

# **Kamoto Copper Company**

## AT THE FOREFRONT OF SUSTAINABLE MINING



www.kamotocoppercompany.com

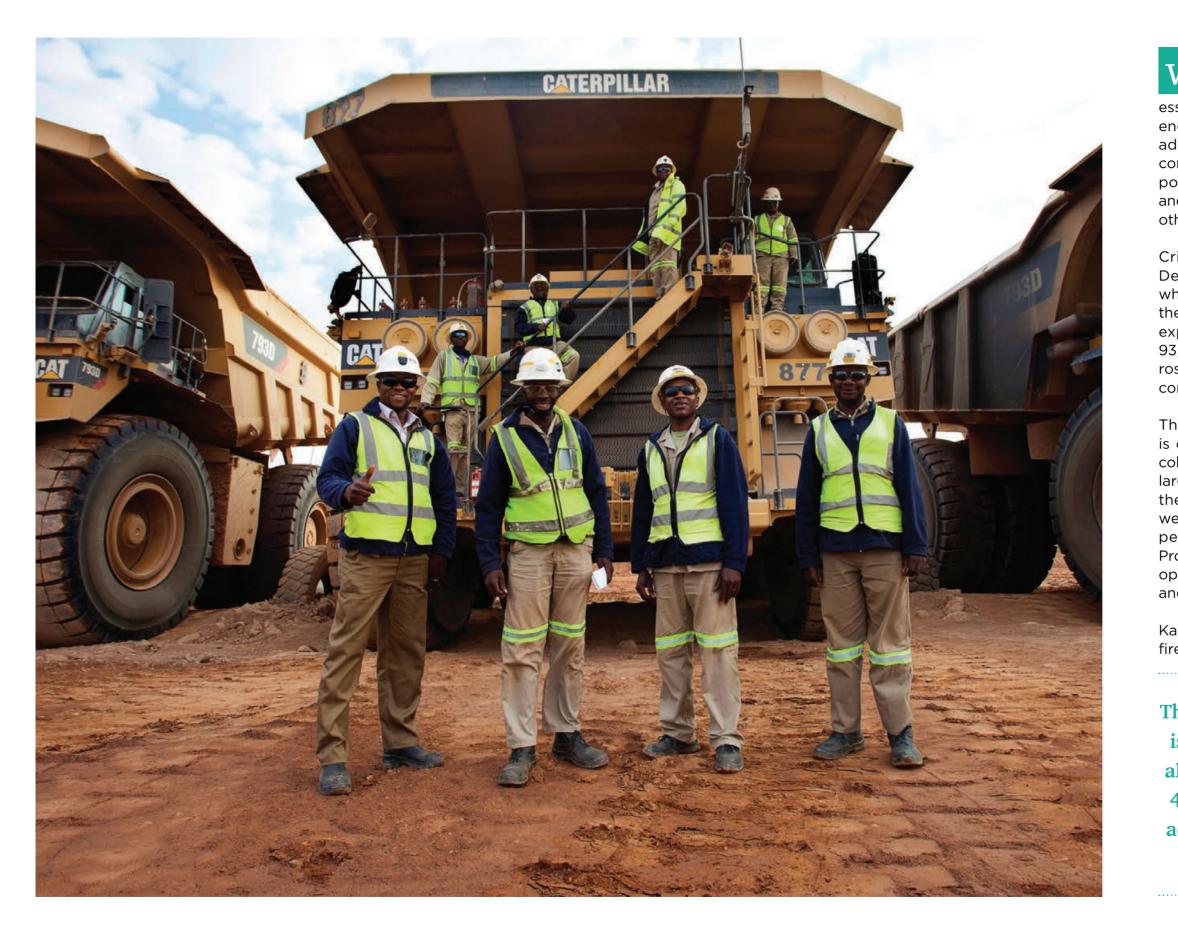


KCC

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At The Forefront Of Sustainable Mining

RESEARCH BY MAME COUMBA GAYE





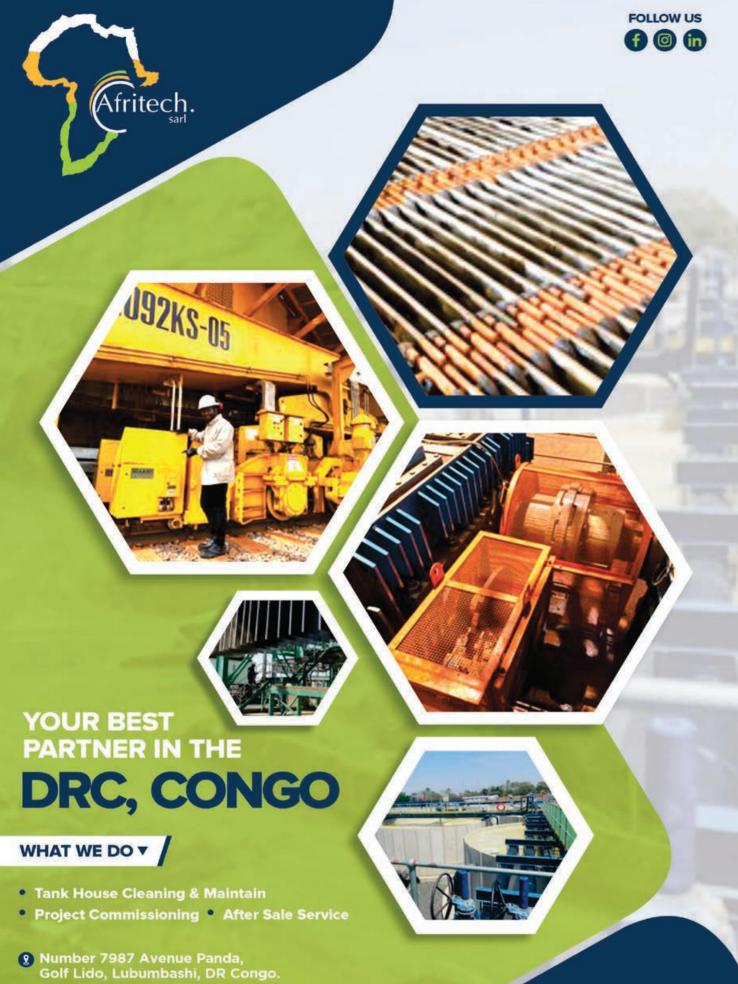
orld demand for cobalt, a by-product of copper and nickel mining, continues to soar. It is an essential building block of infrastructure, energy and mobility solutions that help advance everyday life. It is a crucial component of rechargeable batteries that power everything from electric vehicles and laptops to smartphones, cameras, and other decarbonization technologies.

Critical to that supply flow is the Democratic Republic of Congo (DRC), which is responsible for around 70% of the world's cobalt. Indeed, DRC's cobalt exports rose by nearly 8% in 2021 to 93,011 tonnes. DRC's copper exports also rose 12.3% in 2021 to 1.798 million tonnes, confirming it as Africa's leading producer.

The Kamoto Copper Company (KCC) is central to this success of copper and cobalt extraction as it oversees the world's largest cobalt mine at the western part of the Katangan Copperbelt. It is located west of Kolwezi, a city of about 570,000 people and the capital of Lualaba Province in southern DRC. The large-scale operation also produces cobalt hydroxide and copper cathodes.

Kamoto - derived from the meaning 'small fire' in Swahili - is a vertically integrated

The \$192 million project, which is set for completion by 2024, also entails the construction of 48 bridges and 22 culverts, in addition to a bridge across the Hope Canal





ioint operation which is 75% owned by Glencore, the world's largest producer of cobalt, and 25% by the state-owned Gécamines.

### **Operational Overview**

KCC's operations in Kolwezi include two open pit mines at KOV and Mashamba East, an underground mine, the Kamoto concentrator and the Luilu refinery. It produces copper and cobalt hydroxide from the two open pit mines and the underground mine.

Copper is utilized in various applications, including renewable energy technologies, construction, telecommunications equipment, electrical and electronic products, and general everyday products.

Apart from electric vehicles, cobalt also finds applications in medical imaging technologies. As a superalloy, it is used in aircraft engines and hard metals used as sharp cutting edges or for drilling, as well as high-speed steels, corrosion-resistant alloys, cemented carbides, magnets and magnetic recording media.

Apart from electric vehicles, cobalt also finds applications in medical imaging technologies

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KCC represents a vital part of Glencore's almost \$8 billion investment in the DRC. Its state-of-the-art infrastructure and world-class copper-cobalt ore body make the operation a key part of global energy and mobility transitions. Following its successful ramp-up in 2020, KCC is on track to achieve an annualized capacity of 300ktpa of copper and 30ktpa of cobalt production.

### AFRITECH SARL

### **AFRITECH SARL is a 100% proud locally owned Congolese company.** It was duly constituted in 2012 with the objective to supply critical equipment to the mines and private industrial sectors

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It is made up with team members who have years of experience, intellectual capital, and a proven track record. As an organization AFRITECH has successfully established itself in the mining industry and became a successful point of reference for young local companies.

AFRITECH as a company specialised in the manufacturing and supply of Electrowinning, dewatering technology and recently a new division was established to focus on clean energy production much needed by Mining in the DRC. Afritech is a well-known partner to all key mining producers and others industry in the DRC.

### **AFRITECH Electrowinning**

The Electrowinning division manufactures and supply the below following products:

- Stainless steel cathodes Our design entails the use of a solid copper hanger bar & 316L stainless steel blade.
- Anode stiffeners that cover the anode length.
- Cathode edge strips. ٠
- Our designs allow for greater current efficiency and longer lifespans on edge

### strips.

- Insulator blocks
- Capping board. •
- Design and supply of single or double contact busbars.

"AFRITECH as specialists in the industry, can provide a service to any aspect within the tank house and Electro-winning process".

### **AFRITECH De-watering & Water treatment:**

Within AFRITECH Dewatering division, the following products can be offered:

- Manufacturing & supply of filter presses (thickeners/clarifiers are done in-house).
- Supply vessels, spares & thickeners for filter presses.
- Supply of High-quality filter plates & cloth through our German partner. The lifespan of the filter plates is estimated to more than 15 years.
- Flottation
- Process Water Scale Inhibitor & Elution circuit Scale Inhibitor
- Dust Control : Dustbind, DustFoam PLUS, Haulage DC, Dustcon, Dust Ban
- Solids/Liquid Separation: Flocculants for concentrate and tailings thickeners (OPTIMER product line, CORESHELL product





line, POL-E-Z)

- Tailing Management : Water Shed technology
- AFRITECH's team is open for any further clarity on what we can offer to your valued organization.
- Awaiting to hear from you.

#### Afritech Energy solution

• Our solution of energy production for sites is flexible, simple and innovative. Plug-andplay rental of solar PV and battery energy storage

### An innovative technology

- Bifacial modules and trackers to maximize the vield,
- Preassembled modules and trackers optimized for containers transport,
- Optimized hybridization with battery storage to maximize the offset of thermal generation Re-deployable, modular and scalable.

### **Enabling a rapid deployment**

Quickly installed (1-2 MW per week) thanks to pre-assembled equipment and simplified

## model.

- The plant is prefinanced and the rent is payable monthly Initial contract duration of 5 years with the option to extend or buy-out the equipment.
- Performances are guaranteed for the entire contract duration.



anchoring.

- All in one including modules, trackers, battery storage, control system and SCADA, inverters and transformers.
- Monitored 24/7 from Scatec/afritech global control and monitoring centre.

### Combined with a simple and flexible business

• The plant is provided under a flexible and simplified rental contract.

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The refinery and concentrator facilities were extensively overhauled in 2015 to enable the construction of the Whole Ore Leach (WOL) expansion project, which was realized two years later. KCC produced the first copper cathode in 2018 and installed an acid plant in 2020 to augment facilities. The Kamoto underground mine commenced operations in 1969 and is the primary sulphide ore supplier.

These inclusive investments have enabled KCC to maintain direct control over all its source materials. Ore is extracted from its open pits and underground operations and transported via trucks and conveyor belts to its concentrator, where the ore is crushed and concentrated.

It is then transferred to its Luilu metallurgical plant, which processes the ore through concentrate leach technology,

followed by solvent extraction and electrowinning for copper production and selective precipitation for cobalt hydroxide production.

KCC tracks the movement of its material at every step using sampling and measurement systems. Once ready to leave the site, each cobalt bag is sealed and tagged with bar codes and trucked overland to port by Glencore.

### Going beyond sustainability

KCC does not pay lip service to sustainability. It fully reflects Glencore's strict policies and strategies, from human rights to responsible sourcing and supports efforts to establish greater transparency in the value chain.

For cobalt, KCC has been assured under the Responsible Minerals Initiative's (RMI)





Clint Donkin, CEO of Glencore Copper Africa, stated, "The health and safety of our workforce, host communities and contractors, is our number one priority

**Responsible Minerals Assurance Process** (RMAP) since 2021. But the company goes far beyond just looking after its own operations. KCC does not buy, source, or process any artisanal and small-scale mining (ASM) or thirdparty feed. It believes legal ASM can play an essential and sustainable role in the economy when carried out responsibly and transparently. However, how it is carried out often presents significant challenges for KCC operations.

So, as part of its efforts to support



legitimate ASM to be as responsible as possible, KCC is a founding member of the Fair Cobalt Alliance (FCA) and engages local communities, the DRC Government, the OECD, civil society and other stakeholders, and its customers on the issue.

It also has a zero-tolerance approach for child, forced, or compulsory labour. It works to tackle the socio-economic root causes that contribute to the high prevalence of child labour, specifically focusing on improving access to school. It runs initiatives to support local families



## **INNOVATING FOR** PERFORMANCE



Normet SmartDrive is a modular battery electric vehicle (BEV) architecture designed to optimize energy consumption and performance in underground mining and tunnelling applications. Normet SmartDrive equipment enables higher productivity, lower operating costs and most importantly - zero local emissions. Ease of use and carefully engineered controls ensure safe and pleasant operation. High power motors reduce tramming time and recover energy in downhill driving.

Normet can provide a range of battery electric underground equipment solutions including charging, lifting & installation, spraying and logistics.

The SmartDrive product family provides high productivity with decreased operating costs. For more information or to contact your local representative, please visit www.normet.com

ero local emissions eaner air

More speed & higher performance





Improved energy efficiency Lower operating expenses

and helps to diversify the local economy to offer alternatives to ASM, such as summer camps.

In line with its values, KCC prioritizes the safety, health and wellbeing of its employees in the workplace. It is committed to operating safely, and the KCC Health and Safety programme focuses on identifying and managing hazards. It is also based on the Glencore SafeWork scheme, which aims to provide everyone with knowledge and tools to perform every tasks safely. As Clint Donkin, CEO of Glencore Copper Africa, stated, "The health and safety of our workforce, host communities and contractors, is our number one priority."

In a first-of-its-kind project in the DRC, KCC has teamed up with Vodacom Business and Standard Bank to create









the Umoja App, a digital workplace tool, providing employees with real-time information, including health and safety updates, training, and employee feedback channels. All full-time employees will have smartphones, data bundles and solar chargers.

It has also implemented targeted strategies to achieve safe, consistent, cost-effective production now and throughout the life of the mines.



KCC's Community Development concerns they may have" Programmes (CDPs) are integral to the community and engagement strategies to foster resilient socio-economic communities. It communicates openly with local stakeholders to understand and address their concerns and needs. It actively contributes to activities and programmes designed to improve the quality of life and sustainability of the livelihoods within the communities around its operations.

Clint Donkin expands on this stating "We're proud of the open, constructive, and ongoing engagement with stakeholders at our KCC and Mumi operations. We aim to build relationships with local communities and decision-making authorities to share information about our activities and to help us understand their views and address

The company has contributed to the DRC economy since the beginning of its operations by investing and supporting the National Development Strategy with a focus on healthcare, sustainable livelihoods, education and infrastructure.

KCC has also committed to investing \$ 40





### KCC has also committed to investing \$ 40 million over the next five years, covering infrastructure, education, electrification, agriculture, and health.

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Even more importantly, it is deeply committed to respecting human rights and actively supports its workforce, business partners and suppliers to understand and meet this commitment. It has undertaken a third-party human rights due diligence (HRDD) process that responds to Glencore's Human Rights Standard, supports KCC in identifying the issues affecting its operations, and builds internal awareness of human rights

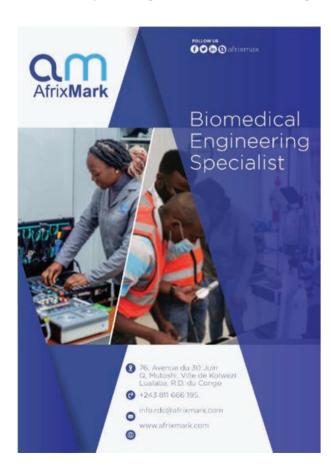
opportunities and challenges. KCC has invested in improving education in local communities by building or financially supporting the construction of schools and academic institutions and renovating others, donating teaching materials and equipment, and supporting teacher development programmes/ It also supports vocational training for community members through boiler making, machine driving, auto mechanics, air conditioning and tailoring courses.



KCC supports summer camp activities for children by providing learning materials and toys, daily meals, and school kits to facilitate the start of the school year. Thanks to this initiative, thousands of children have been given a safe place to learn and grow.

It has implemented a comprehensive environmental monitoring programme which covers surface water, groundwater, dust, air quality and noise. This, along with assessments of local flora and fauna habitats, is carried out regularly at various locations in and around KCC's operations.

Concerned about biological diversity, KCC has focused on returning land to sustainable use. The Miombo reforestation project, which populates a large portion of the Kolwezi region, where KCC operates, involves planting 100,000 seedlings



annually for five years in allocated areas surrounding its operations.

The planning comprises more than a dozen species of seedlings, including species for medicinal use. The site also lends itself to a growing species of mushroom that is a local delicacy and presents a business opportunity for the community.

### Strategic Supply Chain Partners

Kamoto Copper Company (KCC) places paramount importance on its collaboration with suppliers and contracting partners, recognizing their pivotal role in the operational triumphs achieved. KCC insists upon a stringent adherence to ethical principles and compliance with site-specific requisites, which encompass ethical business conduct, stringent health and safety measures, the safeguarding of human rights, and a concerted effort to mitigate environmental impact.

Noteworthy among the array of companies that mirror KCC's values and objectives are AfrixMark, Assistance Technique et Etudes, Africa Technologies Corporation, Rubamin SARL, Congo Equipment, CEMIC Sarl, MineArc Systems, Pressure Filter Specialists (Pty) Ltd, Bolloré Transport & Logistics, and GACLAY ELECTRIC



SERVICES. These partners stand as exemplars of the shared commitment to ethical practices and operational integrity that underscore KCC's endeavors.

Further enhancing the operational landscape are collaborators like Condra Crane & Hoist, ECS (Electrans Congo Service), SGS, Redrilza, GLOBAL SERVICES, and BIA GROUP, whose expertise has played an instrumental role in augmenting operational efficiency.

In this collaborative venture, KCC and its partners are steadfastly dedicated to fostering an environment characterized by ethical conduct, occupational safety, respect for human rights, and an unwavering commitment to environmental sustainability. Together, they traverse a path that not only bolsters existing operations but also propels them towards a future defined by excellence and responsible corporate citizenship.

### Looking forward

With the continuing shift away from traditional fossil fuels and the global industry's rising demand for cobalt, the potential of the Kamoto Copper Company remains one that is highly positive, not only for its workers, operations and stakeholders but for the local communities that depend on it for invaluable support and help.

Given that in 2020, Tesla reportedly inked a deal with Glencore to purchase a guarter of the mine's cobalt for its EV batteries, KCC's ability to continue operating is important not only for the local area but also for the national economy, which last year exported around 70% of world cobalt production.







With the cobalt supply chain contributing \$6.1 billion in tax revenues annually, arowing from \$3.5bn in 2010 to \$11bn in 2021, DRC and KCC can consider the future is filled with immense potential.

Kamoto Copper Company

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