITIONS AND PROMOTING HUMAN RIGHTS IN THE WORKPLACE WITH NKELO BANTU.



The professional sphere is a realm of personal growth and development, where individuals are treated with respect and equity. In the Democratic Republic of Congo, it is encouraging to witness significant changes within numerous companies regarding the improvement of working conditions for employees. The issue of human rights within the professional environment is increasingly gaining importance and visibility.

Nkelo Bantu is a dynamic platform that is committed to contributing to the development of human capital by enhancing working conditions within companies. With a focus on effective Human Resources management, this initiative, established in 2019 by the International Council of Swedish Industry (NIR) and Sodeico Development, aims to foster a respectful and equitable environment for all employees. In this context, Nkelo Bantu will be organizing activities and events in 2023 to actively promote human rights within the professional sphere. Each year, the platform brings together various stakeholders around a relevant theme, aiming to encourage dialogue between employees and employers to ensure sustainable business development and the advancement of human capital in the Democratic Republic of Congo.

In a world where the role of human resources is crucial in ensuring sustainable business growth, Nkelo Bantu emerges as an innovative platform that aims to strengthen human capital by directly addressing working conditions. This unique initiative provides organizations with a means to enhance their performance while fully respecting the fundamental rights of their employees.

At the very core of the platform lies the belief that every individual is entitled to a safe, inclusive, and conducive professional environment for personal and professional growth. To achieve this ambitious goal, the platform offers various initiatives focused on improving Human Resources practices.

Indeed, it is widely recognized that effective talent management plays a crucial role in a company's success. Nkelo Bantu also focuses on the training and development of HR professionals, equipping them with the necessary skills to create a strong organizational culture based on fairness and mutual respect. The platform organizes a series of training programs and workshops in collaboration with Sodeico Academy, a vocational academy that offers a multidisciplinary catalogue of training courses tailored to both the professional world and individuals seeking to expand their knowledge.

With this objective in mind, this year's Human Capital Forum will be held in the Grand Katanga region. It provides a unique opportunity for key players in the professional sphere to share their knowledge, experiences, and best practices concerning human rights in the workplace.

Under the theme of "Human Rights in the Professional Environment," this event will bring together renowned experts and representatives from local businesses interested in promoting human capital. It will be held for two days in Lubumbashi and followed by two days in Kolwezi. The selection of this theme is deliberate, as the issue of human rights is crucial for ensuring an equitable and respectful environment within the world of work. Every individual is entitled to dignity, equal opportunities, and complete respect for their individual freedoms while engaged in their professional activities.

By addressing this complex but essential subject during the forum, Nkelo Bantu aims to raise further awareness among businesses about the challenges related to human rights in their specific contexts. The goal is to create an ecosystem of sustainable investment and trade that will ultimately generate more employment opportunities and benefit the population. Additionally, the platform seeks to

demystify the mining sector in the DRC and promote a more positive image of our mining industry.

Interactive workshops will be organized to facilitate exchanges among participants on these complex matters related to sustainable development, the media, the professional environment, and the mining sectors. Actively promoting human rights in the professional realm should not be perceived merely as a legal obligation, but rather as a moral imperative for all responsible businesses. Nkelo Bantu is committed to playing a key role in encouraging this positive change and actively promoting the integration of human rights within internal policies.

In addition to the annual Human Capital Forum, Nkelo Bantu organizes various activities throughout the year to assist businesses in strengthening their human capital. These initiatives include specialized human resources training, strategic advice to improve internal human resources policies, roundtable discussions, job fairs, workshops, webinars, and after-work events. The aim of these activities is to bring together stakeholders from the professional sector to foster fruitful exchanges.

Nkelo Bantu positions itself as an innovative platform that contributes to the development of human capital by focusing on improving working conditions and actively promoting fundamental rights in the professional sphere. The annual Human Capital Forum scheduled in the Grand Katanga region represents a unique opportunity for HR professionals and other stakeholders to exchange their knowledge, aiming to collectively create a respectful environment where every individual can thrive.

Throughout the forum, participants will have the chance to share insights, strategies, and best practices, fostering a collaborative atmosphere that supports the growth and well-being of employees. By addressing critical topics such as workplace rights and conditions, the forum seeks to drive meaningful improvements in the professional landscape.

Nkelo Bantu recognizes the importance of empowering individuals within the workplace, emphasizing the pivotal role of human capital in driving sustainable business success. Through its innovative platform and events like the annual forum, Nkelo Bantu aims to lead the way in promoting positive change, ensuring that the professional environment becomes a source of personal growth and fulfillment for all individuals.

For more details, please visit our website at www.nkelobantu.org or write to us at info@nkelobantu.org

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We deliver international quality industry updates to our readers, along with fresh local news. We offer you a unique opportunity to gain maximum market penetration by combining with premier mining and construction expos in Southern Africa. We partner with major local and international exhibitions and conferences, which increases our distribution and your exposure.



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UNDERGROUND LIGHTING SOLUTION FOR KIPUSHI MINING PROJECT

BEKA Schröder has supplied the underground lighting solution to the Kipushi Project in the Democratic Republic of the Congo (DRC).

The Kipushi Project, a historical underground mine located in the DRC's province of Haut-Katanga, is adjacent to the town of Kipushi and approximately 30 kilometres southwest of the provincial capital of Lubumbashi, DRC. Kipushi Corporation (KICO), a joint venture between Ivanhoe Mines and state-owned mining company Gécamines (La Générale des Carrières et des Mines), owns the project.

The mine is expected to become one of the largest zinc mines in the world, following the start of production. The average annual zinc production from Kipushi is estimated to be 225,000t. Earthworks and civil engineering work began in the second half of 2022. BEKA Schröder is proud to have supplied the underground lighting solution.

Underground Lighting Solution

The underground lighting solution comprises of the OPTIWAY and OPTILINK, as well as LEDNOVA-MIDI bulkheads.

The OPTIWAY is a small, highly versatile and robust low-power LED bulkhead. It can be mounted on any structure, is highly robust and offers a high photometric performance. The

OPTIWAY utilizes the latest LED technology and unique optical distribution that suits most lighting applications. Its small size and robust design will provide the necessary amount of light for any low-power bulkhead application.

The OPTIWAY is suitable for use in various industrial environments, which include underground haulage, outdoor mining areas, oil and gas refineries, food and beverage plants, manufacturing process plants and any application that requires a low power and robust luminaire. The uniquely designed optional OPTILINK plug-in system simplifies the installation process significantly, especially for underground mining applications.

The OPTILINK system is a pre-wired plug-and-play system designed to mount the OPTIWAY at predefined spacings by means of a tool-less plug-in system. Each connection box is pre-wired using armoured cable with alternating phase on each one of them. The OPTILINK system is supplied in 100m system lengths. Once the OPTIWAY is plugged onto the OPTILINK system, it cannot be removed, thus making it highly vandal- and theft-proof. The LEDNOVA is a robust and versatile LED

bulkhead. It offers optimal photometric performance and high reliability to reduce energy consumption and maintenance in all types of lighting applications. The LEDNOVA range is suitable for use in various environments, which include outdoor mining areas, oil and gas refineries, food and beverage plants, manufacturing process plants and any application that requires robust and well-built luminaires. It has been developed to reduce disability glare and thus improve the quality of light.

The LEDNOVA range can be used in hazardous environments where a Zone 2 or 21/22 rated luminaire is required. It is also available with a battery backup version, to be used in emergency situations.

BEKA Schröder develops and manufactures robust, versatile and energy-efficient LED lighting products in South Africa, designed and suitable for local conditions.

We are very proud to be associated with KICO Mine in providing a successful underground lighting solution for this project.

For further enquiries, contact Pacha Mukuna at exp@beka-schreder.co.za

ANGOLA'S CABINDA REFINERY SECURES \$335M CREDIT FACILITY



Emerging markets asset manager Gemcorp has mobilized a \$335 million financing facility for the construction of the Cabinda oil refinery in Angola alongside finance organizations, the African Finance Corporation (AFC) and the African Export-Import Bank (Afreximbank). With the financing facility, project partners Sonangol and Gemcorp have secured the relevant capital to proceed with the refinery's development.

The \$335 million facility, in conjunction with \$138 million in equity provided for by Gemcorp and Sonangol, covers the construction of the first phase of the refinery development.

Phase 1 comprises a crude distillation unit, desalinators, kerosene treating unit and auxiliary infrastructure. Additionally, it involves the construction and installation of a conventional float anchoring system, pipelines and a 1.2-million-barrel storage terminal. Initial

construction commenced in 2020.

Gemcorp shared that with the credit facility, the project partners will also progress with Phase 2 of the development, comprising the addition of units for catalytic reforming, hydrotreating and catalytic cracking that will transform the project into a full-conversion refinery.

While Phase 1 will see the refinery process up to 30,000 barrels per day (bpd), satisfying 10% of the country's total demand for refined oil products, Phase 2 will double processing capacity, satisfying up to 20% of demand.

Gemcorp CEO Atanas Bostandjiev stated that, "The project stands to make Angola energy independent while leveraging its natural resources for the benefit of the community and wider economy."

Afreximbank President and Chairman of the Board of Directors Prof. Benedict Oramah

remarked that the "establishment of a modular oil refinery in Cabinda will add critical value to Angola's main commodity and its largest export product, while contributing to a reduction in greenhouse gases by reducing the need to transport crude and refined products to and from Africa." Meanwhile, the refinery serves as a critical economic contributor, with over 300,000 hours of training already been completed for upskilling local employees.

AFC President and CEO Samaila Zubairu added that, "Cabinda Refinery will generate significant employment opportunities which will help to build the skilled workforce of the future. It will save valuable foreign exchange and enhance Angola's balance of payments. It will create spin-off industries that rely on the output of the refinery, thereby boosting the economy and driving long-term economic growth."

GALILEO RESOURCES EXERCISES OPTION OVER SHINGANDA IN ZAMBIA



Previous drilling from a limited programme at Shinganda included drill intercepts peaking at 50.3 metres (m) at 1.54% copper from 21m with notable gold grades also recovered from grab samples.

In a statement, Colin Bird, Galileo chairman and chief executive, said: "The 51% earn-in and formation of a joint venture demonstrates our commitment to the Shinganda copper-gold project.

"The more work that we do the more confident we become, and we are grateful for the previous work carried out by Vale which, while not advanced enough to define a mineral deposit, was pivotal in establishing our initial work programmes which have taken us to the current position.

"Our exploration will continue to target near surface discovery with the mid-term intent, if our drilling and studies warrant, of a deeper drilling programme to identify a potential IOCG system."

Galileo Resources PLC said it has taken up its option on a 51% stake in the Shinganda copper-gold project in Zambia after spending US\$500,000 in direct exploration costs.

Under the terms of the joint venture, Galileo will fully fund and manage further drilling, metallurgical and scoping studies leading to

the completion of a feasibility study.

Work has already been stepped up to fast-track several further copper-gold targets to the drill-ready stage within the project area, Galileo said. Galileo can further increase its holding in the joint venture to between 65%-85% depending on the size of any future discovery.



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SOUTHERN AFRICAN-GERMAN CHAMBER PARTNERS WITH CRITICAL MINERALS AFRICA: OPENS SUMMIT TO EUROPEAN UNION (EU), GERMAN COMPANIES

The Southern African-German Chamber of Commerce and Industry has partnered with Energy Capital & Power for the Critical Minerals Africa summit 2023, creating an avenue for German companies to participate in the region's critical minerals value chain



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Deutsche Industrie- und Handelskammer für das südliche Afrika
Southern African-German Chamber of Commerce and Industry

The Southern African-German Chamber of Commerce and Industry (AHK Southern Africa) has partnered with Energy Capital & Power for the Critical Minerals Africa (CMA) taking place October 17-18 in Cape Town. The summit serves as the African critical minerals dealmaking space, connecting global consumers and businesses with African producers and projects. AHK Southern Africa members are invited to participate in the forum, the most important critical minerals gathering of the year.

Germany has long been an essential partner for Southern African nations, serving as a provider of technology and expertise as well as an important end-user of critical minerals. The country is a member of the Minerals Security Partnership (MSP) – a US-led collaboration of 14 countries which aims to increase public and private sector investment in critical mineral supply chains globally – and boasts strong bilateral ties across the minerals sector with countries such as South Africa, Zimbabwe, the Democratic Republic of Congo and more.

“AHK Southern Africa, through the establishment of its Competence Centre for Mining and Minerals Resources in 2013 and the support of the Federal Ministry for Economic Affairs and Climate Action (BMWK), plays a crucial role in supporting German investment in Southern Africa's mining industry. As a key point of contact for German suppliers and investors in the region, we promote market transparency, advocate for responsible mining practices, enhance resource efficiency, and contribute to the long-term sustainability and socio-economic development, while also fostering a greener and more environmentally conscious mining industry,” said Matthias Boddenberg, CEO, AHK Southern Africa.

CMA 2023 provides a unique opportunity for German companies and investors in the critical minerals space to advance their contribution to the regional market while establishing long-

term supply networks between Southern Africa and Germany, as well as other EU states. Under collaborations such as the MSP and legislation such as the EU's Critical Raw Materials Act – a framework to ensure EU access to a secure and sustainable supply of critical raw materials – Africa's role as a global mineral producer and exporter has been augmented. CMA 2023 enables German and African stakeholders to engage on a bilateral and multilateral level, establishing strategic roadmaps for both minerals and energy security.

An EU delegation is expected to participate at CMA 2023 in October, with representatives speaking at official levels. Through the AHK Southern Africa partnership, both EU and

German companies have the chance to strengthen their investment in African minerals, unlocking high returns while strengthening global supply chains. CMA 2023 takes place concurrently with the continent's biggest energy event, African Energy Week 2023, and unites African governments; international presidential and ministerial delegations; and global finance, mining, manufacturing and technology firms under the theme, Establishing the Critical Minerals Value Chain of the Future in Africa.

German technology and capital will be integral to Africa's future minerals success. Energy Capital & Power extends an invitation to AHK Southern Africa members to participate in this important forum.





METSO TO DELIVER A LARGE MINERALS PROCESSING EQUIPMENT PACKAGE TO KANSANSHI COPPER MINE IN ZAMBIA

EUR 20 million, and it has been booked in the Minerals segment's second-quarter orders received.

Metso's scope of delivery includes apron feeders, Nordberg® MP800™ cone crushers, TankCell® e630 and TankCell® e300 mechanical flotation cells, high-intensity Concorde Cell™ units, ColumnCell™ units, HRT thickeners and a clarifier.

Most of the separation equipment are part of Metso's Planet Positive offering.

Last year, Metso was awarded an order for two Premier™ grinding mills with a total installed power of 50MW including Metso Megaliner™ and metallic mill linings.

“Kansanshi's flotation flowsheet combines the well-proven, energy efficient TankCell® flotation cells with the new Concorde Cell™, unlocking the potential for further improved flotation performance. Concorde Cell™ high-intensity, forced-air pneumatic flotation cells allow operations to enhance fine and ultrafine particle selectivity,” says Antti Rinne, Vice President, Flotation, at Metso.

Canadian First Quantum Minerals (FQM) has placed an additional order with Metso for the delivery of minerals processing equipment to their Kansanshi copper mine S3 expansion announced in 2022 in Zambia. The value of the order exceeds

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Extending the life of hydraulic cylinders and hoses is a cinch with Seal Saver. “It is a simple solution to a variety of hydraulic and air cylinder rod maintenance issues that boasts excellent resistance to heat, oil, chemicals, and water,” explains Craig FitzGerald from ISO Reliability Partners. Seal Saver hydraulic cylinder boots protect seals and cylinder rods from premature failure and extends the life of equipment by preventing rod scoring and corrosion.

Hose saver protection sleeves extend the life of hydraulic and pneumatic hoses by eliminating unnecessary expenses from downtime, oil loss, contamination, and replacement hoses. The hose protectors are adjustable to fit various hose sizes. Each sleeve wraps around a single hose or bundle to eliminate chaffing and protect them in the toughest working environments. The easy-to-install protection sleeves use a unique VELCRO® closure for quick and simple installation, with no disconnection of the hose required.

They are ideal for any environment on virtually any machine, including industrial machinery and heavy equipment. The range is



available in ballistic nylon, Kevlar, or silicon models, which can all withstand temperatures up to 1000°C.

Seal Saver also prevents silt-sized particles from entering the hydraulic system via the rod seals. Once in the system, these tiny particles can act as a lapping compound, causing valves

and pumps to wear and ultimately damaging the entire hydraulic system.

FitzGerald comments: “Seal Saver stops the influx of contaminants, so the hydraulic system always remains clean and fully operational. It saves equipment owners' significant time and money in repairs and unexpected downtime.”

The effectiveness of Seal Saver was proven dramatically at an unforeseen accident in 2015

at Rand Refinery in Germiston which saw molten metal being spilled. Fortunately, the company had installed Seal Saver protective covers on its 5-m-long hydraulic cylinders, which effectively protected them from destruction and a considerable 3 weeks in lost production.



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SPOTLIGHT ON ENERGY GAP AT DRC MINING WEEK

With a depth of mineral potential drawing increased investment into the Democratic Republic of Congo, the success of the country's mining sector is tied closely to its ability to meet rising demand for energy.

It was no surprise, therefore, that a key focus of the recent DRC Mining Week was on energy generation – in a context in which global mining players are looking to reduce their carbon footprint.

“One of the main discussion points at this event was about the energy transition, and how mining companies in the DRC can meet their energy needs while pursuing sustainability principles,” said Dominique Sambwa, geological consultant and chairman of SRK Consulting Congo. “This is an exciting field in which SRK is increasingly involved – as it brings new areas of investigation and demands protocols that meet international standards.”

Sambwa highlighted that mining companies are looking for clean technologies to power their operations, especially in regions where infrastructure is weak. He pointed out that the country already made use of hydro-electric energy and had considerable potential for more – but that the climate also lent itself to extensive solar generation.

Also part of the SRK Consulting team at DRC Mining Week, SRK Consulting South Africa managing director Andrew van Zyl noted that

there was a keen awareness of the opportunities presented by renewable energy. “Every enterprise needs a level of self-sufficiency in power supply, so there will be ongoing interest from mining companies – and even smaller businesses – to generate their own renewable energy,” said Van Zyl. “There is certainly much interest and considerable expertise among our clients in the demands and opportunities associated with mining's commitment to environmental, social and governance (ESG) issues.”

Rising global demand for minerals required for lower carbon technology had boosted the country's mineral sector – not just in terms of its copper and cobalt in the copper belt but also related to tin, tantalum and lithium resources in the 'tin belt' from Kolwezi eastwards through Kivu province. This was already leading to some infrastructural improvements, according to Frank Li, senior geologist for SRK Consulting China.

“I am often in the DRC and every time I arrive there are improvements such as roadworks,” said Li. “In Kolwezi, for example, there is more infrastructure under construction; it is exciting to be witnessing the development of DRC and we are happy to be part of it.”

He said his work with a number of China-based mining companies active in the DRC confirmed that these companies embraced ESG as an important topic to incorporate into their operations and plans.

“Almost all of these companies are planning or have already setup ESG systems, and they are aware of the relevant international standards,” he said. “They are also looking for guidance and studies that will facilitate the development of responsible supply chains.”

Wouter Jordaan, partner and principal environmental scientist at SRK Consulting South Africa, highlighted the scope for independent power production in the DRC – which also brought ESG implications.

“With good potential for hydro-electric schemes, and quite a few new ones already underway, the country is seeing investment in solar energy generation,” said Jordaan. “The renewable energy potential has underpinned growing interest from mines – to invest in renewable power for themselves and their local communities.”

He emphasised that mines had a potential role in facilitating energy access for local stakeholders, as this could contribute to the growth of local economies around the mine. Mineral exploration and ESG were two important aspects of SRK Consulting's three-way collaboration between its offices in the DRC, China and South Africa.

At SRK Consulting's exhibition booth at DRC Mining Week, visitors discussed mining related solutions with specialists in a range of disciplines – from mining engineering and geology to environmental management and stakeholder engagement.

ANGLO AMERICAN JOINS EFFORTS TO CREATE SUSTAINABLE MINING TAXATION SOLUTIONS

Anglo American joined representatives of government, civil society and other stakeholders in the mining sector at a global conference in Lusaka to discuss the future of resource taxation, as part of the launch of a new guide on the subject by the Inter-governmental Forum (IGF) on Mining.

Those attending were seeking to find effective solutions to promote transparency and sustainable development in the mining sector. The conference was officially opened by the Minister of Finance and National Planning Dr Situmbeko Musokotwane, who expressed confidence in the three-day event's potential to facilitate constructive discussions and generate innovative solutions surrounding mining taxation.

Anglo American's Lead Economist, Benjamin Jones, commended the government of Zambia's emphasis on investing in research in the context of ambitions to develop downstream processing capacity in critical raw materials value chains, stressing the broader need to understand the market and investment context when designing policies. He said: "One of the challenges tax policy makers and administrators are facing is the extreme levels of price volatility in some mining products that creates problems with the predictability and measurement of taxable value.

However, benchmark prices for some of these rapidly growing materials markets are emerging which help measure value with greater accuracy and ease".

"Anglo American is committed to participating in multi-stakeholder discussions aimed at addressing some of the ongoing challenges surrounding mining taxation, and ensuring any future mining tax reforms serve to balance the needs of host countries while preserving



ANGLO AMERICAN

incentives for much needed investment in the sector." David Spencer, Anglo American's Head of International Tax, commenting on the topic of the conference said: "It is important to set the right frameworks to encourage the significant amount of mining investment required to address climate change.

The world needs a lot more mining to transition to net zero and we must encourage and enable the required investments in a way that also benefits the countries that host those resources. Finding this right balance would be win-win for governments and investors. The mining regime should be considered holistically, and certainty is key to investors given the long-term nature of mining." The dialogue between Anglo American and key stakeholders underscores their shared commitment to address the challenges of mining taxation and promote sustainable socioeconomic development in the country.

The Global Conference on the Future of Resource Taxation served as a platform for constructive discussion and knowledge-sharing, and marked a significant milestone in the ongoing efforts to create a transparent, equitable and prosperous mining sector in Zambia and other resource-rich countries. Forming part of its global greenfield discovery programme, Anglo American is conducting exploration activity in Zambia to identify potential opportunities in critical minerals, including copper and cobalt. The company recently entered a joint venture agreement with Arc Minerals plc.

Once the conditions of that transaction are satisfied, Anglo American will have the right to retain up to a 70% shareholding in the Joint Venture Company to explore Zambia's North-Western province for copper and cobalt.



Fact Sheet

WELCOME TO OUR CONTEMPORARY HOTEL IN KITWE

LOCATION

Located just outside the central city of Kitwe and 56km to Ndola, the new Garden Court Kitwe is an oasis of comfort and convenience and offers guests outstanding service and a modern hospitality experience. The hotel is well located close to the Mukuba Mall and adjoins the ECL Business Park. It is an ideal base for conducting both business and corporate functions with a host of professional services.

ACCOMMODATION

Garden Court Kitwe's 130 modern rooms are equipped with familiar home comforts, productivity-boosting business amenities and contemporary design touches for a new standard of Kitwe accommodation in Zambia's Copperbelt.

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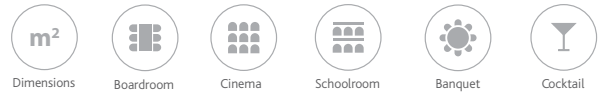
GROUPS & CONFERENCE

Experience a new level of modern business-first conference-simplicity at Garden Court Kitwe. The conference rooms offer privacy and have a full range of amenities. Some rooms enjoy natural light with views overlooking the landscaped gardens. A dedicated professional conference team is on hand to provide knowledgeable assistance in customising any event to your specific requirements and to deliver a streamlined event from start to finish.

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VENUES



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Meeting Room 1 + 2 (D)*	80	30	40	35	30	45
Meeting Room 1	40	15	20	12	-	-
Meeting Room 2	40	15	20	12	-	-
Kafue	185	-	180	140	140	180
Mukula	73	-	70	35	50	100
Lukanga	80	-	70	45	50	100
Kafue + Mukula + Lukanga	338	-	320	240	220	340

The above venue capacities are the maximum capacities per venue under normal circumstances. To ensure social distancing guidelines are met, please contact the hotel reservation team for the current venue capacities.

*(D) = Dividable



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BABCOCK HITS THE BULL'S EYE WITH BULL CONSTRUCTION EQUIPMENT

Babcock has partnered with BULL to become the exclusive supplier of BULL tractor loader backhoes (TLBs) and BULL skid steers in southern Africa. These products complement Babcock's existing world-class construction equipment portfolio. Babcock is fully equipped to offer comprehensive construction and earth-moving solutions across all southern African industries as it meets the evolving needs of its diverse customer base.

BULL is a leading international construction equipment brand based in India and owned by the long-standing AV Group. It has a well-established global footprint and two state-of-the-art manufacturing plants. The business is India's foremost tractor attachment manufacturer and its range of backhoe loaders and skid steers maintain world-leading standards in efficiency, comfort and safety.

David Vaughan, Managing Director for Babcock's Equipment business, is excited to be providing top-class BULL TLBs and skid steers to the southern African market. He says that Babcock has supplied, sold and maintained various brands of TLBs in southern Africa for over 20 years, which allowed for a natural and easy integration with BULL.

"We are experts in construction equipment distribution and have in-depth technical understanding of these machines."

He adds that besides the machines' superior quality, innovation and reliability, BULL's business philosophy aligns with Babcock's. "Our aftersales service and approachability set us apart from our competitors. Our door is always open and BULL's customer-centric, solution-driven ethos makes them an ideal fit."

Vaughan believes with the BULL range of products in Babcock's portfolio, the business is now better equipped than ever to provide reliable and efficient machines to diverse customers across various sectors.

These include agriculture, construction, plant hire, contracting, as well as sand, stone and waste management. Existing Babcock customers, such as those in the mining sector, also benefit from a choice of smaller, cost-effective machines to supplement their fleets of heavy earth-moving equipment.

Babcock is providing aftermarket and



technical support to all new and existing BULL customers in southern Africa, with product manager Mark Senyard at the helm. Senyard has long been associated with BULL equipment and brings with him years of construction equipment knowledge and product expertise. He will be playing a key role in facilitating the seamless transition of the brand into the Babcock fold.

Senyard puts his full support behind the BULL range which is competitively priced, mechanically reliable and technically superior. "BULL is globally renowned for its impressive equipment, proactive approach and commitment to continuous research and development. I am looking forward to new and existing BULL customers benefitting from these exceptional machines, and the Babcock team is ready to create value and provide solutions for our customers," he says.

"Mark's years of experience and BULL product knowledge, together with our extensive regional footprint and established parts and maintenance network, means we are well equipped to provide comprehensive aftermarket support to all BULL customers throughout southern Africa," says Vaughan. "Spare parts are also already on hand to ensure minimal downtime for clients."

BULL is dedicated to producing reliable construction equipment that performs consistently and efficiently on the harshest of job sites, making them well suited to tackling African terrain. As an in-house research and development company, the business is able to respond to market feedback, and incorporate the latest technology into its equipment, giving customers the benefit of enhanced productivity and performance.

Every BULL loader and skid steer is built with precision while remaining competitively priced. Babcock's line-up includes three TLB models; the HD76, HD96 and HD100. These machines are designed to match the needs of digging, trenching, lifting and loading applications, with the HD96 and HD100 available in either general or multi-purpose variants. Their rugged reliability doesn't compromise on operator comfort, with features such as power steering and smart technology hydraulics.

To get the job done in tight spaces, the compact and easily manoeuvrable AV490 skid steer is ideal for landscaping, agriculture, construction and under-conveyor mining. This cost-effective all-rounder is designed for fuel efficiency and features a rear-view camera to reduce blind spots. Babcock supplies this machine in two variants, giving customers a choice of canopy or cab with air-conditioning.

Babcock is the exclusive regional distributor for leading international brands and construction equipment including Volvo and SDLG construction equipment, Sennebogen cranes, and Winget concrete handling machinery. Working closely with its customers, Babcock has a proud history of sales and servicing of construction equipment that spans more than six decades.

"This exciting collaboration brings together Babcock's expertise in construction equipment distribution and BULL's reputation as a leading brand in the industry, offering customers in the region access to an exceptional range of machinery," says Vaughan. "With our extensive national network and unwavering commitment to exceptional support, we will ensure that BULL customers' needs are met with optimal uptime and operating effectiveness."



REL DRILL RIGS : BUILD TO PERFORM


Revathi Equipment Ltd (REL), with its remarkable journey in the Mining Industry since 1977, is a testament to its unwavering commitment towards innovation, quality, and customer satisfaction. With a diverse product portfolio, customer-centric approach, and a focus on sustainability, REL continues to shape the future of Mining industries across the globe with its cutting-edge solutions.

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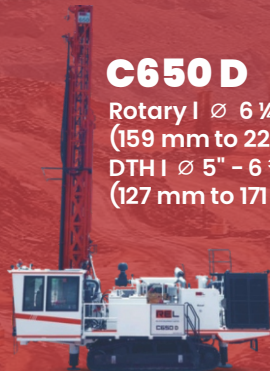
REL DRILL RIGS



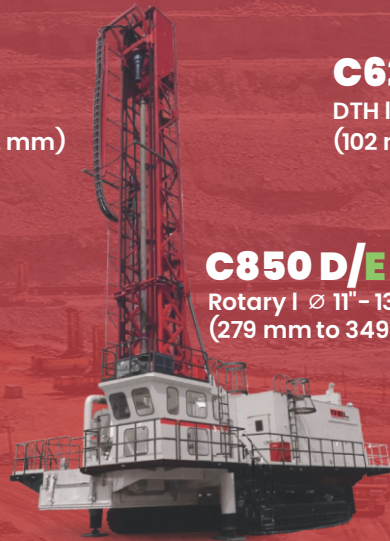
C615 D
DTH | $\varnothing 3.5'' - 6''$
(102 mm to 152 mm)




C625 D
DTH | $\varnothing 4'' - 6\frac{3}{4}''$
(102 mm to 171 mm)



C650 D
Rotary | $\varnothing 6\frac{1}{4}'' - 9''$
(159 mm to 229 mm)
DTH | $\varnothing 5'' - 6\frac{3}{4}''$
(127 mm to 171 mm)



C850 D/E
Rotary | $\varnothing 11'' - 13\frac{3}{4}''$
(279 mm to 349 mm)



C750 D/E
Rotary | $\varnothing 9'' - 11''$
(229 mm to 279 mm)

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MONTE MUAMBE MINING: ALTONA RARE EARTHS SUBSIDIARY JOINS CHAMBER OF MINES OF MOZAMBIQUE

Altona Rare Earths Plc subsidiary Monte Muambe Mining has been accepted as a member of the Chamber of Mines of Mozambique (CMM). The industry group, formed by large international miners, is regularly involved in consultations with the government and other stakeholders.

Altona, via Monte Muambe, is a natural addition to the prestigious business advocacy group, said chief executive Cedric Simonet. “

“I am delighted that our subsidiary Monte Muambe Mining Limitada has joined the Chamber of Mines. Mozambique is a mature

mining country, where the Mining Industry has a bright future ahead, provided it remains united and proactively engages with all stakeholders. As a key player in Mozambique, it was only natural for Altona, through its local subsidiary, to join this prestigious business advocacy organisation.” Cedric Simonet said.

CMM was founded in 2012 by a number of large international mining companies with the following aims:

- Coordinate private sector mining companies in Mozambique,

- Represent the interests of private sector

mining companies to the government, and

- Improve the image of mining in Mozambique.

CMM is regularly involved in consultations with the Government and other stakeholders pertaining to regulatory improvements and other matters affecting the Mining Industry.

Among other advocacy matters, CMM is currently proactively lobbying for the enabling of a business environment favourable to minerals value addition and transformation in Mozambique, for the benefit of both the investors and the country.



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A CHINESE MINING COMPANY HAS OPENED A GIANT LITHIUM PROCESSING PLANT IN ZIMBABWE

A Chinese mining company formally opened a \$300 million lithium processing plant in Zimbabwe, which has one of the world's largest reserves of the metal as demand surges globally because of its use in electric car batteries.

Zimbabwe has the largest lithium reserves in Africa and has in recent years drawn investors in battery minerals from Canada, the United Kingdom and Australia, although China is the dominant player.

The plant opened by Prospect Lithium Zimbabwe, an arm of Chinese company Zhejiang Huayou Cobalt, has a capacity to process 4.5 million metric tons of hard rock lithium into concentrate for export per year, Zimbabwe President Emmerson Mnangagwa said.

Mnangagwa was present for the official opening of the sprawling plant in Goromonzi, about 80 kilometers (50 miles) southeast of Zimbabwe's capital, Harare.

"Lithium is the mineral of the present and the future ... and value addition will position our country as an emerging and competitive player in the global lithium value chain," Mnangagwa said. He urged the company to "beef" up expertise that would help Zimbabwe and other southern African countries "eventually" manufacture lithium batteries and other components locally.

Lithium is a key component for electric vehicle batteries. To cash in on demand, Zimbabwe last year banned the export of raw lithium ore. In doing so, it joined countries like Indonesia and Chile that are trying to maximize their return on deposits of lithium, cobalt and nickel by requiring miners to invest locally in refining and processing before they can export.

Prospect Lithium Zimbabwe deputy general manager Trevor Barnard said that the firm aims to start by processing 450,000 tons of concentrate every year. The concentrate will be further processed into battery-grade lithium outside Zimbabwe.



HOW SENSOR-BASED SORTING CAN HELP LITHIUM MINING OPERATIONS UNLOCK UNTAPPED POTENTIAL AND MEET THE RISING DEMAND

The global demand for lithium is soaring, driven by the growing adoption of electric vehicles and grid-scale lithium-ion batteries for energy storage. Some forecasts project the demand to reach as much as 1.5 million metric tons of lithium carbonate equivalent by 2025 – triple what it was in 2021 – and over 3 million tons by 2030.

In the face of such a surge in demand, lithium supply is struggling to keep up. While new projects are set to increase lithium mining capacity in 2023 and 2024, the rise in electric vehicles sales will continue to put the supply under pressure.

These trends translate into a tremendous business potential for mining operations. However, as new projects will struggle to keep up with demand, this potential comes with the challenge of extracting as much lithium ore from all mines as efficiently as possible, while meeting increasingly stringent environmental

requirements.

Basalt contamination: the challenge in lithium mining

The main challenge in lithium mining comes from basalt contamination. This high-iron, barren material has a high density very similar to that of spodumene. It means that when dense media separation (DMS) is used as the primary spodumene concentration process, basalt is concentrated with spodumene, contaminating the final product.

This issue can be addressed by selectively mining high grade ore, but contamination is unavoidable, and this approach ultimately results in a substandard product unsuitable for sale at market rates. This contaminated product is usually stockpiled, leaving valuable lithium resources unexploited. The DMS and crushing circuits utilized to produce lithium concentrate from ore are extremely energy intensive, and carrying contamination through the plant decreases productivity and increases

costs.

Mining operations under pressure to meet the soaring demand need to maximize the efficiency of their processing plants, using their capacity effectively to extract as much valuable lithium from their mines.

The solution to this challenge is available from TOMRA Mining, the leader in sensor-based sorting with a proven track record in designing and building the largest, high-capacity sorting plants in the world.

TOMRA's proven technologies are able to effectively remove basalt contamination before crushing, optimizing the capacity of the processing plant, reducing energy consumption and waste, as well as lowering the environmental impact of the process. They allow mining operations to consistently achieve the required grade of the product and expand their resources to include more iron and basalt contaminated ore bodies.

The solution: unlocking untapped value with sensor-based ore sorting

TOMRA's industry-leading sensor-based sorting solutions rely on color cameras, X-Ray Transmission sensors, and multi-channel scanning lasers to sort the ore prior to the downstream wet processing. The sensors analyze every single particle, identify the ore and waste in milliseconds, and high-speed air jets direct the particles accordingly to the product or waste chutes, processing at a capacity up to 350t/h in a single sorter.

These high-speed sensor solutions are capable of sorting a wide size range – from around 6mm to around 200mm – to maximize the removal of iron and basalt from the feed. With these technologies, it is possible to minimize the unsorted fines that are discarded or stockpiled, and it has been extensively proven that they are effective in consistently reducing the contamination of the ore to less than 4%.

This was the experience of Galaxy Resources at its Mt. Cattlin Mine in Western Australia, where a TOMRA PRO Secondary Laser sorter has been in operation since 2021 to reduce basalt contamination in the pegmatite-hosted spodumene. Since the first day of operation, it has met and exceeded specifications, consistently achieving less than 4% basalt in the concentrate.

Operational efficiencies can be further improved with connectivity to the cloud-based subscription service TOMRA Insight, which turns the sorters into connected devices that

generate valuable process data. Mining operations are able to measure the contamination level in real time, and hence the mining quality. They can also monitor the distribution of the particle sizes, and consequently the efficiency of the upstream crushing and screening equipment. TOMRA Insight also gives visibility on the individual sorter's availability and usage, helping to optimize the process. In addition, it enables the operator to accurately track any faults as they occur and improve the maintenance processes, so that the sorting plant is always operating at its best.



A partnered approach for a tailored solution

TOMRA works in partnership with clients to develop the tailored solution that matches their requirements. It brings its in-depth understanding of the process and expertise, helping clients from the development phase to purchasing and plant integration with quality test work on samples from the mine at its test center and flowsheet guidance. Its solution perfectly integrates the sorting into the overall

process stream, for seamless operation. The sorters are specified to match the capacity of the crushing and screening plant, and downstream wet processing plant, maximizing productivity.

This was the approach TOMRA adopted for the design of the world's largest lithium sorting plant for Pilbara Minerals in Australia. It worked closely with the client's metallurgical team, completing extensive testwork at the TOMRA Test Center in Sydney, running sample ores from the mine at capacity on production sorters. Based on the results of the testwork and its experience and ability to provide expert local support, TOMRA was awarded the contract. The involvement of the TOMRA team extended beyond testing and supply of equipment to include assistance with the plant layout and understanding of the implications of sorting on the upstream mining and downstream process of the ore, adding to the efficient operational ramp-up and technical optimization.

TOMRA's close relationship with its clients continues after installation and commissioning of the sorting plant, to keep it operating at its best with tailored service agreements.

With TOMRA's sensor-based ore sorting solutions, mining operations can not only improve the efficiency of their processing plants, but most importantly unlock value from stockpiled materials and even expand their resources, exploiting ore bodies with higher contamination or search for new mining opportunities in areas with higher iron or basalt content.



LUBRICATE EQUIPMENT WITH SKF'S BIODEGRADABLE BEARING GREASE AND KEEP IT GREEN!



SKF LGGB 2 is a biodegradable, low toxicity, synthetic ester, oil-based grease that has been specially formulated to suit any application where there is the potential of environmental contamination.

During the equipment lubrication process, it is not always possible to prevent some grease from leaking. "In applications like agriculture and water treatment for instance, there is always the risk of the grease spillage into the soil or on to crops and even entering water systems," notes Eddie Martens, SKF Product Manager, MaPro.

"However, detrimental environmental impacts can be significantly reduced or even prevented with the application of SKF's biodegradable

LGGB 2 grease.

This product is subsequently ideal for lubricating agricultural, forestry, construction, earthmoving, mining and conveying equipment, helping to green the footprints of these industries."

SKF LGGB 2 is suitable for medium to high loads and delivers good low temperature start-up performance. Incorporating a lithium-calcium thickener formulation, the grease features good corrosion inhibiting properties and performs especially well in applications with steel-on-steel spherical plain bearings, ball bearings and roller bearings.

Martens

points out that over-lubrication increases the potential of harmful environmental contamination coupled with costly product wastage and can also lead to premature equipment failure. "We therefore recommend to our customers to combine LGGB 2 with a SKF battery-driven grease gun; this will deliver the most optimum environmental and cost-saving integrated solution. Customers can choose from our TLGB 20 with a built-in grease meter as well as the TLGB 1262-E and TLGB 1886-E units without a grease meter."

MINING FIRMS DRIVING DEMAND FOR POWER SOLUTIONS

Securing dependable power is a prerequisite in commercial mining, an energy-intensive industry, but in Africa that is sometimes half the challenge. An uneven, erratic electricity network has long prompted mine operators to take matters into their own hands, deploying on-site diesel generating sets (gensets) as back-up, or in remote areas where no grid connection exists.

In recent years, mining power stations have also begun to embrace renewable technologies, alongside traditional thermal-based plants. But the absence of reliable electricity and availability to Africa's mining sector is becoming more of a concern – and a potential block to new project development. This could threaten broader global strategic initiatives like net zero, if mine project development is not keeping pace with future energy transition demand. Wood Mackenzie suggests that in order to reach the Paris Agreement targets of zero carbon by 2050, copper and aluminium production must double, nickel output needs to rise three-fold and the world will require nine times the amount of lithium produced today. Not all of that will come from Africa, of course, but a lot of it will, placing even greater strain on already limited power supplies.

South Africa

Many African countries, including big economies such as Nigeria and South Africa, are already struggling to meet demand,

Martin Clark reports on mining firms across Africa that are stepping up demand for power solutions and exploring new technologies in a bid to secure dependable energy in the face of poor grid supply

squeezing industry and households. South African President, Cyril Ramaphosa, has acknowledged that the nation's electricity crisis is severely hurting its mining sector, a key pillar of the economy.

According to the Minerals Council South Africa, total mining volumes were down by around 6%, or US\$1.8bn, last year, in large because of electricity shortages.

In a bid to rapidly expand generation capacity, the Department of Mineral Resources and Energy this year removed requirements for independent power producers to hold generation licences to produce electricity up to a threshold of 100MW, boosting demand for diesel gensets and other power solutions.

Genset demand

The fragile state of the nation's grid-based supply has left South African mining firms with little option but to take action for themselves.

Goldplat is the latest to invest in a fleet of new gensets to bolster its South African business. The company reported that power shortages in South Africa had cost it 28% of hours available during the first two months of its Q4 period, compared to 20% in Q3. As a result, it is

investing £750,000 (US\$944,000) in diesel generators, set to arrive in September this year, which it says will be able to sustain operations during electricity cuts.

“The diesel generators will not just reduce the impact of electricity cuts, but also give control back to operational teams to improve efficiencies and maximise gold production,” said Goldplat CEO, Werner Klingenberg.

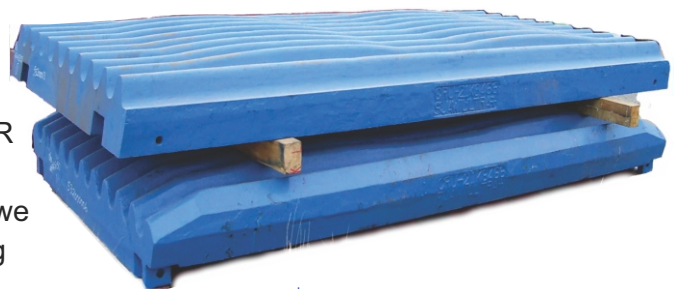
He also said it would provide “a sense of normality” at its mine sites “which we believe is important for the morale of our employees.” Crucially, the economics of the diesel genset energy project stack up.

The company said it will recover the full capital cost of the gensets in two years, based on 25% of available hours expected to be lost over the next 24 months – suggesting that it expects to see no real improvement in the country's grid power supply.

Goldplat also said that it will continue to explore other options to secure reliable supply, for example additional connections to the local municipality grid, or a new direct connection to Eskom – though it noted timelines for these options remain “uncertain and unclear”.

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PROVIDING KAROWE UNDERGROUND EXPANSION PROJECT UPDATE

The Karowe Underground Expansion project is set to extend the mine life to at least 2040, delivering \$4 billion in additional revenues. Despite some delays, the project remains technically and economically feasible.

Management initiated an update to the UGP schedule and budget in response to slower than planned ramp up to expected sinking rates, and, to account for time incurred to date, as well as for anticipated future grouting programs. Grouting programs took longer than anticipated due to a combination of high-water volumes in the sandstone lithologies between 870 and 752 metres above sea level in depth (144 metres to 262 metres below the shaft collar) combined with technical challenges associated with the transition to main sinking. The updated schedule incorporates a 28% increase in the duration of construction, extending the anticipated commencement of production from the underground from H2 2026 to H1 2028. As a result, the revised forecast of costs at completion is \$683 million, a 25% increase to the May 2022 estimated capital cost of \$547 million.

The project remains technically and economically feasible, however, the impact of actual and modelled delays changes the revenue profile due to the use of lower-grade, stockpiled ore for mill feed rather than high-grade ore from the underground as previously planned. Sufficient surface stockpiles of South, Centre and North Lobe kimberlite ore are available to maintain current, un-interrupted mill feed to the plant for the duration of the anticipated delay. The long-term outlook for diamond prices, combined with the potential for exceptional stone recoveries and the continued strong performance of the open pit could

mitigate the modelled impact on project cash flows due to the schedule slippage.

Eira Thomas, CEO commented: "Lucara has made tremendous progress on the Karowe underground expansion project, despite many challenges over the last year as we transitioned into the main sink phase of the underground development. Schedule delays due to longer than anticipated grouting activity have impacted the project timeline, however the grouting methodology selected has proven to be effective in controlling water inflows. As we transition out of the sandstones in early Q4 2023, we look forward to meeting planned sinking rates. Despite these challenges, the project continues to deliver strong economics paying back capital in under three years and adding approximately \$4 billion in revenues from an extended mine life out to at least 2040, using conservative diamond price assumptions. The project also comes at a time when the long-term outlook for the diamond market is stronger than it has been for many years representing an exciting growth opportunity for our shareholders and stakeholders in Botswana."

Lucara's major shareholder remains supportive of the Karowe asset and the long-term potential of the Karowe UGP. Adam Lundin commented: "The Karowe underground mine expansion provides access to the highest value portion of the orebody responsible for delivering numerous record-breaking diamonds in respect of size and value, including three diamonds in excess of 1,000 carats. The project remains highly economic, despite the delays incurred, and as Lucara's largest shareholder, we remain fully supportive of the company."



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TWIGA TRANSFORMS TANZANIAN MINING, SETS STANDARD FOR INDUSTRY

Twiga Minerals, the joint venture between the Tanzanian government and Barrick Gold Corporation, has revitalized the country's gold mining industry through a partnership that should serve as a model for similar operations, particularly in developing regions, Barrick president and chief executive Mark Bristow said today.

Briefing media at a mine visit, Bristow said in 2019 when Barrick took control over North Mara and Bulyanhulu — the mines that now form the Twiga complex — both were rundown and at a virtual standstill due to a deadlocked dispute between the government and the previous operators.

"We settled the dispute and established Twiga as a 50:50 economic benefits sharing partnership, which also vested a 16% shareholding in each mine with the government. We reinvented the mines which now, as a combined complex, produce gold at a Tier One level, in other words one which can produce at least 500,000 ounces of gold annually for more than 10 years at the lower half of the industry cost curve. So successful are these operations that, since Barrick's buyout of the minority shareholders, they have contributed more than

\$2.8 billion to the Tanzanian economy in the form of taxes, levies, dividends, salaries and payments to local suppliers," Bristow said.

"Equally important, we have fixed the environmental, land claims and human rights issues that destroyed these mines' reputations and have restored their social licence to operate as an integral member of their communities. Since its establishment, Twiga has invested more than \$12.5 million in landmark projects — identified in collaboration with the community development committees we established at the mines — to provide access to quality healthcare, educational facilities, potable water and alternative sources of income. Among these is an irrigation system which is expected to substantially improve production for 2,356 farmers."

Twiga has also committed \$30 million to a Future Forward School Programme. In partnership with the government, it will build 1,090 classrooms and other facilities across 161 schools nationwide, to accommodate some 49,000 of the estimated 190,000 students who will start their A-levels in July this year. In addition, it has pledged \$40 million to construct a 73 kilometre road from Kahama to Kakola.

Operationally, Bristow said the Twiga complex was continuing its strong production performance and was well on track to achieve its guidance for the year. Both mines are maintaining a strong focus on the health and safety of their workers, and in April Bulyanhulu won the Overall Tanzanian OSHA1 Compliance Award for 2023 in the Mining Sector Category and North Mara was second runner-up.

Globally, Barrick has a policy of prioritizing local employment and at Twiga this has delivered a workforce which is 96% Tanzanian, with almost half drawn from the communities around the mines.

Bristow said conversion drilling at North Mara was successfully replacing the reserves depleted by mining and first ore was mined at the mine's new Gena pit last quarter. Additional opportunities for resource conversion have been identified at both mines.

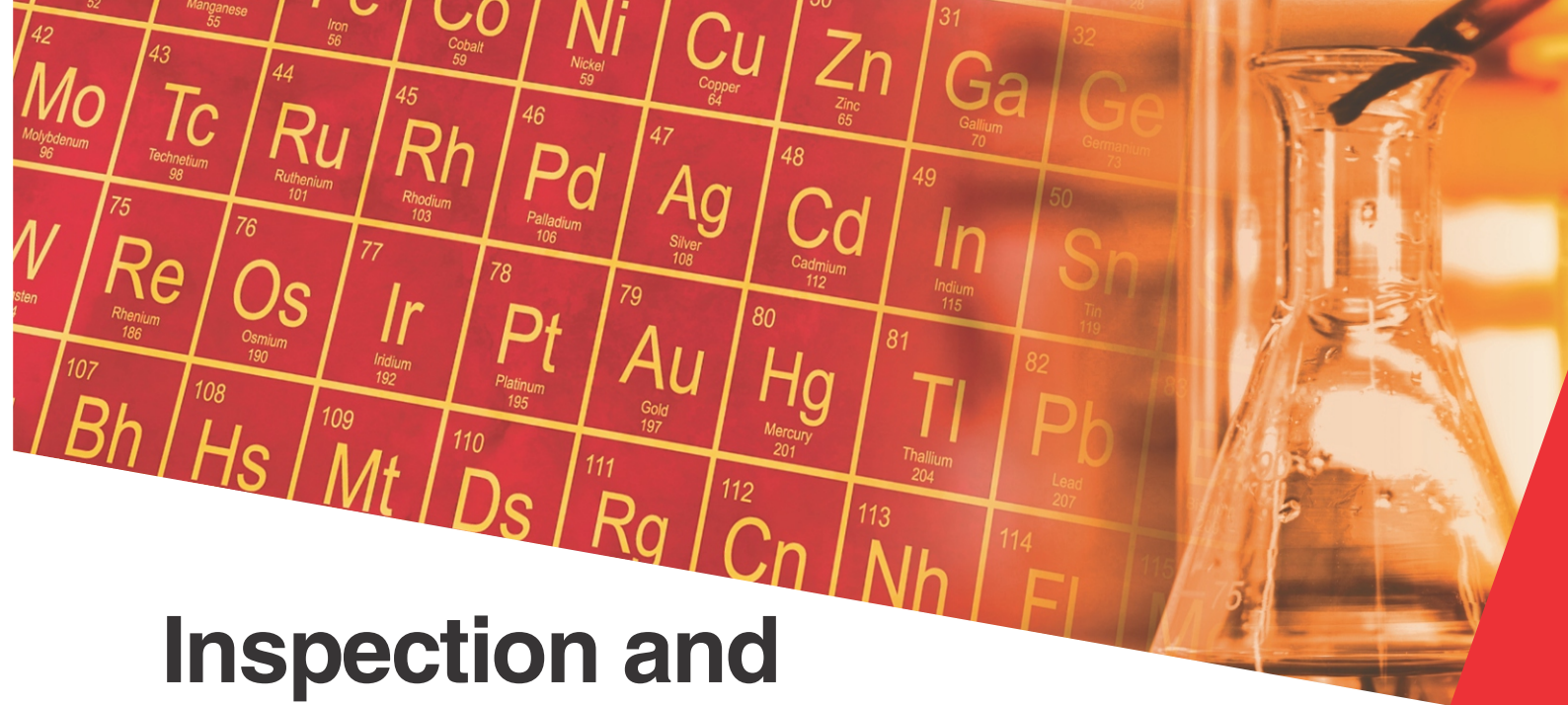
"Barrick is committed to expanding its presence in Tanzania from our base here. We are currently consolidating key prospecting licences in the country with a view to expanding our existing reserves and resources as well as to discovering new world-class gold deposits," he said.



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