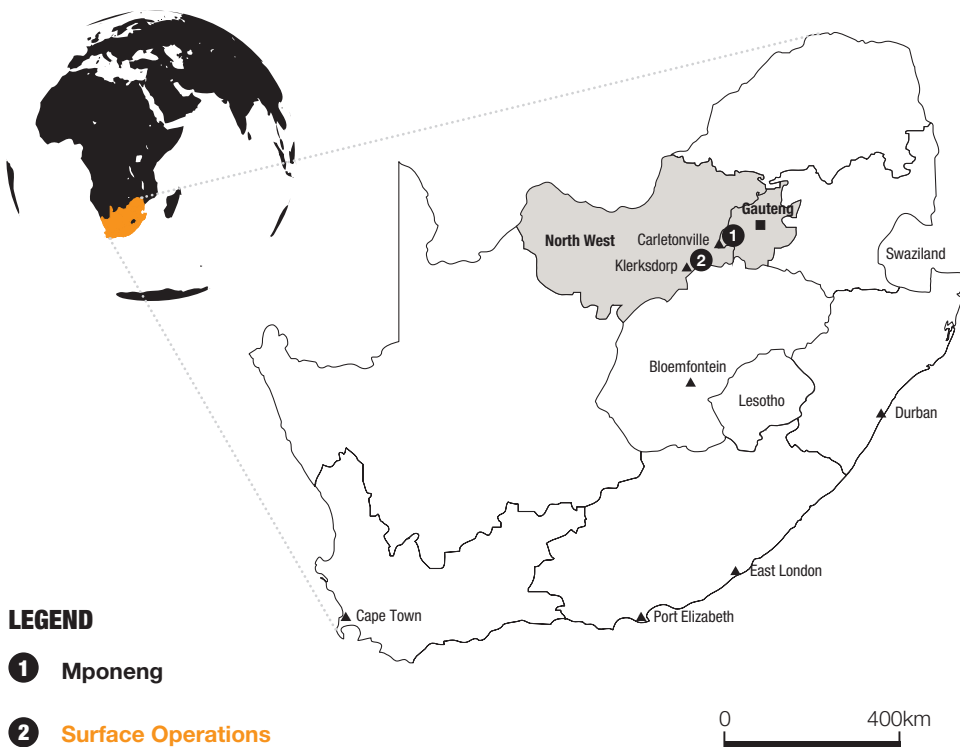


# SURFACE OPERATIONS

SOUTH AFRICA



**S**urface Operations comprises surface facilities in the West Wits and Vaal River areas, which process and extract gold from marginal ore dumps and TSFs. Surface Operations also includes Mine Waste Solutions (MWS).

Operates independently, and processes slurry material reclaimed hydraulically from various TSFs. Backfill is produced as a by-product, for use as mining support in mined out areas underground.

Currently, Surface Operations together with Mponeng make up the two operating entities and assets in AngloGold Ashanti's South Africa region. Agreement on the disposal of these South African assets was announced in February 2020.

## FEATURES OF THE YEAR

### ASSETS SOLD

as part of sale agreement of South Africa assets announced in February 2020

### INCREASE

in recovered grade driven by improved recoveries

### PRODUCTION

increased by 3%

### OPERATIONAL EXCELLENCE

remains a priority, costs decline

### 5.34Moz

inclusive Mineral Resource as at 31 December 2019

# PERFORMANCE 2019

## Operating performance

### Production

Production of 176,000oz at Surface Operations improved for the year driven by a 3% increase in production at MWS, from improved recoveries with the introduction of the Aachen Shear reactor and other initiatives aimed at enhancing efficiencies.

The main drivers for the improved delivery at the Surface Operations were primarily due to:

- Improved throughput from better operational performance delivery by the contractor; stabilised duty cycle of the comminution circuits
- A change in strategy to process Mponeng marginal ore dumps (MOD) through the Savuka Gold Plant
- General metallurgical process efficiencies
- Implementation of grid sampling and grade profiling strategy

The impact of inclement weather remained significant during 2019. A remote reclamation project is currently underway with the aim of reducing inclement weather disruptions to production. Load shedding of the supply of electricity by Eskom remains a concern as MWS is not able to operate optimally on emergency power and therefore any interruptions caused by load shedding directly impact production activities.

### Costs

Costs benefitted from operating efficiencies as well as a weaker rand/dollar exchange rate. Through our Operational Excellence initiatives, cost and capital management remained a key priority as we continued to maintain asset integrity and safety performance. Project initiatives include a wide array of activities aimed at improving metallurgical recoveries and throughput and cost savings.

## Sustainability performance

### Safety

There were no fatalities, the operations delivered a fatality-free year in 2019, its safest on record. The AIFR for the year was down to 3.35 (2018: 4.63) per million hours worked. Various safety campaigns were initiated to address safety performance. To create additional awareness during the festive season, a campaign named Khumbul'ekhaya, a Nguni word meaning 'remember home', was launched in the last quarter of 2019 and rolled over into 2020 to encourage mineworkers to return home healthy and safe every day. Khumbul'ekhaya was developed by South African mining companies to drive and sustain the local gold mining industry's pursuit of Zero Harm.

### Environment

New carbon tax regulations in South Africa were implemented on 1 June 2019, with the first tax payment date being 31 July 2020. Phase 1 of the regulations, which is applicable until 31 December 2022, will have an insignificant impact on the South African operations. This first phase applies to Scope 1 emitters and contains tax-free emission allowances. In 2019, Scope 1 emissions in the South Africa region were less than 17,000t and did not attract material carbon taxes. In 2023, when the second phase of the carbon tax begins, pass through taxes in electricity prices are likely to be incurred. However, these are unlikely to be significant for the company.

An environmental incident occurred on 20 September 2019, when a pipeline, conveying tailings from the MWS plant to the Kareerand TSF, failed near the Koekemoerspruit crossing, a stream that flows into the Vaal River. Pumping operations were suspended, and a containment berm was constructed downstream in the Koekemoerspruit. Water quality monitoring of key locations in the Koekemoerspruit and at the Midvaal Water Company's intake, downstream in the Vaal River, confirmed its effects were limited to the contained area. Regulators and the landowners adjacent to the watercourse, were notified of the incident. Recovery of the impacted section of the Koekemoerspruit will be assessed through in-stream bio-monitoring by an independent specialist, following clean-up of the watercourse and adjacent surface areas impacted by the spill.

### Community development

Discussions are on-going in the region about a possible donation by the Company of some of its rock dumps for processing in an income-generating venture for the community. This forms part of our community development initiatives and other related opportunities for local businesses. To this end, the office of the Premier of North West Province has assembled a multi-disciplinary team including Matlosana Municipality to focus on this project. The new social and labour plan for 2020-2024 was submitted to South Africa's Department of Mineral Resources and Energy for approval following consultation. The plans provide a broad map for corporate and social responsibility spend across the South African operations.

### Education programmes

Various education programmes were funded in the South Africa region supporting learners in their school work to improve performance and attainment in mathematics, science and English. For additional work in education see the South African regional review section of the <IR>.

### Health programmes

Ensuring the health of our employees and those in the host communities is a priority for AngloGold Ashanti. For work carried out during the year, see the South African regional review section of the <IR> and the [Employee and community health](#) data table in the <SR>.

### Silicosis settlement

In July 2019, a full bench of the Johannesburg High Court approved the settlement of the silicosis and TB class action suit in South Africa, providing a route to compensation for affected mineworkers and their families. The settlement was between the Occupational Lung Disease Working Group – representing African Rainbow Minerals, Anglo American South Africa, AngloGold Ashanti, Gold Fields, Harmony and Sibanye-Stillwater – and the settlement classes' attorneys, Richard Spoor Inc, Abrahams Kiewitz Inc and the Legal Resources Centre.

The Tshiamiso Trust has been set up to implement the settlement and is charged with tracking class members, processing all submitted claims, undertaking medical examinations and paying benefits to eligible claimants. Benefits provided for in the agreement and other details can be found at [www.silicosissettlement.co.za/about](http://www.silicosissettlement.co.za/about)

# PERFORMANCE 2019 CONTINUED

## Human rights

There were no human rights related incidents reported in 2019. Further there were no fatalities related to any security intervention for the same reporting period.

## Key statistics

Surface Operations	Units	2019	2018	2017
<b>Operating performance</b>				
Cut-off grade <sup>(1)</sup>	oz/t	0.007	0.007	0.006
	g/t	0.23	0.23	0.20
Recovered grade	g/t	0.17	0.16	0.17
Tonnes treated/milled	Mt	33.8	33.5	35.8
Gold production	000oz	176	171	192
Total cash costs	\$/oz	987	1,030	969
All-in sustaining costs	\$/oz	1,043	1,094	1,045
Capital expenditure	\$m	7	12	12
Productivity	oz/TEC	7.95	7.83	7.60
<b>Safety and health performance</b>				
No. of fatalities		0	0	0
All injury frequency rate (AIFR)	per million hours worked	3.35	4.63	4.21
<b>People</b>				
Total average no. of employees		2,031	2,290	3,161
– Permanent		1,543	1,754	2,500
– Contractors		488	536	661
<b>Environmental performance</b>				
Water use	ML	7,779	7,007	6,002
Water use efficiency	kL/t	0.29	0.27	0.23
Energy consumption	PJ	0.82	0.87	0.83
Energy intensity	GJ/t	0.03	0.03	0.03
Greenhouse gas (GHG) emissions	000t	210	210	201
GHG emissions intensity	t CO <sub>2</sub> e/t	8	8	8
Cyanide use	t	8,581	8,873	6,430
No. of reportable environmental incidents		1	1	1
Total rehabilitation liabilities	\$m	32.2	20	25
<b>Social performance</b>				
Community investment <sup>(2)</sup>	\$m	4	5	6
Payments to government <sup>(2)</sup>	\$m	80	91	118

<sup>(1)</sup> Based on the Ore Reserve.

<sup>(2)</sup> For the South Africa region as a whole.

For further information on AngloGold Ashanti and its work and performance, as a group and in the South Africa region, see the <IR> and <SR> which are available online at [www.aga-reports.com](http://www.aga-reports.com).