

# Sukari Gold Mine

# MAXIMIZING UNTAPPED POTENTIAL





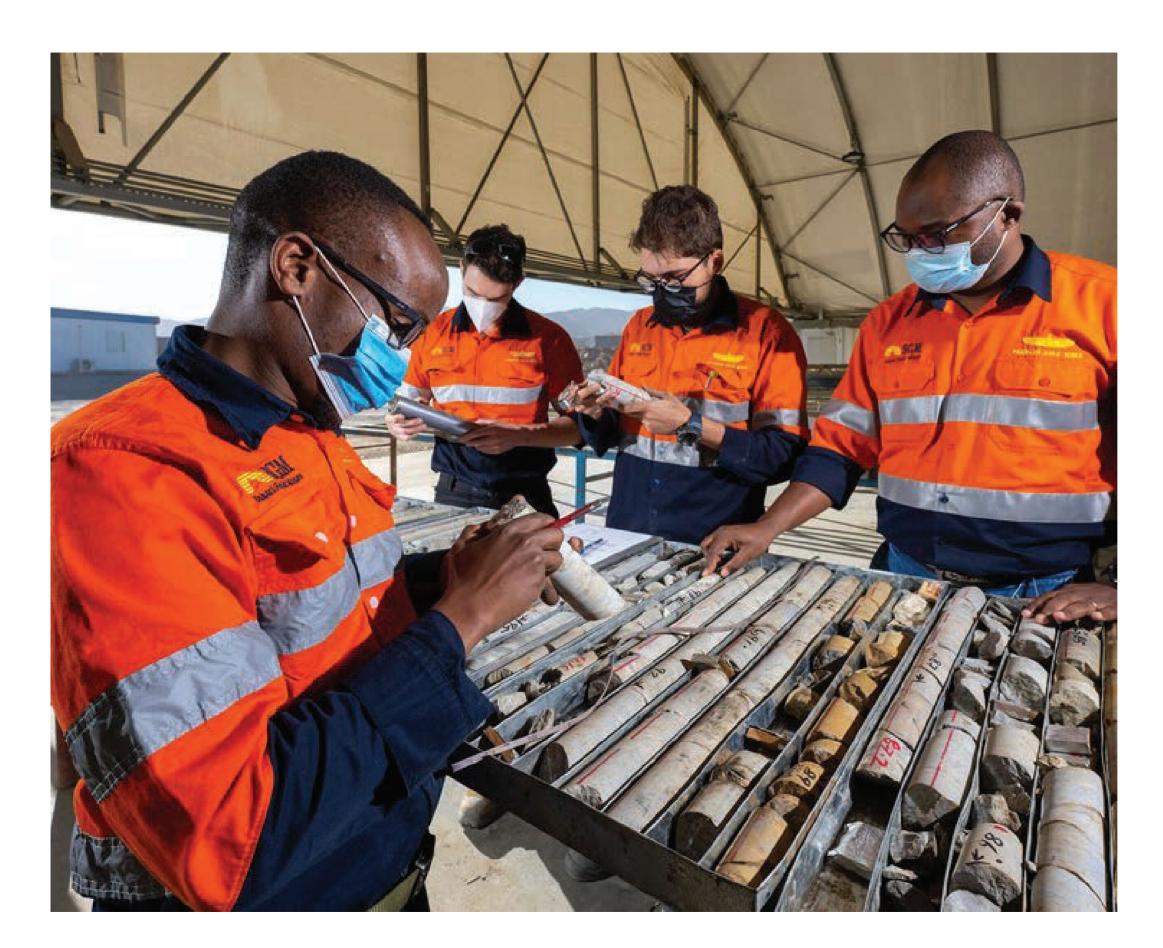
SGM

# **SUKARI GOLD MINE**

**Maximizing Untapped Potential** 

RESEARCH BY MAME COUMBA GAYE

2 [APRIL 2024] BUSINESS EXCELLENCE [APRIL 2024] 3



gypt remains a land of mystery: the Pharaohs, Pyramids, Valley of the Kings and the Nike River. But the Sukari Gold Mine, the nation's first large-scale gold mine, is anything but.

Production began in 2009 and surpassed its five millionth ounce of gold in 2022. Sukari remains a beacon for the country's largely untapped natural resources. But where its greatest tourist attractions remain shrouded in mythical references, Sukari is a modern-day success story.

The mine is paving the way for the country to realize its potential, particularly in defining one of the few underexplored gold belts: the Arabian Nubian Shield.

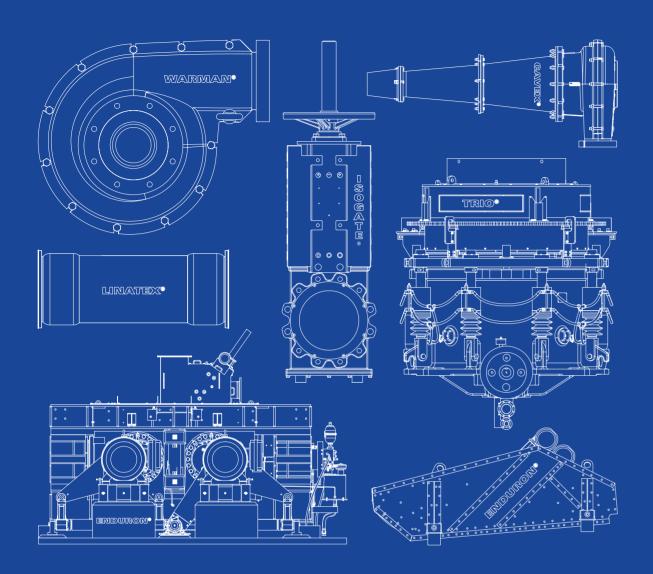
#### Overview

Centamin was built on the success of exploration by its Egyptian founders, with the discovery of Sukari in the 1990s. The subsequent development of Sukari is a story of tenacity in the modernization of an ancient gold mining jurisdiction.

Located in Egypt's mineral-rich but unforgiving landscape of the Eastern Desert, south of Luxor between the Nile and the Red Sea, Sukari is a modern mine, served by smooth roads, off-grid power, solar and a 25 km water pipeline served by the Red Sea.

Sukari, Egypt's first largescale gold-exporting mine, contributes up to \$900m annually to the nation's GDP

[ APRIL 2024 ] BUSINESS EXCELLENCE [ APRIL 2024 ] 5



# Think about your entire circuit; we have.

everything you need. With best-in-class products from Cavex®, Enduron®, Isogate

To get more from your mine, visit www.global.weir today.



Minerals www.global.weir

Today, Sukari, Egypt's first large-scale gold-exporting mine, contributes up to \$900m annually to the nation's GDP. The mine, a low-cost, bulk-tonnage open pit and high-grade underground operation, has significant exploration upside and regionally within its 160 km2 plot.

According to Centamin, gold production from Sukari peaked at 450,000 ounces by the end of 2023, an increase compared to 440.000 ounces mined in 2022. Sukari has at least a decade's worth of production ahead and 11.11 million ounces in gold resources.

#### **Transitional Times**

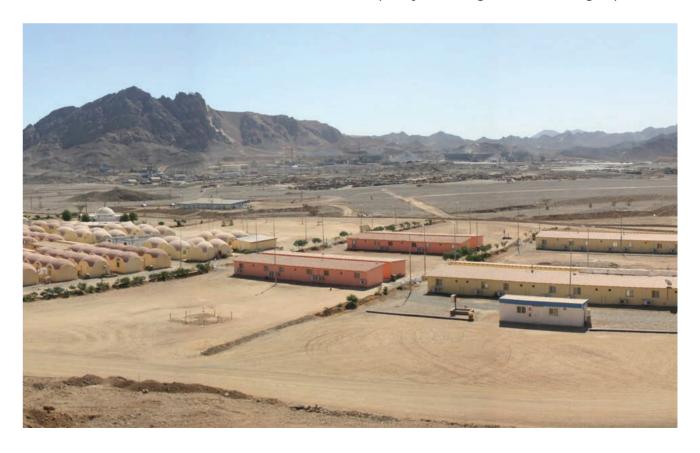
In 2022, Centamin shifted underground operations at Sukari from a contractor to an owner-operator model. The move, which followed the ending of a

five-year contractor deal, would enable an anticipated \$19 million in cost savings annually from 2023.

Various reasons also influenced the decision, including a 200% rise in underground proven and probable reserves. The underground mine had eight years left of productive life, but Centamin identified near-term drill targets to extend it beyond ten years by 2022's end. The shift also aims to improve cost savings, operational control, mining flexibility, and local workforce upskilling.

It is now targeting average gold production of 506,000 ounces per year from 2024 to 2032 and 475,000 ounces per year for the entire 11-year life-of-mine plan from 2024 to 2034.

The transition saw Centamin hire a thirdparty underground mining specialist

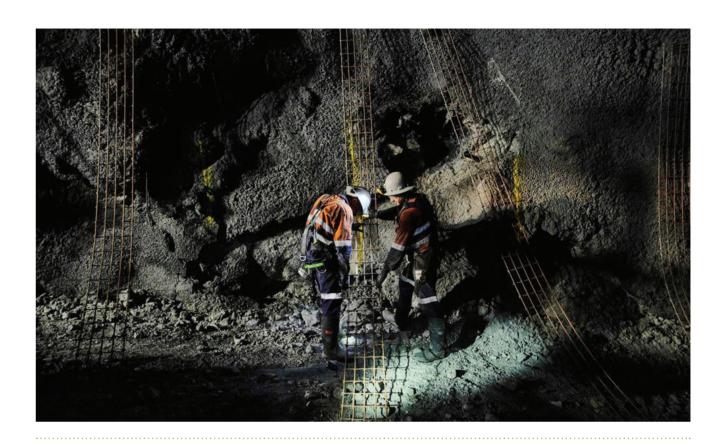


# SUSTAINABLE BLASTING 100 MILLION TREES

# Eco-friendly explosives, for greener blasting.

In just a little more than a decade since the introduction of used oils into its various Eco bulk emulsion formulations, AECI Mining Explosives has consumed more than 80 000 000 liters of used oil. This initiative has prevented approximately 55 000 tons  $\rm CO_2e$  into the atmosphere, which equates to having to plant roughly 100 million trees. Thank you for partnering with us in our quest to drive more sustainable blasting.





In late 2023, Centamin announced a new life-of-mine plan for Sukari that will focus on increased gold production, reduced carbon emissions, operational risk reduction, and lower costs

to assist with workforce training. It has also awarded Toronto-based exploration drilling firm Geodrill a five-year \$54.5 million contract to drill a minimum of 90,000 metres per year using five rigs.

Centamin has not only bought the incumbent contractor's current underground mining fleet, an acquisition that raised its 2022 capex to \$225m, but has also spent \$750 million over the past four years improving mine efficiencies.

In late 2023, Centamin announced a new life-of-mine plan for Sukari that will focus on increased gold production, reduced

carbon emissions, operational risk reduction, and lower costs. All-in costs are projected to lower by 34% to \$922 per ounce of gold sold from \$1,399 in 2022.



The new plan has amalgamated four major work streams: optimization of the open pit, expansion of the underground mine, optimization of the processing facility, and entirely replacing the use of diesel for stationary power generation. Strategies for improvement include an enhanced open pit schedule, expanded underground mining and incorporation of a gold gravity circuit in the processing plant.

The new plan envisages a 39% reduction in greenhouse gas intensity over the life of the mine, to 0.69 tonnes CO2-e per ounce, compared to 1.14 tonnes CO2-e per ounce in 2022. This will be achieved by integrating grid power into the Sukari electricity mix, combined with the existing 30MW solar plant. Connecting Sukari to the national electricity grid will realize savings of \$41 million annually on diesel spending for power generation.

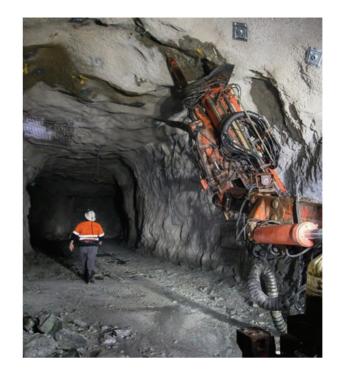
Centamin CEO Martin Horgan highlighted the plan's significance in re-establishing Sukari as a global tier-one gold asset and maximizing free cash flow generation while reducing operational risk and carbon emissions.

The strategy also includes expanding the high-grade underground operations and increasing mining rates to 1.4 million tonnes per annum, compared to 0.8 million tonnes mined in 2022. The open pit design has been optimized for more ore mined and less waste

A gold gravity circuit has been integrated into the processing plant, which is expected to increase gold recoveries by 2% to 89.8% over the mine's life, compared to 88.2% in 2022.

The plan follows a restructuring of the geological approach to exploration, transforming Sukari from a mine depleting its mineral reserves to a mine achieving growth. The estimated mineral resources at the mine amount to 320 million tonnes.





grading 1.08 grams of gold per tonne, which contains 11.11 million ounces of gold, including 6.0 million ounces of mineral reserves.

He said: "This plan demonstrates our commitment in striving to maximize the value of Sukari as the foundation for growth and diversification, safeguarding stakeholders' interests, and generating tangible value for Egypt and its people. It represents a significant improvement over previously published plans and includes lower operational risks compared to the past and achieves a notable reduction in carbon emissions."

#### **Suppliers**

Centamin relies on a host of highquality suppliers to ensure the continued success of Sukari. These include RIGA, which focuses on engineering ventilation systems, Ridgewood Water Desalination Company, Swegypt Mina International and Weir Minerals providing a multifaceted solution saves SGM US\$251,000 per annum and increases average wear life by 161%.

Epiroc has partnered with mining services company Capital Limited to field test the SmartROC D65 BE, a battery-electric surface drill rig for the mining and construction industry at Sukari.

Renewable energy specialists Juwi AG was contracted to design, supply and integrate



[ APRIL 2024 ] BUSINESS EXCELLENCE [ APRIL 2024 ] 11



# The mine has a workforce of 2,400 people, of which 95% are Egyptian, and a 68% Egyptian supply chain

the Sukari solar and battery plant into the current diesel power plant. GroundHog deployed the OpsCenter for Dispatch and the Fleet Management System app. Other notable suppliers included Maxam Egypt, Siemens Industrial and Capital Drilling.

## Socio-economic and sustainability **Impact**

The mine has a workforce of 2,400 people. of which 95% are Egyptian, and a 68% Egyptian supply chain. Centamin has been creating long-term value in Egypt for three decades, working in partnership with the Egyptian government, local communities, and numerous local businesses throughout

the supply chain to develop Egypt's modern gold mining industry.

Its operating strategy focuses on responsibly producing profitable ounces through stringent cost controls, disciplined capital allocation, and improved operating efficiencies.

Horgan said: "Our team takes pride in our responsible approach to mining, setting the benchmark for sustainability performance and good industry practice in Egypt. Enhancing the socio-economic contribution to our host countries is fundamental to our purpose.



"In 2023. Centamin distributed \$984 million in economic value, from operating costs and employee wages to capital expenditure, as well as profit share and royalty payments. The vast majority of this value distribution remained in Egypt by our partnership with the Egyptian government and our high level of national employment and procurement."

He said that through 2023 "we continued to deliver against our sustainability targets with improved performance across our priority metrics." These included ISO 45001 certification at Sukari and a marked reduction in Group Scope 1 and 2 greenhouse gas emissions.

Other highlights included 9.5 million hours worked at Sukari with zero lost time injuries. The Group lost time injury frequency rate of 0.08, an 83% improvement on the 3-year trailing average. Total recordable injury frequency rate of 2.83, represented a 24% improvement on the 3-year trailing average.

Its 2023 Sustainability Report also highlighted a sustained zero reportable environmental and social incidents across

the Group and a 7% reduction in Scope 1 and 2 greenhouse gas emissions compared to 2021.

There was also a sustained commitment to provide professional development opportunities to empower employees to fulfil their potential. For the Group, 76% of senior and middle management roles are held by nationals. At Sukari, 67% of employees were assessed to have met training requirements for progression to a higher level of competency.

#### **Golden horizons**

Egypt's mineral reserves were largely left untapped due, in part, to the country's past system of royalties and profit-sharing agreements, which made it difficult for miners. However, a legislative overhaul in 2020 eliminated the need for miners to form joint ventures with the government. It also limited state royalties to a maximum of 20%.

Sukari Gold Mine remains Centamin's focus, having identified opportunities to extend its current life-of-mine through underground deposits, surface satellite deposits, and adjacent exploration licenses. However, it is also advancing an active pipeline of future growth prospects, with over 3,000 km2 of highly prospective exploration ground in Egypt's Nubian Shield.

Sukari Gold Mine

① +203 5411 259

12 [ APRIL 2024 ] BUSINESS EXCELLENCE



### Sukari Gold Mine

361 El Horreya Road Sedi Gaber Alexandria, Egypt

D +203 5411 259✓ pgm@centamin.comwww.centamin.com