

**Evander Mines  
– Elikhulu**

Built within budget and ahead of schedule, the flagship Elikhulu operation demonstrates the Group's expertise in designing and commissioning tailings retreatment plants and is instrumental in ranking the Company among South Africa's lowest-cost gold producers.



**ORIEL SHIKWAMBANA**  
General manager

**Gold sold (oz)**



**Tonnes milled and processed (tonnes)**



**Overall recovered grade (g/t)**



**AISC\* (US\$/oz)**



**Capital expenditure\* (US\$ million)**



\* Converted to US\$ at the average exchange rate prevailing for the respective period.



Monitoring Elikhulu re-mining processes.

## HIGHLIGHTS

### Safety

- TRIFR and LTIFR (per million man hours) regressed to 5.29 (2019: nil) and 0.88 (2019: 0.42) respectively
- No fatalities were reported for the year under review
- No COVID-19 cases were reported for the year under review

### Sales and production

- Gold sales increased by 31.1% to 59,616oz (2019: 45,465oz)

### Cost of production

- AISC per ounce increased by 4.6% to US\$614/oz (2019: US\$587/oz)
- Cost of production increased 29.9% to US\$33.0 million (2019: US\$25.4 million)

### Capital expenditure

Total capital expenditure was US\$0.6 million (2019: US\$37.7 million) comprising:

- sustaining capital expenditure of US\$0.6 million (2019: US\$nil)
- expansion capital expenditure of US\$nil (2019: US\$37.7 million)

### Community and social initiatives

- The decision to proceed with treatment of historical tailings at Elikhulu sustains the local economy in the long term and provides employment for communities that would not have existed had Evander Mines' operations been permanently closed
- Elikhulu is included in Evander Mines' mining right and its profitability contributes to the community projects and commitments for the underground operations at Evander Mines, including the COVID-19 relief and assistance programme

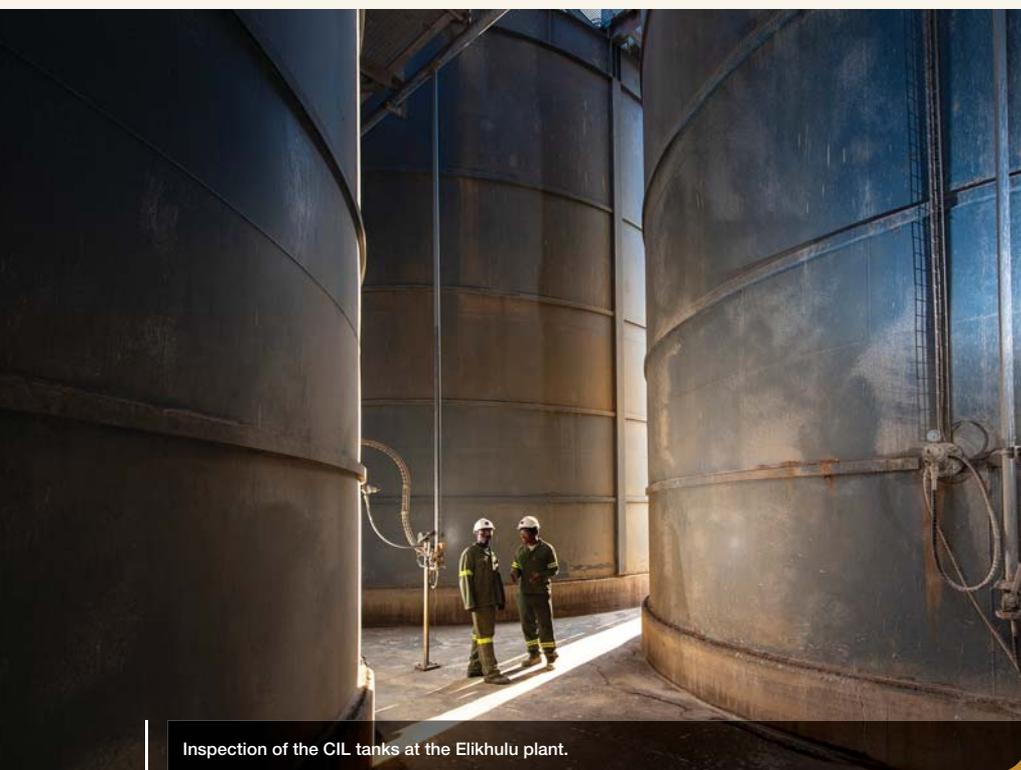
### Environmental

- Reprocessing of historical tailings allows the rehabilitation of land for alternate land use. The new tailings facilities have a reduced footprint and are safer. Modern processing technologies mean they comply with new environmental regulations
- A solar photovoltaic plant has been approved to supply power to Elikhulu that will reduce its dependency on the national grid, ensure supply stability and reduce the Group's carbon footprint

Elikhulu is one of the lowest-cost operations in Southern Africa, producing 59,616oz at an AISC<sup>◆</sup> of US\$614/oz, with an operational life of 12 years.

## OVERVIEW OF OPERATIONS

The Group's expansionary capital expenditure in the current and previous year related predominantly to the development of **Elikhulu**. The ZAR1.74 billion surface tailings retreatment operation is the Group's third gold retreatment plant and was built within budget and commissioned ahead of schedule in September 2018. Elikhulu is one of the lowest-cost operations in Southern Africa, producing 59,616oz at an AISC of US\$614/oz, with an operational life of 12 years. The plant processes up to 1.2Mt of historical tailings per month from the three existing slimes dams at Kinross, Leslie/Bracken and Winkelhaak. Reprocessing will result in the residues being re-deposited to a single TSF site which will reduce our ecological footprint. Elikhulu's enlarged Kinross TSF extension is lined to prevent and limit underground seepage and pollution. It represents our commitment to address the environmental legacy of historical tailings deposits. As the TSFs are located in close proximity to residential areas, specialist independent contractors were appointed to build and operate the TSF. In addition, tailings dam management is overseen by an appointed competent person at each TSF site to ensure monitoring and compliance with legislation as well as the Group's own internal code of practice.



Inspection of the CIL tanks at the Elikhulu plant.

The Elikhulu operation consists of a technologically advanced, automated plant with a reduced labour requirement. The plant's numerous innovations, in addition to its high throughput and short pumping distances, include its modern extraction process, which does not require regrind mills and thickeners, has low reagent consumption and uses mostly non-potable water supply from adjacent underground operations. The Group designed its tailings plants to incorporate a pre-oxidation methodology to enhance gold extraction successfully. The re-mining activities are also automated to a large degree, with the latest in hydro-mining technology. These factors allow production costs to remain remarkably low.

Elikhulu is testament to Pan African's ability to conceptualise, plan and complete substantial growth projects ahead of time and within budget.

The Group's board has approved the development of a solar photovoltaic plant at Elikhulu, following the finalisation of a positive bankable feasibility study undertaken by independent consultants ARUP. The solar photovoltaic plant will initially provide up to 30% of Elikhulu's annual power requirements and aims to reduce the operation's dependency on the national grid, while also reducing exposure to annual power cost increases which are above inflation. The investment will promote a more sustainable renewable energy solution for the green economy of the country and reduce Elikhulu's carbon footprint.

The solar photovoltaic plant is expected to generate electricity at a much lower cost than electricity provided by Eskom, which makes this investment economically compelling. The solar photovoltaic plant has an expected minimum life of 20 years. Additional positive environmental and social aspects include the generation of carbon credits and job creation within the local communities. This investment in renewable energy by the Group will result in improved efficiencies, a further reduction in operating costs and the long-term sustainability of Elikhulu.

The engineering, procurement, and construction contract for the solar photovoltaic plant has been awarded to an independent contractor and the Group is in the process of finalising the necessary

legal and contractual agreements, as well as raising dedicated funding for the solar photovoltaic plant.

### CHALLENGES

Production was impacted by the delay in commissioning the new pump station for Elikhulu's re-mining feed. After it was fully commissioned, production stabilised and the operation's ability to cope with excessive rainfall was enhanced.

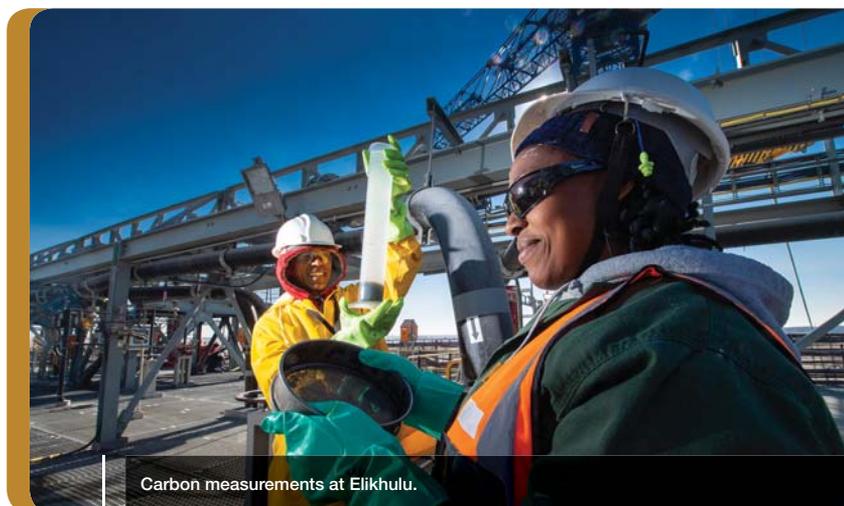
As Elikhulu is highly automated, the labour complement required is reduced. This means fewer unskilled employment requirements from the local communities compared to underground mining, which results in dissatisfaction and demand for jobs that cannot be filled. The Group endeavours to create alternate employment opportunities through its business Incubation centre, where local small businesses are developed to supply the mining and other industries. The commencement of the Egoli project will also create further local employment opportunities.

Unstable supply of electricity from the national grid has the potential to disrupt operations and interrupt process flows, leading to delays in resuming steady-state production. Unplanned power cuts on an ongoing basis exacerbates the situation resulting in production losses that cannot be recouped immediately, leading to missed production targets. The installation of the renewable energy solar photovoltaic plant (as described above) will mitigate this situation to a large extent.

### FOCUS FOR 2021

Our goal for the year ahead is to achieve optimal performance in our surface operations. Our focus areas for the year ahead include:

- achieving continued low-risk, high-margin performance from Elikhulu
- commissioning the solar photovoltaic plant to reduce electricity costs and the risk of power supply disruptions
- continuing with rehabilitation of historical TSF sites and investigating alternate land-use projects on the newly rehabilitated areas
- investigating collaboration opportunities with adjacent mines to expand the scale and impact of LED projects
- planning and preparing for the construction of the Leslie/Bracken pumping infrastructure
- completing planning and starting construction for the re-deposition of tailings on the Kinross TSF dams 1 and 2.



Carbon measurements at Elikhulu.