# Ore Reserves and Mineral Resources Report 2020

AngloAmerican

Anglo American Platinum Limited

# Purpose: re-imagining mining to improve people's lives

We are grounded in our purpose to re-imagine mining to improve people's lives. We are transforming the very nature of mining for a safer, cleaner, smarter future. We are using more precise technologies, less energy and less water; we are reducing our physical footprint for every ounce of PGM and base metal we produce. We are combining smart innovation with the utmost consideration for our people, their families, local communities, our customers, and the world at large – to better connect precious resources in the ground to all of us who need and value them.

Our focus is on our four strategic priorities to deliver the next phase of valve creation for stakeholders.

– Stimulate new markets and leverage new capabilities

– Embed anti-fragility across our business

– Maximise value from our core

– A leader in ESG

Refers to other pages in this report

Supporting documentation on the website
Integrated report
Full annual financial statements (AFS)
Environmental, social and governance (ESG) report

www.angloamericanplatinum.com/investors/annual-reporting/2020

## Contents





Cover image: Prosper Ngwerume (Section Surveyor) using a laser device underground for precision markup of centre lines and panel marking

# Our approach to reporting

Anglo American Platinum is a member of the Anglo American plc group, guided by the purpose and values of our parent while considering the complexities of the PGM industry and our operating countries in developing our strategic priorities. The synergies created by a common purpose, shared values and strategic focus underpin significant benefits for all stakeholders.

### Integrated report
- Balanced assessment of our performance and ability to create sustainable value
- Relevant extracts from supplementary reports, particularly ESG report
- Developed for key stakeholders: employees, local communities, non-governmental organisations (NGOs), customers, investors and government.


### ESG report
- Detailed disclosure on key environmental, social and governance elements that could have a material impact on our performance and business if not managed effectively
- Prepared in accordance with core requirements of GRI Standards.

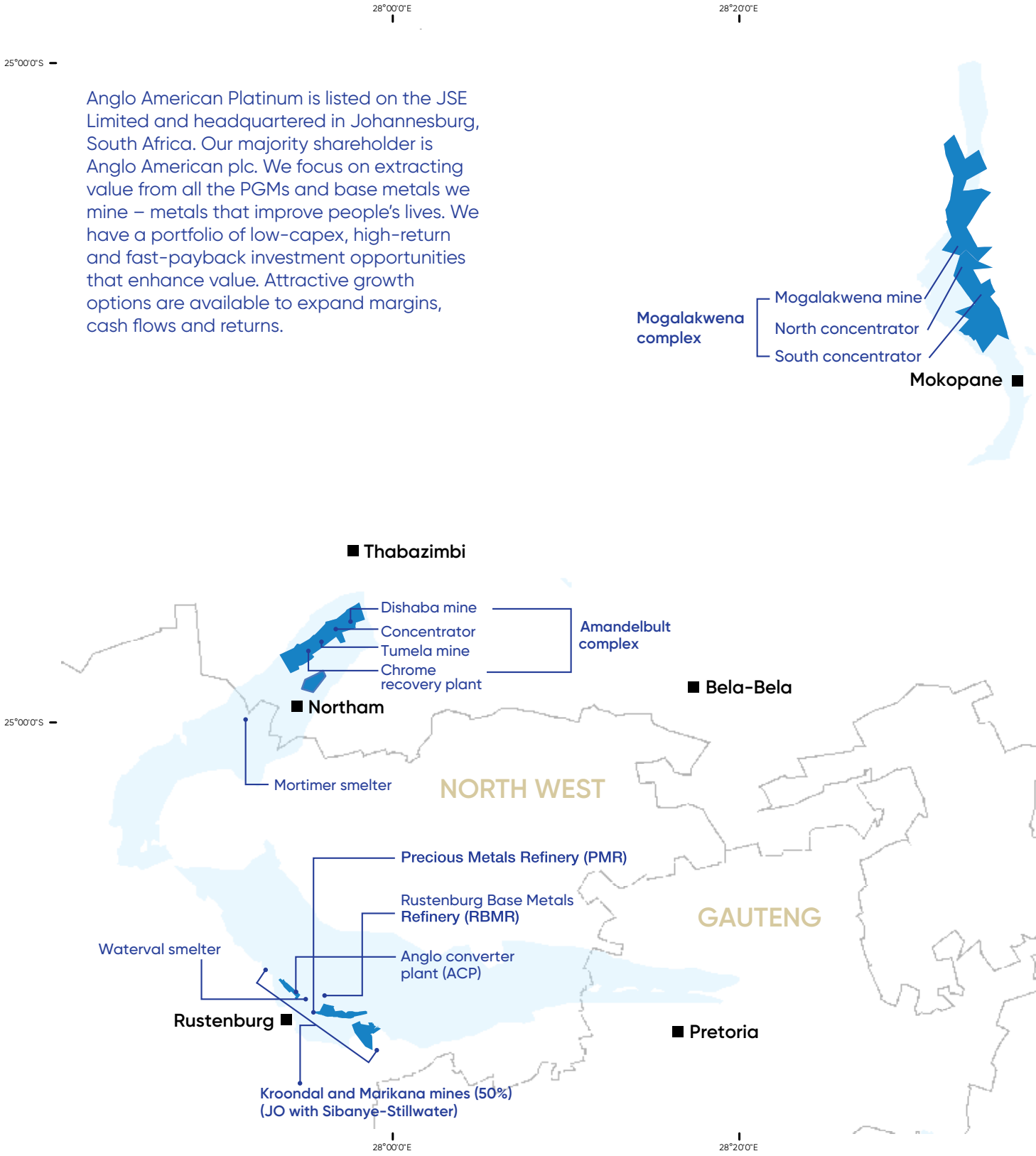

### Annual financial statements
Prepared according to:
- International Financial Reporting Standards (IFRS)
- SAICA Financial Reporting Guides
- Financial Reporting Pronouncements issued by the Financial Reporting Standards Council
- South African Companies Act 71 2008
- JSE Listings Requirements
- King IV recommendations.

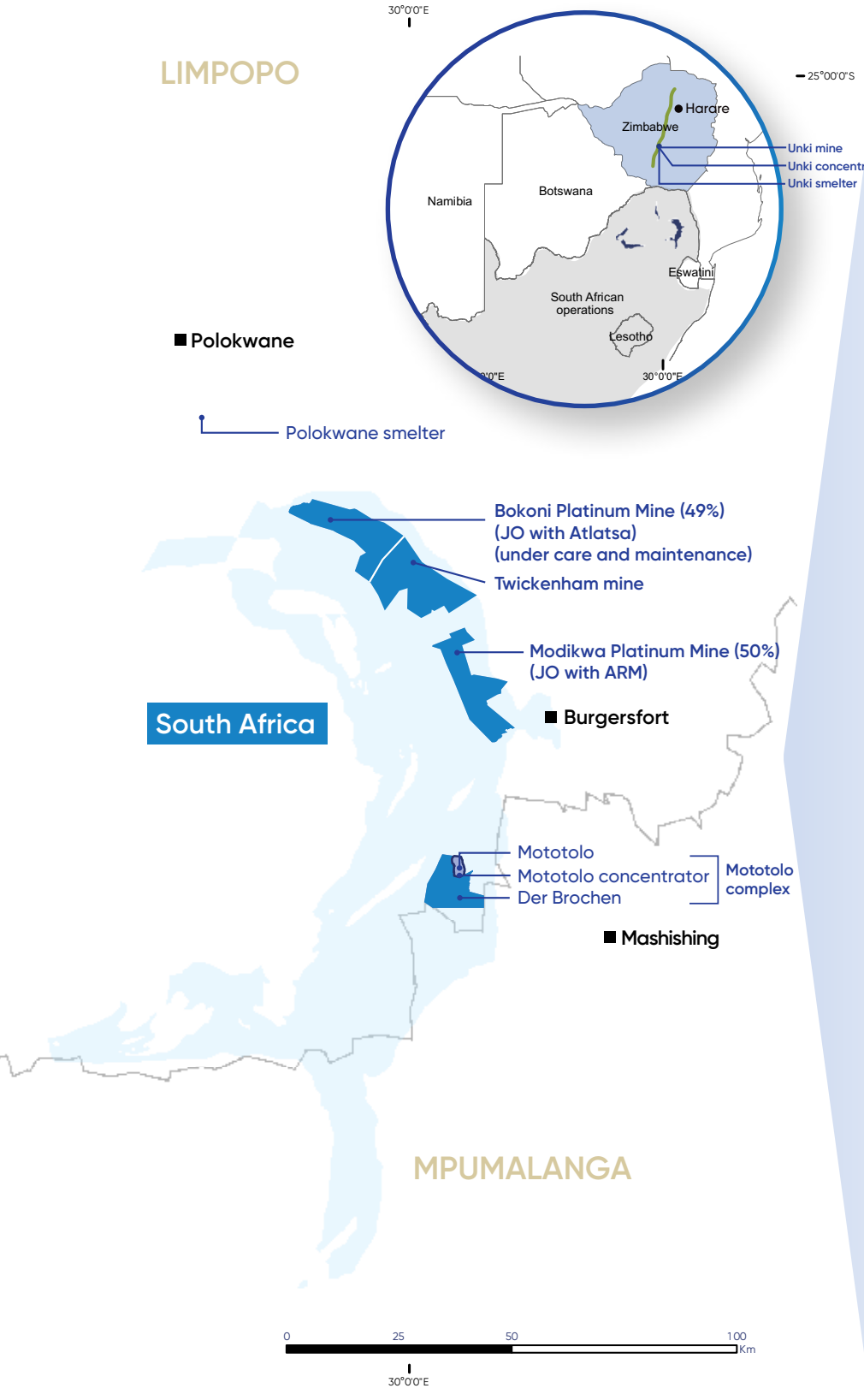

### Ore Reserves and Mineral Resources report
- Updated estimates and reconciliation of Ore Reserve and Mineral Resource statements for all our assets
- As per SAMREC Code guidelines and definitions (2016)
- Complies with JSE Listings Requirements
- Signed off by Competent Persons.


### Assurance
In compliance with the three-year external review and audit schedule, the following detailed audits of data gathering, data transformation and reporting of Ore Reserves and Mineral Resources were carried out in 2020:
- Amandelbult Complex – The Mineral Corporation
  - Tumela Mine
  - Dishaba Mine

# Operational footprint

Anglo American Platinum is listed on the JSE Limited and headquartered in Johannesburg, South Africa. Our majority shareholder is Anglo American plc. We focus on extracting value from all the PGMs and base metals we mine – metals that improve people's lives. We have a portfolio of low-capex, high-return and fast-payback investment opportunities that enhance value. Attractive growth options are available to expand margins, cash flows and returns.






## We own and operate four mining complexes.

In South Africa we operate Mogalakwena, Amandelbult and Mototolo, with Twickenham Mine on care and maintenance.

In Zimbabwe we operate Unki Mine on the Great Dyke in Zimbabwe.

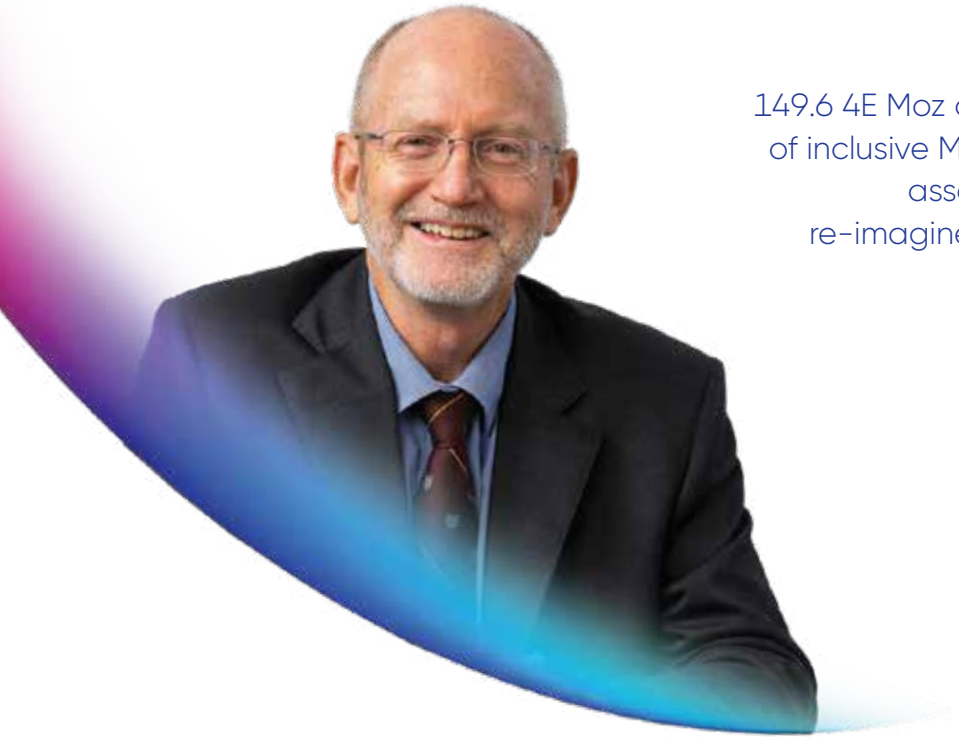
We have interests in three joint operations (JOs):

- Modikwa Platinum Mine (50%), with African Rainbow Minerals Mining Consortium Limited
- A pooling-and-sharing agreement with Sibanye-Stillwater, covering the shallow Ore Reserves of the Kroondal and Marikana mines (latter on care and maintenance)
- Bokoni Platinum Mine (49%), with Atlatsa Resources – on care and maintenance

Our wholly owned smelting and refining operations treat concentrates from our owned operations, and from our JOs and third parties.

For more detail on our operations and the 2020 operational performance, see our integrated report.

# Ore Reserves and Mineral Resources



149.6 4E Moz of Ore Reserves and 828.9 4E Moz of inclusive Mineral Resources provide the core assets that underpins our purpose to re-imagine mining to improve people's lives.

**Gordon Smith**
Executive head: technical

## General statement

The Ore Reserves and Mineral Resources report is issued annually to inform stakeholders, shareholders and potential investors of the mineral assets held by Anglo American Platinum Limited. Our method of reporting Ore Reserves and Mineral Resources is in accordance with the principles and guidelines for public reporting of the South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves (the SAMREC Code, 2016) and section 12.13 of the Listings Requirements of the JSE.

From 31 December 2020, our approach of reporting Ore Reserves and Mineral Resources will change from an attributable ownership basis to 100% basis. This will streamline internal reporting processes and ensure alignment between the Anglo American Platinum and Anglo American plc reports. Estimates (tonnes and content) for individual operations and summaries quoted in this report are on a 100% basis and the attributable interest is referenced in tables or where relevant.

To ensure continuity, transparency, consistency for reconciliations and reporting, as well as effectively informing all stakeholders, 2019 estimates have been restated on a 100% basis. Ore Reserve and Mineral Resource estimates are quoted as at 31 December 2020.

## Ore Reserves

### Salient features: year-on-year changes

The combined South African and Zimbabwean Ore Reserves decreased by 1.3% from 151.5 4E Moz to 149.6 4E Moz in the review period, primarily due to annual production and reallocation of Ore Reserves to Mineral Resources. The reduction of Ore Reserves has been partially offset by increased Ore Reserves at Dishaba and Tumela mines after converting Mineral Resources to Ore Reserves, as well improved economic assumptions at Mogalakwena Mine.

At Mogalakwena, pit-shell optimisation mainly related to improved economic assumptions, resulted in the conversion of additional material, previously classified below cut-off value, to Ore Reserves (+2.8 4E Moz). The extent of the increase was offset by reallocation of Ore Reserves to Mineral Resources due to pit design changes to improve haulage connectivity and access (-2.6 4E Moz) and annual production (-1.7 4E Moz). Overall, Mogalakwena Platreef Ore Reserves, including stockpiles, decreased by 1.6 4E Moz to 117.2 4E Moz in 2020. The combination of basket metal prices and the exchange rate used to optimise the Mogalakwena pit is based on long term forecasts in a balanced supply/demand scenario. Mining costs are escalated in real terms to account for anticipated mining inflation, increasing mining depth and haul distance.

At Dishaba and Tumela, mine-design changes and favourable modifying factors resulted in the conversion of UG2 Reef Mineral Resource to Ore Reserves (+0.9 4E Moz), partially offset by production (-0.7 4E Moz). Merensky Reef Ore Reserves increased by 22.2% (0.3 4E Moz) after converting the 15E drop-down project area to Ore Reserves.

Ore Reserves at the Mototolo Complex, Unki Mine and non-managed joint operations decreased primarily due to annual production.

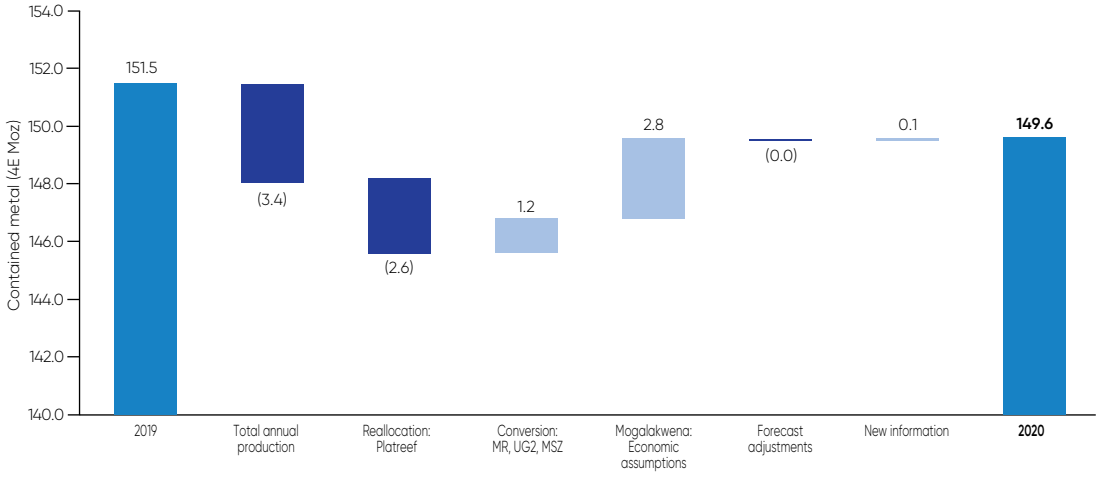
### Recent developments

The Mototolo Mine and Der Brochen Project have been consolidated and now report as a single-entity operation. The Der Brochen portion of the complex is expected to be included in the life-of-mine plan for the 2021 reporting cycle, pending the completion of various technical studies.

Anglo American Platinum has a royalty mining agreement with Two Rivers Platinum Mine to access mining areas adjacent to the current Thorncliffe farm boundary from the Lebowa shaft of Mototolo Complex. This royalty agreement provides mining flexibility to Lebowa shaft, which has reached the northern limit of the current Mining Right boundary. The royalty area Ore Reserves are not reflected in this report as the SAMREC Code stipulates that only Ore Reserves and Mineral Resources which are fully permitted can be declared.

**Anglo American Platinum Merensky, UG2, Platreef and Main Sulphide Zone (MSZ) Ore Reserves - South Africa and Zimbabwe**

**2019 – 2020 reconciliation** (4E Moz)



## Mineral Resources

### Salient features: year-on-year changes

The combined South African and Zimbabwean Mineral Resources, inclusive of Ore Reserves, decreased by 0.8% from 835.5 4E Moz to 828.9 4E Moz in the review period. This was primarily due to annual depletion (–3.6 4E Moz), the disposal of Unki Mine KV and SR Claims (-1.4 4E Moz), and effects of updated geological models at managed underground operations.

### Recent developments

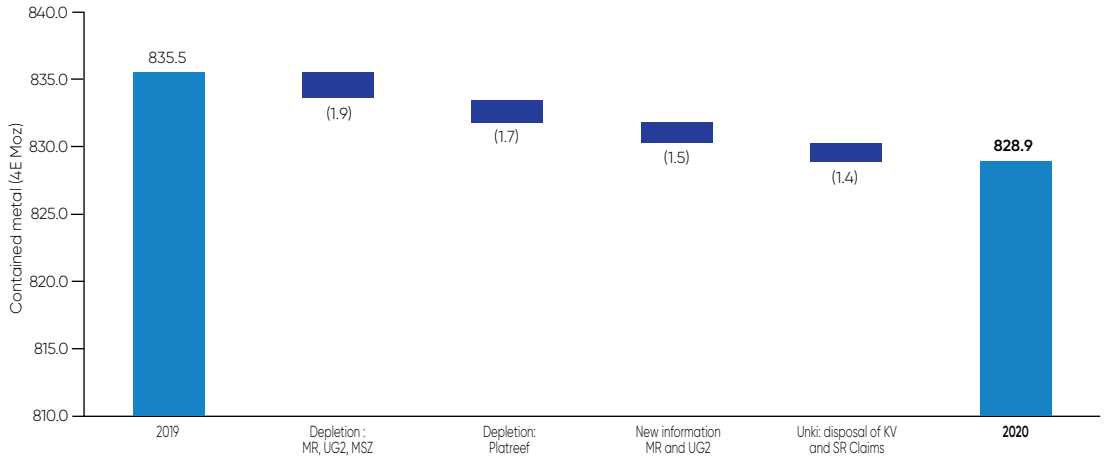
As noted, the Mototolo Mine and Der Brochen Project have been consolidated and now report as a single entity. The Der Brochen Project Merensky and UG2 Mineral Resource have been transferred and now report within the Mototolo complex.

The Central Block and Kwanda North mineral endowment area has been included in the Mogalakwena Mining Right. This area has not been classified as Mineral Resources while further exploration and evaluation work is under way and will therefore not have any impact on the 2020 Mogalakwena reported Mineral Resource base.

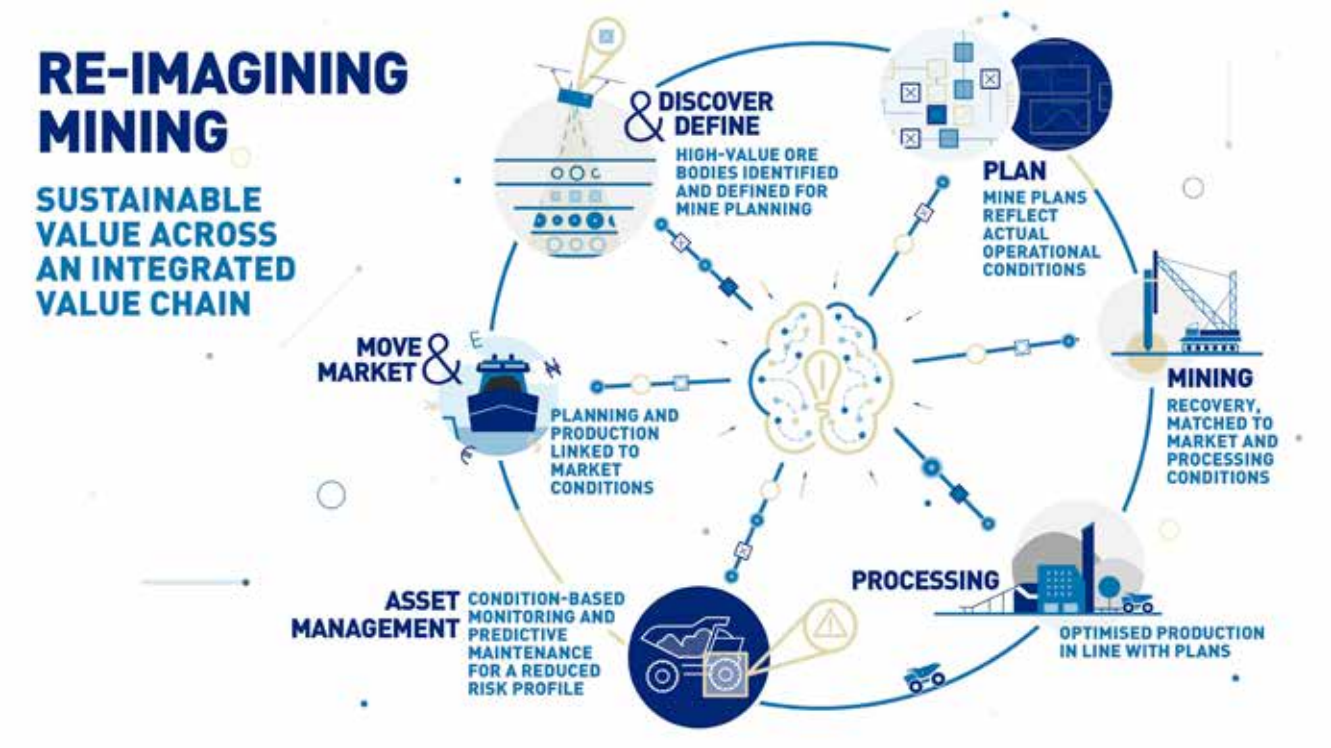
The KV and SR Claims previously reported at Unki Mine have been sold to Mimosa Platinum Mine. This disposal resulted in a decrease of 1.4 4E Moz from the Unki Mine MSZ Mineral Resource inclusive of Ore Reserves, based on the 2020 declaration.

**Anglo American Platinum Merensky, UG2, Platreef and Main Sulphide Zone (MSZ) inclusive Mineral Resources – South Africa and Zimbabwe**

**2019 – 2020 reconciliation** (4E Moz)



# Integrated value-based and FutureSmart Mining™ technology concepts




## We are guided by our purpose to re-imagine mining to improve people's lives.

By re-imagining mining, we will unlock the maximum potential of the orebodies containing precious and base metals in our endowment portfolio. Concurrently, this will create sustainability around our Ore Reserves and Mineral Resources inventory, while maximising value and positively impacting on people, communities and the environment.

By embracing step-change technologies through modernisation and innovation in Anglo American Platinum, our operations can apply value-based modelling and integrated planning approaches to the Ore Reserves and Mineral Resources definition aligned with sustainable value creation. Through digitalisation, data analytics and AI (artificial intelligence), FutureSmart Mining™ is enhancing our performance across the mining value chain, from discovery to integrated mine planning, optimised extraction and processing tailored to market conditions and expectations.

We are applying innovative technologies that are fundamentally changing the way data is acquired and processed, while developing integrated systems. These, in turn, enable people to optimise decision making and effectively realise goals and stretch benchmarks. This has also facilitated our capability to pursue the highest-value options, projects and technologies in current and future operations.

These factors are a fundamental consideration in the design and execution of current drilling programmes, especially in the Northern Limb. Fit-for-purpose, agile collection of data beyond lithology and assays includes spectral, advanced geophysical, orientated structural, mineralogical and multi-parameter geometallurgical datasets. When used in Mineral Resource modelling this expanded suite of data will inform value-based planning and decision-making, reducing risk to Ore Reserves and Mineral Resources reporting and the underpinning business plans.

In recent years many innovative concepts and technologies (including enhanced software) have fundamentally changed the definition of Ore Reserves and Mineral Resources as well as mining and processing effectiveness and efficiency.

**Mechanisation at Amandelbult Complex**

– Mechanised mining at Amandelbult makes underground mining safer and more cost effective. Due to the higher percentage of dilution from non-mineralised material, this mining method may consequently reduce the reported Ore Reserve grade as areas of mechanisation expand.

**Developing multi-parameter value-based ore control (VBOC) algorithms**

– This approach enables mine geologists and planners to optimise ore definition, mine planning, extraction and processing based on value, not PGM grade metrics alone. Our Ore Reserves for Mogalakwena are reported based on this principle.

# Case study: Integrated value-based and FutureSmart Mining™ technology concepts continued

### Transition from rigid, less flexible drill-hole databases to more advanced and agile systems

- Data storage and retrieval is critical to the timely and effective estimation of Mineral Resources. The new system facilitates enhanced QAQC protocols as well as adequate storage of all expanded analytical types and volumes of data, fit for future use. This has been implemented at Mogalakwena, with all other sites to follow.

### Bulk-ore sorting

- Bulk ore sorting is the application of penetrative technology with a mechanical selection process that permits real-time, automated instrument-driven selection of smaller parcels of ore based on sensor data applied in VBOC algorithms. Bulk-ore sorting offers the potential to select and exclude dilution entrained in plant-bound ore streams, with greater levels of selectivity than is practically available from truck-and-shovel mining methods, as is the current practice at Mogalakwena, where bulk-ore sorting is being implemented.
- While the scanning technology cannot read PGM grades at abundances of parts-per-million, it can read nickel and copper values and other mineralogical data which are correlated with PGM values. The value case for bulk-ore sorting lies in:
  - excluding dilution from the mill-feed and liberating mill capacity to process higher-grade (higher-value) ores, resulting in increased metal production
  - plant feed characterisation, which enables plant optimisation in terms of recovery, throughput and concentrate quality; and reduction in feed variability.
- Given that bulk-ore sorting is specifically set up to exclude low-grade or marginal dilution material, inadvertently included in the plant feed because the mining selectivity is coarse, then there is no influence on the definition of Ore Reserves and Mineral Resources.

### Spatial inventory management system (SIM) and dynamic 3D stockpile modelling

- The Anglo American SIM platform is a digital twin of the material flow in a mining operation, providing the most accurate and up-to-date information about all material held across our supply chains and enabling us to predict how material will change as it is transformed from *in-situ* rock via blasting, extraction, stockpiling, and processing operations including bulk-ore sorting. It will enable tracking parcels of material with associated properties and uncertainty at a granular level from pit to customer. The 3D stockpile models deliver real-time information on stacked, reclaimed and feed material. This improves confidence in stockpile Ore Reserve estimates and business-planning. These solutions are currently being trialled for implementation at Mogalakwena.

### Measure while drilling (MWD)

- Reverse-circulation drilling rigs are fitted with the RockMa™ system providing a proxy for fracture percentage and rock strength to develop hardness and blastability index models for optimised blast design and estimation of throughput potential at different plants. This is currently being implemented at Mogalakwena.

### Ore control 3D blast movement modelling and monitoring

- To account for material movement during blasting, application of software that utilises movement vectors, muckpile topography, blasting parameters and face configuration, while also considering mining directions, delivers a full 3D spatial model that allows optimisation of ore separations post-blast. This results in minimising dilution and ore loss (modifying factors in Ore Reserve calculations) and maximising the value of feed delivered to the plant, while also facilitating more accurate material destination control. This is currently being trialled for implementation at Mogalakwena.

### Fourier transform infrared (FTIR) and hyperspectral scanning technologies

Both are in execution at Mogalakwena with rollout to all other sites scheduled in 2021.

- FTIR can be used to predict value driving rock responses that are traditionally difficult, costly or time-consuming to measure. This analytical technology measures light absorbed by a sample in the infrared region of the light spectrum. As it covers a large wavelength range, machine learning applied to the FTIR data can predict a diverse range of mainly mineralogical and metallurgical parameters. The translation of spectral data into a measure for recovery as part of the VBOC calculations, as well as Ore Reserve and Mineral Resource models will add confidence to estimates as well as resource development planning (RDP).
- Hyperspectral imaging, a high-resolution digital scanning technology (undetected by the human eye), can be used to predict value-driving rock responses (including mineral textures) with mineralogy as the primary attribute. This assists in comminution and recovery predictions in geometallurgical models during Mineral Resource modelling, adding granularity and confidence. In turn, this informs future Ore Reserve conversions. The technique is also useful in the early stages of an exploration programme to better understand mineralisation styles for a deposit.

## Internal controls

Well-established processes and protocols ensure reliable Ore Reserves and Mineral Resources reporting.

In line with internal review and audit schedules, as well as improvement initiatives, existing processes and reviews encompass:

### Methodology

- Formal sign-off of the geological structure and geological discount factors; drill-hole and sample databases; and the Mineral Resource classification
- A Mineral Resource classification scorecard for consistent resource-classification statements
- Various single and multiple disciplinary reviews in the framework of the business-planning process
- Mine design and scheduling for consistent Ore Reserve reporting, which considers the company's business plan and economic tail management process
- Further refinement of the basic resource equation (BRE), an internal reconciliation of Mineral Resources segregated into the various business plans and investment centres
- The annual review and sign-off of Ore Reserves and Mineral Resources.

### Information communicated

- Ore Reserve and Mineral Resource waterfall charts indicating year-on-year changes
- Prill and base-metal grade distribution of the Mineral Resources inclusive of Ore Reserves
- Spatial distribution of the Ore Reserve and Mineral Resource classifications of managed mines
- Reporting Mineral Resources, inclusive of Ore Reserves
- Statement of Mineralisation.

### Ore Reserves and Mineral Resources management database

- Digital data capture of all relevant Ore Reserves and Mineral Resources information
- Integration with Anglo American plc's Group Mineral Resource and Ore Reserve reporting management systems
- Internal database audit and approval.

## Assurance/external reviews

External independent audits are executed to ensure that our standards and procedures are aligned with world best practice and include both process and numerical estimate audits.

To comply with the Anglo American Platinum three-year external review and audit schedule, the following detailed audits of data gathering, data transformation and reporting of Ore Reserves and Mineral Resources processes were carried out in 2020.

- Tumela and Dishaba mines – The Mineral Corporation.

### External audits summary

The Mineral Corporation audit comprised site inspections and reviews of Tumela and Dishaba mines' estimation processes. No technical fatal flaws or material issues were identified in the detailed numbers audit of Mineral Resource and Ore Reserve estimates. The Mineral Corporation state that the Mineral Resource estimates are supported by an extensive, validated geological database and satisfy the SAMREC Code requirements for reasonable prospects for eventual economic extraction; and the Ore Reserve estimates are based on a detailed life-of-mine plan that has been tested for economic viability under a set of realistically assumed production levels, modifying factors and economic inputs. A summary note on the audit results is on page 13 of this report

## Risk

The geosciences and integrated planning departments follow risk management processes outlined in the Anglo American risk matrix. This is done to systematically evaluate, mitigate and subsequently reduce risks relevant to the Ore Reserves and Mineral Resources estimation and reporting. Presently, no area of risk is considered significant using current controls.

It is generally recognised that Ore Reserve and Mineral Resource estimations are based on projections that may vary as new information becomes available, specifically if assumptions, modifying factors and market conditions change materially. Since the parameters associated with these considerations vary with time, the conversion of Mineral Resources to Ore Reserves may also change over time. For example, mining costs (capital and operating), exchange rates and metal prices may have significant impacts on converting Mineral Resources to Ore Reserves and reallocating Ore Reserves to Mineral Resources in cases where there is a reversal in the economics of a project or area. The assumptions, modifying factors and market conditions therefore represent areas of potential risk. In addition, security of Mineral Right tenure or corporate activity could have a material impact on the future mineral asset inventory.

Covid-19 has been the most prevalent event in 2020 and was identified as the highest-ranking risk for Anglo American Platinum. The impact of Covid-19 cuts across different stages of the mining value chain and affects employees as well as host communities. The pandemic has brought certain issues to the fore, with an increased focus on health and safety for employees and communities alike, a heightened concern on business continuity, realising the effects of supply-chain disruption, and the accelerated shift to a digital, low-carbon economy.

However, Covid-19 has had no direct impact on the declaration of Ore Reserves and Mineral Resources except for its effect on the timelines/pace of extracting our mineral assets.

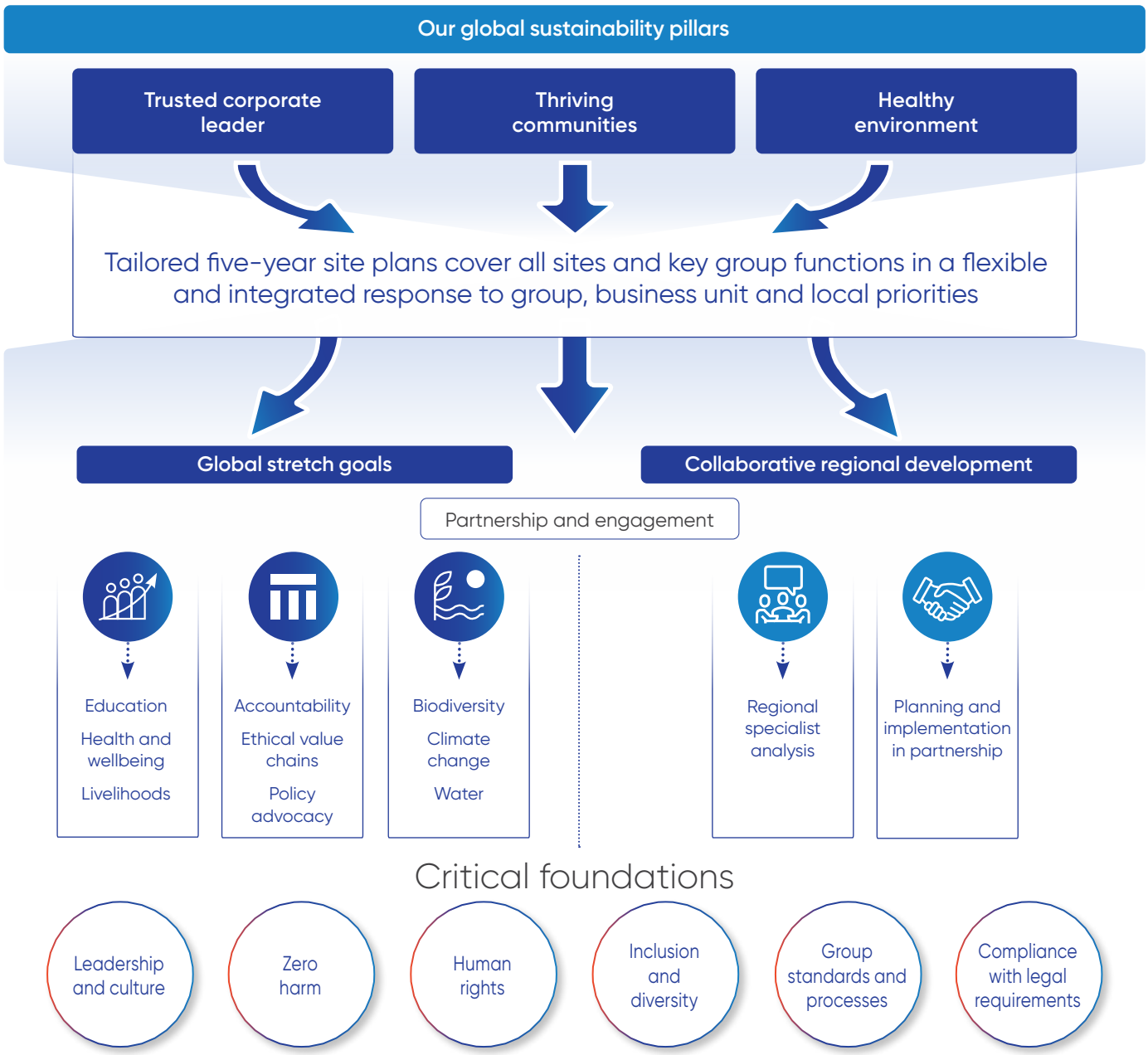
For more detail on our approach to risk and opportunity management see the relevant section in the integrated report.

## Environment, social and governance (ESG)

ESG considerations are important inputs in determining reasonable prospects of eventual economic extraction (RPEEE) and modifying factors for estimating and reporting Ore Reserves and Mineral Resources. Items related to environmental and social aspects as outlined in SAMESG Guidelines (2017) have been incorporated in table 1 of the SAMREC Code (2016), to ensure compliance, and inform all stakeholders and investors.

### The sustainable mining plan

Anglo American Platinum' business strategy has integrated ESG by articulating its commitment to 'reshape ESG' through specific strategic moves. This emphasis on sustainability is directed by the Anglo American sustainable mining plan (SMP), which sets nine stretch goals across our three sustainability pillars (trusted corporate leader, healthy environment, and thriving communities) to be achieved by 2030, with milestones in 2020 and 2025. These goals are underpinned by six critical foundations that are enabled by partnership and engagement. Collaborative regional development is central to our approach and aims to stimulate socio-economic development, both inside and outside the mining value chain.




### Environmental management

Anglo American Platinum is committed to strong environmental stewardship, using innovation as a lever to improve performance. The healthy environment pillar of the SMP covers three stretch goals: water, biodiversity and climate change. These are important focus areas of environmental management, including social and circular-economy principles. In addition, the PGMs we produce contribute to a low-carbon world.

### Energy management

Anglo American Platinum aims to become a leader in achieving carbon neutrality in the mining industry, supporting the global drive to combat climate change, and the drive towards a 'green' product value chain. We continue to invest in energy-reduction and energy-efficiency opportunities at our operations, switching to low-carbon energy sources and developing renewable energy projects to transition our energy mix. Our aim is to improve energy efficiency and reduce greenhouse gas (GHG) emissions by 30%, against a 2016 baseline, and to be carbon-neutral by 2040. Achieving these targets will depend on the effectiveness and value-creation potential of a number of emerging abatement technologies, including those in the FutureSmart Mining™ programme.

Projects in support of these goals include the start of the proof-of-concept design and development of a fuel-cell-powered heavy haul-truck at our Mogalakwena complex to replace diesel consumption, progress with developing our first large-scale solar photovoltaic facility at the same operation and construction of small-scale roof-top and ground-mounted solar photovoltaic systems at our operational sites as building blocks towards alternate (renewable) energy supply.

### Water management

Our water management strategy, based on best-practice standards, is to be a responsible water steward and ensure long-term sustainability of our operations in conjunction with our host communities. Site-wide water balances were developed to address operational water management, priorities and risks. All our 2020 water data was restated for accurate future reporting according to the water-accounting framework (WAF) and International Council of Mining and Metals (ICMM). Currently, 36% of water brought onto site from third parties is from treated effluent and grey-water (obtained by investing in municipal waste-water treatment plants). We increased the use of treated effluent from both Rustenburg and Polokwane water-treatment plants and

continue to implement water-treatment and recovery technologies to drive progress in improving our water-use volumes and intensities. We supported access to potable water in host communities to mitigate the spread of Covid-19.

### Communities

Our social strategy helps Anglo American Platinum fulfil its societal obligations by delivering shared value – creating social value for stakeholders while generating business value. It defines our objective to enable a sustainable business and thriving communities by enhancing our social licence to operate through engaged and empowered stakeholders. In 2020, we proactively developed and implemented a Covid-19 community response plan to support affected communities and actioned a number of initiatives such as water supply, health education and distributing food parcels to vulnerable households.

### Rehabilitation and closure (including funding)

The purpose of mine closure planning in Anglo American is to deliver value through integrated, risk and opportunities-based closure planning and execution. This will establish safe, stable and non-polluting post-mining landscapes that leave a sustainable legacy for all stakeholders. Our cradle-to-cradle approach to mine-closure planning spans the life of an operation from exploration to post-closure phase. Mine closure and rehabilitation at Anglo American Platinum is primarily governed by: the mine-closure toolbox and mine-closure standard compliance, our rehabilitation strategy, and closure liabilities.

This will enable Anglo American Platinum to integrate closure-planning processes into its operational plans in a way that will reduce current and future impacts on mining on an operation's footprint. The annual rehabilitation plans for mining operations ensure that land impacted by mining is rehabilitated concurrently with operations so that a minimum liability remains at the end of each mine's life and post closure. In addition, operational strategies such as waste placement are influenced to ensure a sustainable landscape while mines are still operational.

The closure liabilities of all Anglo American Platinum operations are assessed annually in a rigorous process, based on a first-principle calculation model, third-party contractor rates and includes post-closure remediation liability for any groundwater impacts. Anglo American Platinum currently has approximately R4 billion via financial guarantees and rehabilitation trust funds with the Department of Mineral Resources and Energy (DMRE) to cover the premature closure liability of all its South African mining operations.

For more detail, see ESG report and relevant sections in the integrated report.

## Competence and responsibility

In line with the Listings Requirements of the JSE, Anglo American Platinum prepares its Mineral Resource and Ore Reserve statements for all its operations with reference to SAMREC Code guidelines and definitions (the SAMREC Code, 2016 edition). Competent Persons have been appointed to work on, and assume responsibility for, the Mineral Resource and Ore Reserve statements for all operations and projects, as required.

The lead Competent Person with overall responsibility for compiling the 2020 Ore Reserves and Mineral Resource Report is the executive head: technical, Dr Gordon Smith (PrEng). He confirms that the information on Ore Reserves and Mineral Resources in this report complies with the SAMREC Code and that it may be published in the form and context in which it was intended.

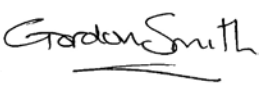
Dr Smith holds the following qualifications from the University of the Witwatersrand: BSc (mining engineering), MSc in engineering, MBA and PhD. He has 42 years' mineral industry experience across precious, base and ferrous metals, chrome, diamonds, semi-precious stone and coal operations. In this period, he has held technical, managerial and executive positions at Rio Tinto (Zimbabwe), Falcon Mines plc, the Chamber of Mines – research organisation, CSIR – mining technology, Snowden Mining Industry Consultants and Metora Mineral Resources prior to joining Anglo American Platinum in 2003.

He is a permanent employee of Anglo American Platinum and is registered with the Engineering Council of South Africa (ECSA) as a professional mining engineer, registration number 930124. ECSA is based on the 1st floor, Waterview Corner Building, 2 Ernest Oppenheimer Avenue, Bruma Lake Office Park, Bruma, Johannesburg, 2198, South Africa.

The lead Competent Person has appointed the following Competent Persons, employees of Anglo America plc and Anglo American Platinum respectively, who are responsible for reviewing Ore Reserves and Mineral Resources estimates and the associated year-on-year reconciliations as well as approvals for the publication in this report.

| Field | Competent Person | Title | RPO | Membership number | Relevant experience |
|---|---|---|---|---|---|
| Mineral Resources | Iain Colquhoun | Principal resource estimation platinum | SACNASP, PrSciNat | 400097/00 | 23 years (36 years in total) |
| Ore Reserves | Nicholaas J Nel | Principal mine planner | SAIMM member | 706878 | 21 years |

Competent Persons for the individual operations are listed in the relevant sections of this report. All Competent Persons have sufficient relevant experience in the type of deposit and activity for which they have taken responsibility. Details of Anglo American Platinum' Competent Persons are also available on written request from the company secretary.



**Gordon Smith PrEng, PhD, MBA, MSc (engineering), BSc (mining engineering)**
*Engineering Council of South Africa (930124)*
*Executive head: technical*

Anglo American Platinum
55 Marshall Street, Johannesburg, South Africa
15 March 2021

## Changes in Ore Reserves and Mineral Resources for 2020

### Summary of Ore Reserve and Mineral Resource estimates

For reconciliation purposes, the summary estimates are reported on both the 100% basis and Anglo American Platinum's attributable ownership. Detailed individual operations' estimates that contributed to this summary as well as reconciliations are stated per reef and mine in the various sections throughout the report (on a 100% basis).

| | 100% basis | | | | Attributable basis | | | |
|---|---|---|---|---|---|---|---|---|
| | 2020 | | 2019 | | 2020 | | 2019 | |
| Classification | Million tonnes (Mt) | Contained metal 4E Moz | Million tonnes (Mt) | Contained metal 4E Moz | Million tonnes (Mt) | Contained metal 4E Moz | Million tonnes (Mt) | Contained metal 4E Moz |
| Ore Reserves[1] – South Africa | 1,473.4 | 144.1 | 1,468.3 | 145.9 | 1,446.2 | 140.7 | 1,439.2 | 142.3 |
| Ore Reserves[1] – Zimbabwe (Unki) | 51.0 | 5.4 | 53.3 | 5.6 | 51.0 | 5.4 | 53.3 | 5.6 |
| **Ore Reserves[1] – South Africa and Zimbabwe** | 1,524.4 | 149.6 | 1,521.6 | 151.5 | 1,497.2 | 146.1 | 1,492.5 | 147.9 |
| Mineral Resources exclusive of Ore Reserves[2,3] – South Africa | 5,107.0 | 639.5 | 5,082.2 | 639.6 | 4,456.2 | 528.1 | 4,431.5 | 528.2 |
| Mineral Resources exclusive of Ore Reserves[2,3] – Zimbabwe (Unki) | 156.9 | 21.3 | 168.0 | 23.0 | 156.9 | 21.3 | 168.0 | 23.0 |
| **Mineral Resources exclusive of Ore Reserves[2] – South Africa and Zimbabwe** | 5,264.0 | 660.8 | 5,250.2 | 662.6 | 4,613.2 | 549.4 | 4,599.5 | 551.2 |
| Mineral Resources inclusive of Ore Reserves[2,4] – South Africa | 6,594.2 | 800.6 | 6,633.6 | 805.4 | 5,914.1 | 684.1 | 5,951.2 | 688.6 |
| Mineral Resources inclusive of Ore Reserves[2,4] – Zimbabwe (Unki) | 212.2 | 28.3 | 223.9 | 30.1 | 212.2 | 28.3 | 223.9 | 30.1 |
| **Mineral Resources inclusive of Ore Reserves[2] – South Africa and Zimbabwe** | 6,806.4 | 828.9 | 6,857.5 | 835.5 | 6,126.3 | 712.3 | 6,175.1 | 718.6 |
| Mineral Resources exclusive of Ore Reserves[2,3] – South Africa tailings | 72.3 | 1.9 | 72.3 | 1.9 | 72.3 | 1.9 | 72.3 | 1.9 |
| Mineral Resources inclusive of Ore Reserves[2,4] – South Africa tailings | 72.3 | 1.9 | 72.3 | 1.9 | 72.3 | 1.9 | 72.3 | 1.9 |

Note:

'Mineral Resources exclusive of Ore Reserves' and 'Scheduled Resources converted to Ore Reserves' are not additive because of modifying factors being applied in the conversion from Mineral Resources to Ore Reserves.

Mineral Resources are quoted exclusive of appropriate known and unknown geological losses.

Due to the uncertainty that may be attached to some Inferred Mineral Resources, it cannot be assumed that all or part of an Inferred Mineral Resource will necessarily be upgraded to an Indicated or Measured Resource after continued exploration.

Rounding of figures may result in computational discrepancies.

*1 Ore Reserves reflect the total of Proved and Probable Ore Reserves.*
*2 Mineral Resources reflect the total of Measured, Indicated and Inferred Mineral Resources. Mineral Resources are quoted after geological losses.*
*3 Exclusive Resources: Mineral Resources exclusive of the portion converted to Ore Reserves.*
*4 Inclusive Resources: Mineral Resources inclusive of the portion converted to Ore Reserves.*

THE MINERAL CORPORATION

**Dr Gordon Smith**
Executive Head: Technical
Anglo American Platinum Limited
55 Marshall Street
Johannesburg 2000

**29 January 2021**

Dear Sir

**The 2020 Mineral Resource and Mineral Reserve Audit - The Amandelbult Complex**

Mineral Corporation Consultancy (Pty) Limited (The Mineral Corporation or TMC), at the request of Anglo American Platinum Limited (AAP), carried out an independent audit (the Audit) of the 2020 Mineral Resource and Mineral Reserve estimates for the Amandelbult Complex. The Amandelbult Complex consists of Tumela and Dishaba Mines, comprising shaft complexes and open pits, as well as integrated central ore processing facilities and other surface infrastructure located in the Limpopo Province of South Africa. The operations at the Amandelbult Complex involve the evaluation and mining of the Merensky and UG2 Reefs in the Western Limb of the Bushveld Complex and processing of the Run of Mine ore at the onsite concentrator plants to produce platinum group metal (PGM) and base metal bearing concentrate. The ore processing facilities also include tailings retreatment plants that recover chromite from the tailings arising from the processing of UG2 Reef ore.

The Mineral Resource and Mineral Reserve Estimates for the Amandelbult Complex were prepared and signed-off as at 31 December 2020 by in-house Competent Persons appointed by AAP. The Audit was completed by Mineral Resource and Mineral Reserve Competent Persons from TMC following the guidelines of The 2016 Edition of the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (The SAMREC Code, 2016). The scope of the Audit covered in situ Merensky and UG2 Reef Mineral Resources and Mineral Reserves for Tumela and Dishaba Mines and tailings Mineral Resources.

The Audit included Process and Detailed Numbers Audit components which were carried out through desktop reviews of relevant Mineral Resource and Mineral Reserve information for the Amandelbult Complex provided by AAP and a confirmatory site visit by TMC's Competent Persons over the period 30 November to 2 December 2020. In all aspects, the Audit has been directed at identifying any fatal flaws and material errors and/or omissions in the input data, estimation process flows and outputs for remediation by AAP. The Process Audit involved systematic and detailed reviews of the key elements of the Mineral Resource and Mineral Reserve estimation processes to validate adherence to AAP internal standards and The SAMREC Code (2016) and to identify areas of improvement. TMC assessed compliance to The SAMREC Code (2016) with respect to the data collection, estimation, classification, reporting and sign-off of Mineral Resource and Mineral Reserve estimates by the Competent Persons. Through the Detailed Numbers Audit of the Mineral Resources, TMC carried out a detailed review of the evaluation input data, geological and structural models, Mineral Resource estimation, classification and reporting. TMC's Detailed Numbers Audit of the Mineral Reserve entailed a detailed review of the technical Modifying Factors and the underlying technical studies employed for the conversion of Mineral Resources to Mineral Reserves, the non-technical Modifying Factors considered for the conversion, and the technical and economic inputs that were utilised for the development of the Life of Mine (LoM) plans for Tumela and Dishaba Mines. In addition, TMC reviewed the final LoM plans and cash flow models utilised for the economic viability testing of the plans as well as the final aggregation and classification of Mineral Reserves from the LoM production plans for Tumela and Dishaba Mines.

TMC could not identify any fatal flaws in the Merensky and UG2 Reef Mineral Resources and Mineral Reserves for the Amandelbult Complex. The consistent and rigorous application and implementation of AAP's procedures resulted in the preparation, validation and reporting of the Merensky and UG2 Reef Mineral Resource and Mineral Reserve Estimates, which can be reported according to the guidelines of The SAMREC Code (2016). The procedures are part of AAP comprehensive governance framework which provides for an overarching management system for the estimation, management and reporting of Mineral Resources and Mineral Reserves. The Merensky and UG2 Reef Mineral Resource Estimates were prepared from geological databases, and geological and structural models of high integrity, with only the evaluated parts of the reef satisfying The SAMREC Code (2016) requirement for reasonable prospects for eventual economic extraction being included in the final estimates reported. Likewise, the Merensky and UG2 Reef Mineral Reserve estimates were prepared from detailed LoM plans for Tumela and Dishaba Mines, which were generated from a detailed Mineral Resource to Mineral Reserve conversion process, and which have been tested for economic viability under a set of realistically assumed production levels, Modifying Factors and reasonable economic inputs. Non-technical Modifying Factors, including certain Environmental, Social and Governance factors, were considered for the derivation of the LoM plans, with associated financial commitments accounted for in the cash flow models.

TMC has recommended re-evaluation of the historical tailings currently included in the Mineral Resource Estimates for the Amandelbult Complex using the latest economic assumptions and an assessment based on reasonable prospects for eventual economic extraction. TMC has also provided AAP with recommendations for heightened diligence when classifying Mineral Resources in structurally complex areas of the Amandelbult Complex, and for continuous improvement where relevant.

The Merensky and UG2 Reef Mineral Resource and Mineral Reserve Estimates for the Amandelbult Complex as at 31 December 2020 can be included in the AAP Mineral Resource and Mineral Reserve Statement for 2020. This opinion does not imply that TMC has accepted the role of Competent Person for the purpose of reporting the 31 December 2020 Mineral Resource and Mineral Reserve estimates for the Amandelbult Complex and APP. Such role resides with the nominated personnel of AAP.

Yours sincerely

C. Madamombe

**CONIACE MADAMOMBE**
**Director**
MSc, BSc (Hons), MBA, Pr.Sci.Nat (400093/08), FGSSA



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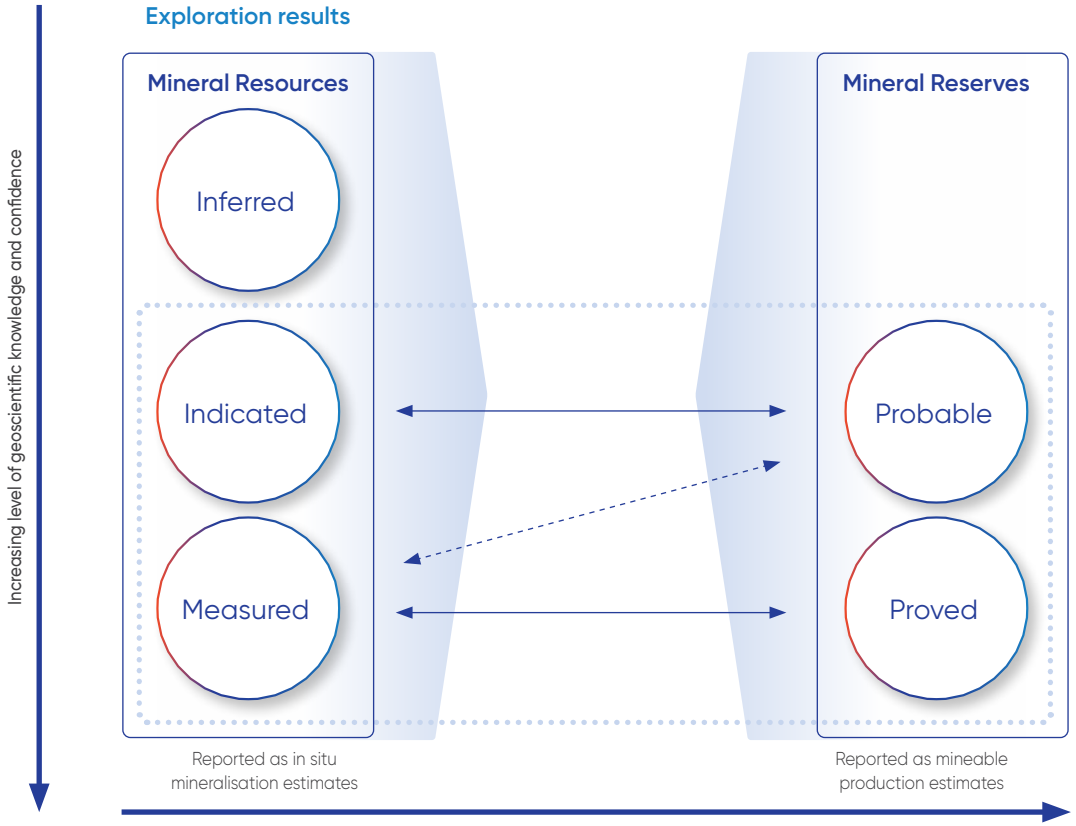
> ADVISORS TO THE MINERAL BUSINESS

# Key reporting criteria

## Our approach to Ore Reserves and Mineral Resources reporting

Ore Reserves and Mineral Resources are reported in accordance with guidelines and principles of the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC Code, 2016), the South African Code for reporting mineral asset valuation (SAMVAL Code, 2016), and section 12.13 of the Listings Requirements of the JSE Limited (JSE). Ore Reserves and Mineral Resources terminology appearing in this report follows the definitions of the Code. Ore Reserves in the context of this report has the same meaning as Mineral Reserves as defined by the Code. This report is issued annually to inform stakeholders, shareholders and potential investors of the mineral assets held by Anglo American Platinum Limited. An abridged version is included in the Anglo American Platinum Integrated Report for 2020, which is published annually and available at **www.angloamericanplatinum.com**

### Relationship between exploration results, Mineral Resources and Mineral Reserves




## Ore Reserves and Mineral Resources: Definition

### Definition: Mineralisation

Mineralisation is a concentration or occurrence of material of possible economic interest, in or on the earth's crust, for which quantity and quality cannot be estimated with sufficient confidence to be defined as a Mineral Resource. Mineralisation is not classified as a Mineral Resource or Mineral Reserves and can only be reported under Exploration Results. The data and information relating to it must be sufficient to allow a considered and balanced judgement of its significance.

### Definition: Mineral Resources

A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are subdivided, and must be so reported, in order of increasing confidence in respect of geoscientific evidence, into Inferred, Indicated or Measured categories (SAMREC Code, clause 24).

| | | |
|---|---|---|
| **Measured Mineral Resources** | That part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with confidence sufficient to allow the application of modifying factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Mineral Reserve or to a Probable Mineral Reserve. | (SAMREC Code, clause 28) |
| **Indicated Mineral Resources** | That part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. | (SAMREC Code, clause 27) |
| **Inferred Mineral Resources** | That part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. | (SAMREC Code, clause 25) |

### Definitions: Ore Reserves

A Mineral Reserve is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at pre-feasibility or feasibility level as appropriate that include application of modifying factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which Mineral Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported. (SAMREC Code, clause 35). Ore Reserves are subdivided, in order of increasing confidence, into Probable Ore Reserves and Proved Ore Reserves.

SAMREC Code considers the term Ore Reserves synonymous with Mineral Reserves.

| | | |
|---|---|---|
| **Proved Mineral Reserves** | The economically mineable part of a Measured Mineral Resource. A Proved Mineral Reserve implies a high degree of confidence in the modifying factors. | (SAMREC Code, clause 37) |
| **Probable Mineral Reserves** | The economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the modifying factors applying to a Probable Mineral Reserve is lower than that applying to a Proved Mineral Reserve. | (SAMREC Code, clause 36) |

## Key reporting principles

The following key reporting criteria apply:

### General

- 4E grade is the sum of Platinum, Palladium, Rhodium and Gold grades in grams per tonne (g/t)
- PGM: Platinum Group Metals
- Mt: million dry metric tonnes
- Moz: 4E million troy ounces with a 31.10348 gram per ounce factor applied. Contained metal is also reported in metric tonnes
- ROM: Ore Reserves are reported as run-of-mine (ROM) ore after all modifying factors have been applied. The reported Ore Reserves grades are as delivered to the concentrator for processing
- Rounding of figures may result in computational discrepancies.
- Estimates of 0.0 represent numbers less than 0.05
- Definitions of reconciliation categories are on page 87 of this report
- The terms Ore Reserves and Mineral Reserves are used interchangeably
- Ore Reserves and Mineral Resources are reported on a 100% basis and the attributable interest is noted in the individual entity tables and where applicable. All 2019 estimates and reconciliations that were reported on an attributable ownership basis are restated on a 100% basis
- There are no material legal proceedings or conditions that will impact the Ore Reserves and Mineral Resources reported for 2020, or Anglo American Platinum' ability to continue with mining activities as per life-of-mine plans
- Reporting is by professionals with adequate experience in the estimation, evaluation and reporting of Ore Reserves and Mineral Resources relevant to this style of Mineralisation
- Information for non-managed operations is provided by the joint operation partners. For additional details, please refer to the applicable annual reports.

### Mineral Resources

- Mineral Resources are quoted exclusive of appropriate known and unknown geological losses

- Due to the uncertainty that may be attached to some Inferred Mineral Resources, it cannot be assumed that all or part of an Inferred Mineral Resource will necessarily be upgraded to an Indicated or Measured Resource after continued exploration
- Mineral Resources are quoted over the entire Mining Right, except for Mogalakwena Mine, where the Platreef Mineral Resources are only quoted down to potential future surface mining depth, and for Merensky and UG2 reefs at Tumela, Twickenham and Bokoni mines, where a virgin rock temperature of 75°C is currently considered to be the limit to mining given anticipated technology, metal prices and energy costs
- Underground Mineral Resources are estimated over a practical minimum width suitable for the Mineralisation known as the "Resource cut". The Resource cut width takes cognisance of the mining method, potential economic viability and geotechnical aspects in the hanging wall or footwall of the reef. The conversion of the Resource cut to an appropriate Reserve width would include additional dilution incurred as the result of appropriate geotechnical and mining considerations (SAMREC Code, clause 24)
  - Merensky Reef is estimated over a minimum Resource width
  - UG2 Reef is estimated over a practical minimum Resource width, which may include dilution. The UG2 Reef, particularly in the Eastern Limb, may contain lenses of internal waste that are included as dilution when estimating Mineral Resources
  - The Main Sulphide Zone (MSZ) estimation is based on optimal minimum Resource width
- Open-pit Mineral Resource reporting methodology is aligned to the Anglo American policy. Mineral Resource estimates reporting is confined within a factored revenue pit-shell, which is based on stable, long-term economic parameter assumptions, metal prices and exchange rates. Only the Platreef Mineralisation that is within this factored shell is deemed to fulfil reasonable prospects of eventual economic extraction requirements to be reported as Mineral Resource estimates
- Where Ore Reserves and Mineral Resources have been quoted for the same property, Mineral Resources are reported both inclusive and exclusive of the material converted to Ore Reserves, ie one table reports on Resources that exclude those Resources converted to Reserves while the other includes these Resources.
- The 4E prill percentage (%) distribution (Platinum, Palladium, Rhodium and Gold), base metal grades (Copper and Nickel) and chrome are based on modelled and evaluated information, quoted over the 'Resource cut' and based on Mineral Resources inclusive of Ore Reserves
- Only Tumela, Dishaba, Mototolo and Twickenham mines have evaluated the chromite content in the UG2 Reef Resource cut

## Ore Reserves

- Anglo American Platinum takes cognisance of cut-off grades (derived from information on pay limits in the mining operations) and of 'reasonable prospects for eventual economic extraction' over a period of 30 to 50 years
- Stockpile is mined ore stored on surface for future treatment. It is reported separately as Proved and Probable Ore Reserves but included in the total Platreef Ore Reserves. Run-of-mine (ROM) stockpiles are reported as Proved and long-term stockpiles as Probable Ore Reserves
- The published Ore Reserve stockpile does not include oxidised and calc-silicate material; this material is, however, included in the Mineral Resource statement
- Inferred Mineral Resources are generally excluded from feasibility studies and life-of-mine plans, except at Dishaba and Unki, where insignificant amounts are included in the life-of-mine plans. Assessments have indicated that the exclusion of these Inferred Mineral Resources will have no impact on the life-of-mine.
- Reserve life is the scheduled extraction period in years for the total Ore Reserves in the approved life-of-mine plan, considering the combined reefs' production (as applicable) in the current Mining Right. Where applicable, an application to extend the Mining Right will be submitted at the appropriate time and there is reasonable expectation that such an extension will not be withheld
- The "production/depletion" figures for managed operations in this report represent actual measured production data typically up until 31 September 2020. Data for October to December are projections based on anticipated mining rates and these are aggregated with the actual production, to give the annualised production.

## Economic assumptions

- The pay limits are directly linked to the 2021 business plan which takes into account platinum group metals, base metals, chrome and other credits. The pay limit is based on 'Cost 4' which consists of 'Direct Cash Cost' (on and off-mine), 'Other Indirect Costs' and 'Stay-in-Business Capital' (on and off-mine). The range is a function of various factors including depth of the orebody, geological complexity, mining method, infrastructure and economic parameters. The *in-situ* Merensky and UG2 reefs Ore Reserve pay limit for the Anglo American Platinum managed mines ranges between 3.2 g/t (4E) and 4.0 g/t (4E). The pay limit for MSZ is 2.5 g/t (4E) and the Platreef *in-situ* pay limit is 2.1 g/t (4E)
- The macro-economic and planning parameters (global assumptions) applied to the valuation of Ore Reserves to Mineral Resources will impact decisions on overall viability and selection of the primary extraction horizon. Global assumptions are a set of economic and planning parameters forecast into the future, which are applied in economic assessments, valuation of projects, investment decisions, strategic planning and business planning. The global assumptions applied have been smoothed and stabilised to avoid overly pessimistic or optimistic long-term views. This approach should ensure that valid long-term investment decisions are not delayed or curtailed because of short-term market aberrations.
- These parameters comprise:
  - Economic parameters, ie ZAR/US$ exchange rates; inflation rates (USA and SA); cost escalation rates and corporate tax rate
  - Metal prices: core PGM (Pt, Pd, Rh), secondary PGM (Ir, Ru, Os), gold (Au), base metals (Ni, Cu, Co), and chrome concentrate
- The table below summarises long term basket prices and exchange rates assumptions approved by Anglo American Platinum for the December 2020 Ore Reserves estimation and reporting:

| | | |
|---|---|---|
| Basket price, real 2020 | R/4E oz | **21,000** |
| Basket price, real 2020 | US$/4E oz | **1,400** |
| Long term exchange rate, real 2020 | ZAR/US$ | **15.00** |

- Long-term basket price forecasts based on these assumptions vary per operation, in accordance with individual operations' PGM ratios.

# Geological setting and exploration

## Geological setting

Anglo American Platinum' Mineral Resources of platinum group metals occur exclusively within southern Africa and are hosted by two layered intrusions: the Bushveld Complex in South Africa and the Great Dyke in Zimbabwe.

PGM Resources present in these two geological entities account for approximately 85% of the world's known platinum and 55% of the world's known palladium.

### The Bushveld Complex

Formed over 2 billion years ago as a result of multiple injections of magma into the earth's crust many kilometres below the surface, the Bushveld Complex is geologically unique due to its size, uniformity of its layering and extent of known mineral content. This saucer-shaped intrusion is over 350km wide, 250km long and up to 12km thick. Over time, the rim of the intrusion has been exposed by erosion, revealing three separate main segments known as the Western, Eastern and Northern Limbs. The Western Limb is split into two lobes (north-western and south-western) by the Pilanesberg complex, a remnant of an alkaline volcanic plug intruded into the Bushveld Complex about 1.2 billion years ago. The Eastern Limb is split into two lobes (north-eastern and south-eastern) by the north-east trending Steelpoort fault. The exposed segments exhibit layering of pyroxenites, norites, gabbros, anorthosites and chromitites and this layering occurs across the entire extent of the complex.

The Bushveld Complex comprises three main suites, namely the Rooiberg Group, Lebowa Granite Suite and Rustenburg Layered Suite. The Rustenburg Layered Suite comprises four major subdivisions: the Upper Zone, Main Zone, Critical Zone and Lower Zone. Economic concentrations of PGMs occur mainly in three distinct units within the Critical Zone: Merensky Reef; Upper Group 2 (UG2) chromitite; and Platreef. The Merensky Reef and UG2 Reef occur around the Eastern and Western Limbs of the complex, while the Platreef is found only along the eastern edge of the Northern Limb.

The Merensky and UG2 reefs are narrow tabular orebodies that extend laterally over hundreds of square kilometres, resulting in extensive Mineral Resources. Their continuity, established over decades of exploration and mining, allows for the long-range extrapolation of data.

#### The Merensky Reef

The Merensky Reef has been the principal source of PGM since it was first mined in 1925. The reef contains economically important PGM and base metal sulphide Mineralisation. However, with the depletion of shallow Merensky Resources, the UG2 Reef, which occurs between 12m to 400m below the Merensky Reef, depending on location, has grown steadily in importance to the point where it now accounts for most of the platinum-bearing ore processed in South Africa.

The Merensky Reef is extensively developed in both the Eastern (EL) and Western Limbs (WL) of the Bushveld Complex. The reef typically consists of a pegmatoidal feldspathic pyroxenite layer, bounded on the top and bottom by thin chromitite layers (stringers) that range from 5mm to 20mm in thickness. Mineralisation of the reef generally occurs within the pegmatoidal feldspathic pyroxenite and, to a limited extent, in the hanging wall and footwall, with highest PGM concentration peaking at the chromitite stringers.

In the WL, the Merensky Reef outcrops in an arc, and dips from 18° to 27° in a south-easterly direction in the Amandelbult area and at 9° to 12° in a northerly direction in the Rustenburg area. It has a variable thickness ranging from 1cm (Contact Reef facies) to >2m, over large areas. At the Amandelbult Complex in particular, the reef comprises up to five different facies. Each facies type exhibits unique geological, geochemical and mineralisation characteristics and plays a fundamental role in geozone delineations and Mineral Resource and Ore Reserves width estimation. In the EL, the Merensky Reef is slightly thicker and dips at 8° to 18° in a south-westerly direction.

#### The UG2 Reef

The UG2 Reef, which is consistently developed throughout the EL and WL, is rich in chromitite, but with lower gold and base metal grades as compared to the Merensky Reef. In the WL, the UG2 Reef occurs between 12m and 150m vertically below the Merensky Reef and dips at 18° to 27° in a south-easterly direction (Amandelbult area). In the EL, the reef occurs between 120m and 400m vertically below the Merensky Reef and dips at 8° to 18° in a south-westerly direction.

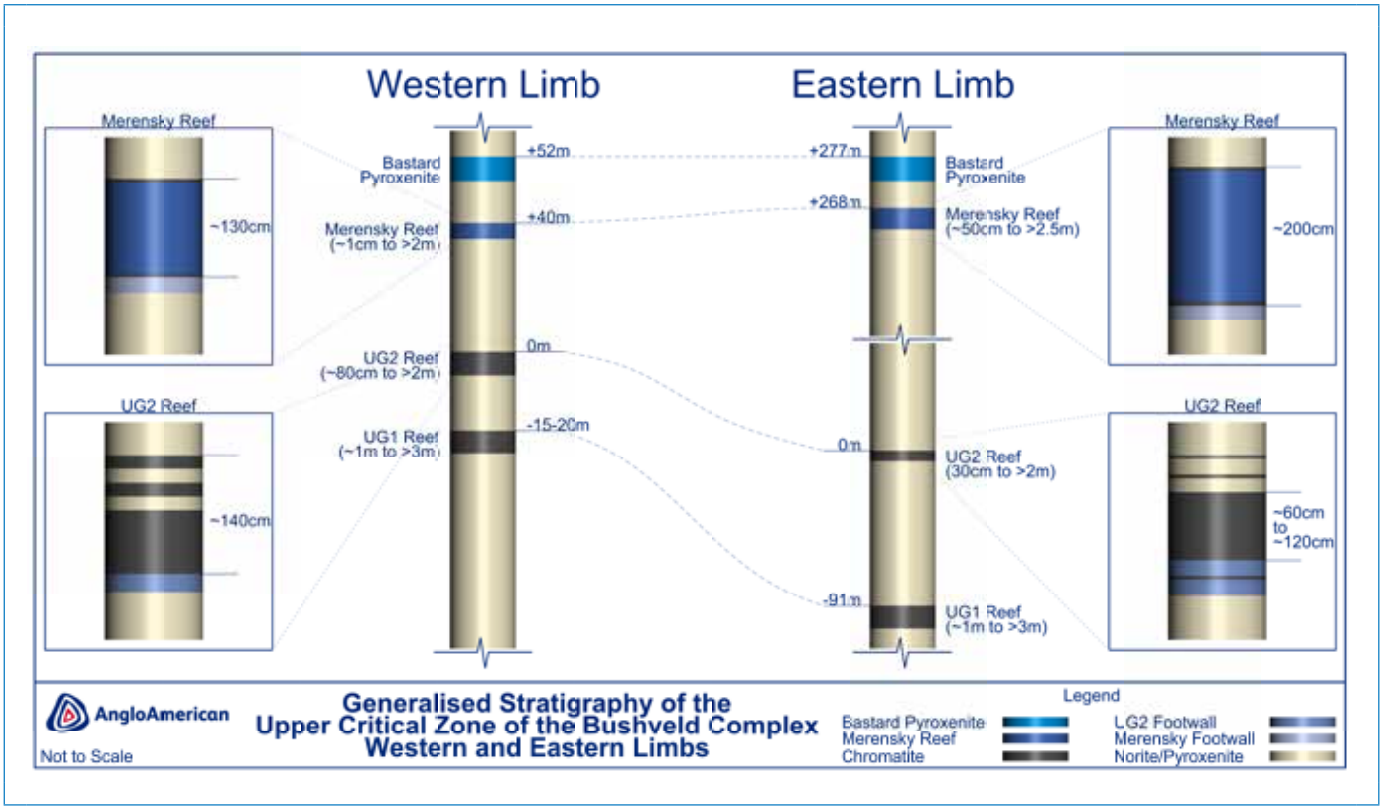
In the WL, the UG2 normally comprises a 0.6m to 1.0m main chromitite band overlain by three chromitite bands (UG2 leaders) varying in thickness from 5cm to 30cm, separated by feldspathic pyroxenite. The immediate footwall of the UG2 is usually a pegmatoidal feldspathic pyroxenite, which varies in thickness from a few centimetres to over 1m. The separation distances between these UG2 leader chromitite bands and the UG2 main band has important implications for geotechnical considerations for mining.

In the EL, the UG2 normally comprises a main chromitite band varying in thickness from 0.3m to 1.0m, overlain by three or up to four chromitite stringers varying in thickness from 2mm to 1cm. The immediate footwall of the UG2 is usually a pegmatoidal feldspathic pyroxenite, which varies in thickness from a few centimetres to over 1m. The separation distances between these UG2 hanging wall stringers has important implications for geotechnical considerations for mining.

In the EL, south of the Steelpoort fault, the UG2 chromitite layer is an amalgamation of UG2 main chromitite with the overlying leader chromitite unit. This is overlain by a poikilitic feldspathic pyroxenite parting varying in thickness from millimetres to 15m and averaging 1m. This parting is overlain by three chromitite bands (up to 20cm thick), separated by poikilitic feldspathic pyroxenite and pegmatoidal pyroxenites commonly referred to as the 'triplets' with an average thickness of 80cm.

The Merensky Reef and UG2 Reef horizons are affected by structural and other geological features, including potholes, faults and replacement pegmatites, which result in geological losses and have an impact on Mineral Resource estimations and mine planning.

**The Merensky Reef and UG2 Reef generalised stratigraphy**




## The Platreef

The Platreef is developed in the Northern Limb of the Bushveld Complex and comprises a thick heterogenous unit of mafic rock, dominated by pyroxenite and norite. It averages 150m in thickness, with a prominently top-loaded grade profile, the highest-grade mineralisation is typically located in the upper 30m to 40m of the package which strikes approximately north-south, dipping at an average of 40° to 50° to the west.

In comparison to the Merensky and UG2 reefs, the Platreef is a far thicker and more variable orebody, typified by extensive contact with metasedimentary and granitic floor rocks and assimilation of footwall fragments. The variability of lithology and thickness along strike is attributed to underlying structures and assimilation of local country rocks. This assimilation ranges from shales and banded ironstones in the south, through to dolomites in the centre of the mining area, to granites in the northern portion of the property.

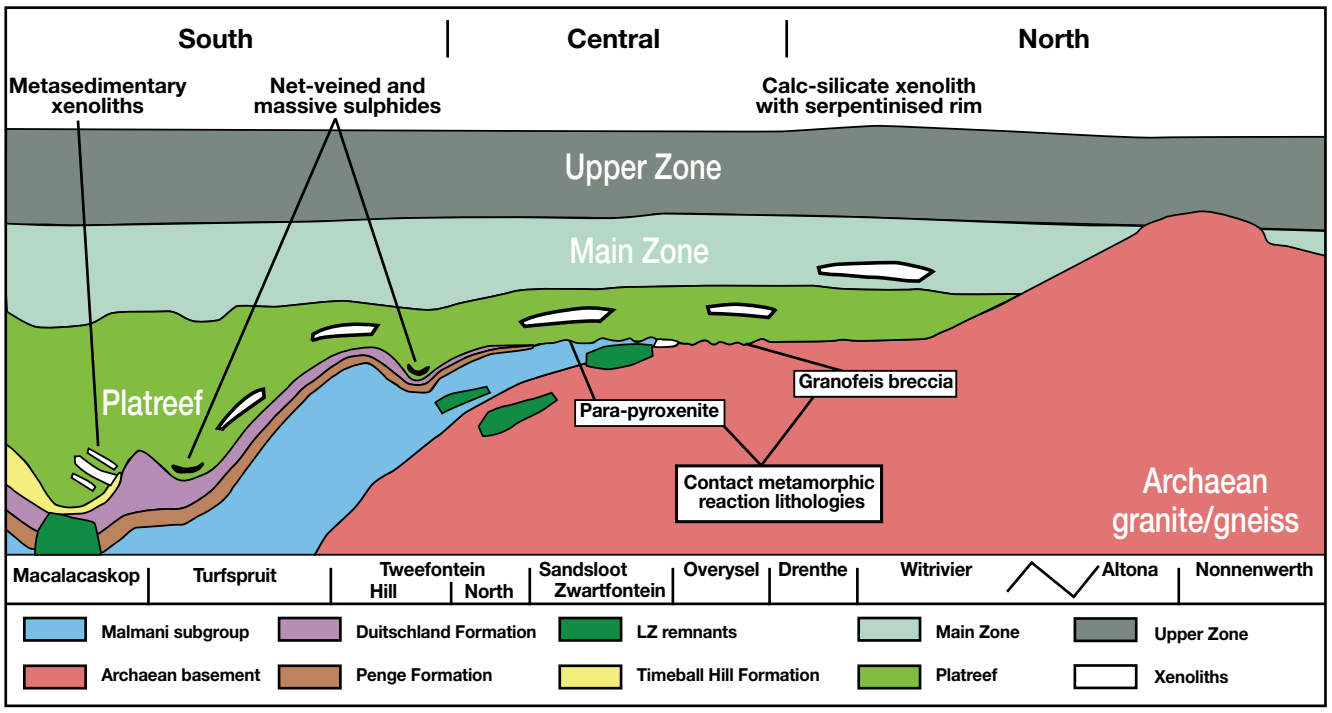
Carbonate floor rocks incorporated into the basal Platreef have been altered to mineralised parapyroxenites and calc-silicates formed during extensive syn-magmatic interaction with high-Mg silicate melts. Towards the north, where the Platreef footwall rock is Archaean basement granite, partial melting of this protolith has resulted in the formation of a metamorphic rock referred to as a Granofels. The Granofels is present in a prominent interaction zone developed between the base of the Platreef and the underlying basement granite. As a result, the mineralised horizon defined for the Platreef orebody often incorporates significant portions of the immediate footwall.

At Mogalakwena, the Platreef is structurally affected by dolerite dykes and several lateral fault systems orientated in a north-east/south-west direction. Zones adjacent to major fault systems are discounted as geological losses. The fault systems display normal to reverse fault displacements ranging between 50m and 600m, with up-thrown blocks proving favourable to mine design. The Platreef hosts significant dolomite inclusions in the southern region of the mining area and these also constitute geological loss zones.

In general, the economic thickness of the Platreef supports open-pit mining operations to depths exceeding 400m below the surface at current prices and mining costs.

## Geological setting continued

**A schematic illustration of the Platreef Mineralisation model**




### Base metal Mineralisation in the Bushveld Complex

The Merensky Reef and Platreef in particular, yield meaningful quantities of nickel, copper and cobalt as by-products. While the UG2 Reef has relatively low concentrations of these metals, beneficiation for the by-product chromium contributed considerable economic value more recently. Copper, nickel, cobalt and chromium are accounted for in the relevant economic evaluations.

### The Great Dyke

The Great Dyke in Zimbabwe occurs as a 2.5 billion-year-old mafic to predominantly ultramafic layered intrusion, over 500km long, trending in a north/north-easterly direction. Unki Mine is in the Selukwe sub-chamber of the Great Dyke. The dyke comprises an upper mafic unit of alternating sequences of pyroxenite and dunite-harzburgites and a lower ultramafic zone of dunite, that cut across the dominantly Archaean granite and greenstone belts of the Zimbabwe Craton.

The Great Dyke has been preserved within a narrow graben structure and the mafic and ultramafic lithologies display a synclinal structure with layers dipping and flattening towards the axis of the intrusion, with essentially the same lithological succession being exposed on both sides of the longitudinal axis. The general dip decreases from outcrops to the central area varying from 14˚ to 0˚. The PGM and associated base metal Mineralisation are developed within the uppermost pyroxenite horizon, the Main Sulphide Zone (MSZ).

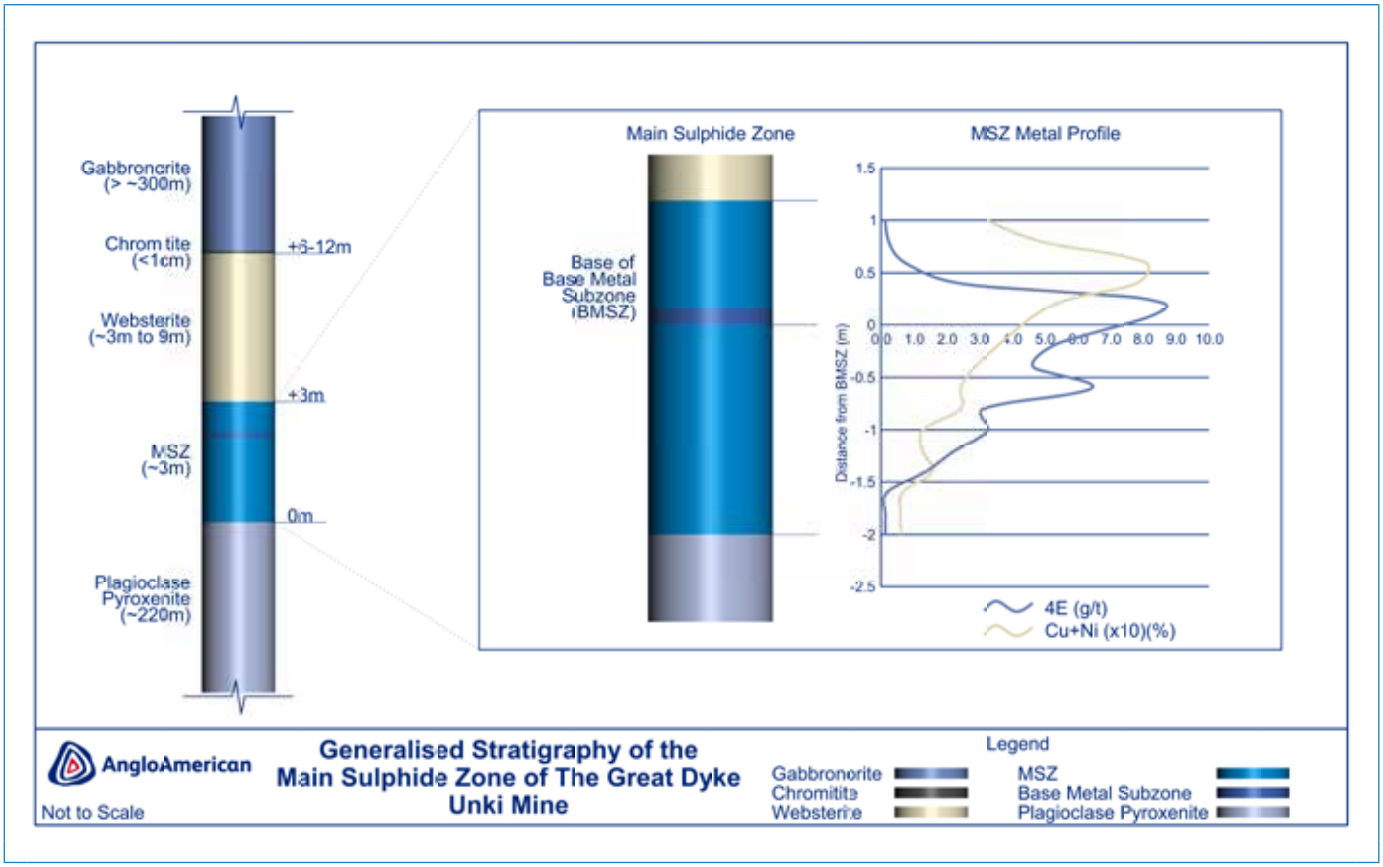
### The Main Sulphide Zone (MSZ)

The MSZ occurs some 10m below the mafic-ultramafic contact and is hosted in the uppermost pyroxenite layer (P1) of the ultramafic sequence. The P1 unit consists of a thin upper unit of websterite and a lower thick unit of plagioclase pyroxenite where the MSZ occurs near the base of the websterite unit. Based on geochemistry, the MSZ has two distinguishable sub-zones – the base metal sub-zone, which is dominated by nickel and copper, as well as the PGM sub-zone. The transition from the upper zone to lower zone is marked by a reduction in iron-nickel-copper sulphides disseminated in the pyroxenite.

The base of the upper zone is an important stratigraphic horizon, referred to as the base of the Base Metals Subzone (BMSZ). The base metals occur as disseminated inter-cumulus Fe-Ni-Cu sulphides. Although the mineralised zone is characterised by the absence of identifiable markers, this risk has been successfully negated by using handheld X-ray fluorescence (XRF) technology, as well as regular underground sampling of the mineralised horizon, enabling optimal extraction.

The MSZ is structurally affected by faults, dykes, xenoliths and replacement pegmatites. The most prominent is the footwall fault, which occurs at an average stratigraphic distance of 1.6m below the BMSZ, with this distance ranging from ~1m to 2.5m. This footwall fault is localised over a small section of the eastern section of the mine.

**The Main Sulphide Zone generalised stratigraphy**




## Exploration activities – managed operations

Exploration activities progressed on all owned and Anglo American Platinum managed operations, with continued focus on brownfields and on-mine exploration. Exploration activities are aimed at supplying a wide variety of grade, geological, geotechnical and geophysical information. This, together with associated value-driven processes, assists in mitigating risk and supports the company's business plans and prospecting works programme compliance. Well defined systems of quality assurance and quality control processes and protocols are in place to validate sampling and analytical data generated from the various exploration programmes.

Most of the exploration budget for 2020 was spent on the Mogalakwena complex. This included activities near current mining operations, Tweefontein, Sandsloot and Boikgantsho as well as the Central Block and Kwanda North endowment areas within the Mogalakwena Mining Right. Exploration activities over the Central Block and Kwanda North endowments will continue, aligned with the Northern Limb exploration strategy.

Exploration continues at the Great Dyke in Zimbabwe to obtain more information specifically in support of the mine extraction strategy for the Unki Mine Special Mining Lease (SML).

Due to Covid-19, much less exploration expenditure occurred at Mototolo Complex during 2020 than planned. Additional work conducted included the sampling of the outstanding Merensky and UG2 reefs drill-hole intersections that would provide increased grade confidence for the Lebowa and Borwa shaft areas.

At Dishaba and Tumela mines, activities were focused on current and future projects supporting the mine's life extension as well as minimising the risk to the business plan through resource conversion drilling and structural/geological complexity resolution.

Exploration on Prospecting Right areas are in line with the work programme schedules and the environmental management programmes submitted to the government's Department of Mineral Resources and Energy. A further reduction of Prospecting Right holdings is envisaged, in alignment with Anglo American Platinum' portfolio focus on long-term, high-quality assets.

Total exploration expenditure for 2020 was R254 million. The projected exploration expenditure for 2021 is expected to increase to R452 million.

Excluding the non-managed joint operations, **110** surface diamond cored drill-holes were drilled in 2020, totalling **57,674** metres and **20,948** assay samples. In addition, **219** underground exploration diamond cored drill-holes totalling **16,605** metres, associated with **7,013** assay samples were completed. A total of **106,513** metres of reverse circulation (RC) drilling equating to **7,101** in-pit RC drill-holes were completed at the Mogalakwena operation for value-based ore control.

## Exploration activities – managed operations continued

**Exploration expenditure**

| Mine/project | Resource conversion and near-mine discovery drilling | | | Underground exploration and in-pit ore control drilling | | |
|---|---|---|---|---|---|---|
| | Number of drill-holes | Length (m) | Expenditure (Rm) | Number of drill-holes | Length (m) | Expenditure (Rm) |
| Mogalakwena Mine | 76 | 38,745 | 84.15 | 7,101 | 106,513 | 68.83 |
| Northern Limb and Near Mine | 10 | 3,846 | 34.35 | – | – | – |
| Dishaba Mine | 3 | 4,078 | 9.12 | 104 | 5,379 | 6.14 |
| Tumela Mine | 7 | 7,159 | 28.77 | 41 | 2,486 | 3.16 |
| Mototolo Complex | – | – | 1.59 | 36 | 2,120 | 2.54 |
| Der Brochen Project | – | – | 0.80 | – | – | – |
| Unki Mine | 14 | 3,846 | 7.76 | 38 | 6,620 | 6.77 |
| Prospecting Rights | – | – | – | – | – | – |
| Total 2020 Exploration expenditure | 110 | 57,674 | 166.54 | 7,320 | 123,118 | 87.45 |

Drill rigs in Mogalakwena Central pit – Cut 8

# Mineral Resources summary

as at 31 December 2020

## Mineral Resource estimation: managed operations

### Geological Modelling

A standardised Anglo American Platinum approach is used to create geological structure models and determine geological losses for Mineral Resources at individual underground and open-pit operations. This involves identifying and quantifying geological losses from all possible sources, historical mining, surface exposure and any geophysical and geological exploration data. The total known and unknown geological losses are reported per structural domain as defined by similar geological attributes regarding structural characteristics, complexity, geological loss feature frequency, size or distribution. The final structural models and geological loss estimates are signed off by a Competent Persons team, to ensure the best possible input into Mineral Resource models and business mine-planning processes.

### Mineralisation

The Mineralisation envelope is based on data generated from all possible sources, including surface and underground diamond drilling, open-pit RC drilling, underground reef sampling and geological mapping. The mineralised envelope for the Platreef is delineated on an increment 1 g/t 4E cut-off grade. The remaining orebodies do not apply a grade cut-off.

The tabular PGM orebodies lend themselves to a three-component subdivision, comprising the mineralised, hanging wall and footwall intervals. Separate estimation models are prepared for each of these components. The mineralised interval represents the most consistently mineralised unit and dominates the defined Mineral Resource. The margins of the mineralised interval may be defined exclusively by grade cut-offs (ie Platreef), by a combination of geological features and grade cut-offs (ie Merensky Reef and MSZ) or by geology (ie UG2 Reef). The hanging wall and footwall components, which are lower grade relative to the mineralised interval, do contribute to the total mining cut that may be planned to extract the mineralised interval. When these marginal units are prepared as 'layered estimation models', different extraction plans may be applied, and the appropriate marginal dilution aggregated.

### Grade Estimation

The Mineral Resource models are prepared as 2D block models for underground operations and 3D block models for the open pit, created with Datamine software. Ordinary kriging is the estimation method applied, together with semi-variogram analysis, to quantify the spatial continuity and variance of the data. The estimation parameters were defined using a kriging neighbourhood analysis (KNA) and the variogram models defined by the Merensky, UG2, MSZ and Platreef geozones respectively. KNA tests the impact of different parameters on the estimate by interpreting changes in the kriging efficiency and kriging variance.

Within sparse to moderately informed areas of the Merensky, UG2 and MSZ, the kriging efficiency and kriging variance reaches stability at block sizes between 300m and 500m. In well-informed areas (underground sample sections and drill-holes) of the similar orebodies, the kriging efficiency and kriging variance reach stability at block sizes between 50m to 250m. For the Platreef, however, block sizes range from 50m x 50m x 5m to 20m x 20m x 5m. The smaller block size is due to the closely spaced data density from exploration drilling and in-pit RC drilling data.

Search distances for grade and width estimation were based on variogram ranges for each variable. A minimum of five to seven and a maximum of twenty-five samples were used for estimation as determined from the KNA study. Multiple search passes were used to estimate blocks not populated by the first search pass. The minimum and maximum number of samples used remained constant, except in the third pass where they increased to 20 and 40 respectively.

### Mineral Resource Classification

The Mineral Resource classification is reviewed and signed off by a team of Competent Persons. The classification process is driven by a weighted scorecard approach evaluating both geological (non-statistical) and geostatistical criteria. This allows assessment of data quality; orebody knowledge; Mineralisation geometry and continuity as well as statistical outputs. The geostatistical and geological considerations for the classification procedure are shown below.

| Non-statistical parameters | Statistical parameters |
|---|---|
| Aeromagnetic survey | Search volume |
| Seismic survey (where applicable) | Number of samples |
| Structural model | Kriging efficiency |
| Facies interpretation | Kriging variance |
| Historical data/mining history | Slope of regression |
| Geological loss | |
| Quality assurance and quality control | |

## Reasonable prospects of eventual economic extraction

Anglo American Platinum has maintained the basic resource equation (BRE) to establish a consistent and auditable process for tracking and reconciling movements in Mineral Resources and Mineralisation. This is underpinned by the reasonable prospect for eventual economic extraction criteria specified in the SAMREC Code as well as Anglo American Platinum's determination of reasonable prospect of eventual economic extraction of Mineral Resources guidelines document. The BRE encompasses processes from all technical disciplines to ensure that the publication of Mineral Resource data is aligned with the company's business plan and with technical and economic considerations.

A virgin rock temperature of 75°C is still considered to be the practical limit to mining (given current technology constraints, metal prices and energy costs), and continues to form the perimeter of declared Inferred Mineral Resources within the Mining Rights of Tumela and Twickenham mines, as well as the Bokoni Mine. Anglo American Platinum will continue to review deposits down-dip of this limit based on changing geological information, mining technology and metal prices.

### Endowment

Further understanding and quantification of the company's full mineral endowment potential on and around our current holdings is underway, following the acquisition and inclusion of the endowment specified in the Central Block and Kwanda North into the greater Mogalakwena Mining Right.

**Iain Colquhoun** (Geology hons)
*PrSciNat (400097/00)*

*Principal resource estimation: platinum*
*Anglo American group discovery and geosciences*

Johannesburg
15 March 2021

Amandelbult concentrator

## Mineral Resources summary: estimates

### Exclusive of Ore Reserves (4E)

The estimates below are reported on a 100% basis. The 2019 estimates for joint and non-managed operations are restated on a 100% basis. Estimates of 0.0 represent numbers less than 0.05.

| | | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| **Mine/project** | **Classification** | **2020** | 2019 | **2020** | 2019 | **2020** | 2019 | **2020** | 2019 |
| Tumela (100%) | Measured | **23.0** | 24.8 | **6.74** | 6.82 | **155** | 169 | **5.0** | 5.4 |
| Merensky Reef | Indicated | **46.2** | 46.5 | **7.04** | 7.04 | **325** | 327 | **10.5** | 10.5 |
| | **Measured and Indicated** | **69.2** | 71.3 | **6.94** | 6.96 | **480** | 496 | **15.4** | 16.0 |
| | **Inferred** | **44.6** | 45.8 | **7.04** | 7.02 | **314** | 321 | **10.1** | 10.3 |
| | **Total** | **113.7** | 117.1 | **6.98** | 6.99 | **794** | 817 | **25.5** | 26.3 |
| Tumela (100%) | Measured | **102.4** | 105.6 | **5.40** | 5.40 | **553** | 571 | **17.8** | 18.3 |
| UG2 Reef | Indicated | **44.1** | 44.3 | **5.52** | 5.52 | **243** | 244 | **7.8** | 7.9 |
| | **Measured and Indicated** | **146.5** | 149.9 | **5.44** | 5.44 | **796** | 815 | **25.6** | 26.2 |
| | **Inferred** | **47.4** | 47.0 | **5.77** | 5.77 | **273** | 271 | **8.8** | 8.7 |
| | **Total** | **193.8** | 196.9 | **5.52** | 5.52 | **1,069** | 1,086 | **34.4** | 34.9 |
| Dishaba (100%) | Measured | **8.0** | 9.4 | **7.11** | 7.01 | **57** | 66 | **1.8** | 2.1 |
| Merensky Reef | Indicated | **10.6** | 10.4 | **6.92** | 6.88 | **73** | 71 | **2.4** | 2.3 |
| | **Measured and Indicated** | **18.5** | 19.8 | **7.00** | 6.94 | **130** | 137 | **4.2** | 4.4 |
| | **Inferred** | **12.6** | 13.0 | **6.28** | 6.29 | **79** | 82 | **2.6** | 2.6 |
| | **Total** | **31.2** | 32.8 | **6.71** | 6.68 | **209** | 219 | **6.7** | 7.0 |
| Dishaba (100%) | Measured | **19.2** | 19.5 | **5.25** | 5.27 | **101** | 103 | **3.2** | 3.3 |
| UG2 Reef | Indicated | **22.8** | 22.7 | **5.78** | 5.79 | **132** | 131 | **4.2** | 4.2 |
| | **Measured and Indicated** | **42.0** | 42.1 | **5.54** | 5.55 | **233** | 234 | **7.5** | 7.5 |
| | **Inferred** | **8.9** | 9.0 | **5.54** | 5.55 | **49** | 50 | **1.6** | 1.6 |
| | **Total** | **50.9** | 51.1 | **5.54** | 5.55 | **282** | 284 | **9.1** | 9.1 |
| Mogalakwena (100%) | Measured | **246.4** | 221.1 | **2.17** | 2.18 | **535** | 482 | **17.2** | 15.5 |
| Platreef (*in-situ*) | Indicated | **1,389.7** | 1,375.7 | **2.30** | 2.31 | **3,196** | 3,178 | **102.8** | 102.2 |
| | **Measured and Indicated** | **1,636.0** | 1,596.8 | **2.28** | 2.29 | **3,731** | 3,660 | **119.9** | 117.7 |
| | **Inferred** | **595.7** | 596.0 | **1.76** | 1.76 | **1,048** | 1,050 | **33.7** | 33.8 |
| | **Total** | **2,231.7** | 2,192.8 | **2.14** | 2.15 | **4,779** | 4,710 | **153.7** | 151.4 |
| Mogalakwena (100%) | Measured | **3.9** | 4.4 | **3.22** | 3.20 | **12** | 14 | **0.4** | 0.4 |
| Platreef stockpiles | Indicated | **–** | – | **–** | – | **–** | – | **–** | – |
| | **Measured and Indicated** | **3.9** | 4.4 | **3.22** | 3.20 | **12** | 14 | **0.4** | 0.4 |
| | **Inferred** | **–** | – | **–** | – | **–** | – | **–** | – |
| | **Total** | **3.9** | 4.4 | **3.22** | 3.20 | **12** | 14 | **0.4** | 0.4 |

## Mineral Resources summary: estimates continued

### Exclusive of Ore Reserves (4E) continued

| Mine/project | Classification | Mineral Resources Million tonnes (Mt) 2020 | 2019 | Grade 4E g/t 2020 | 2019 | Contained metal 4E tonnes 2020 | 2019 | Contained metal 4E Moz 2020 | 2019 |
|---|---|---|---|---|---|---|---|---|---|
| Mototolo Complex (100%) | Measured | **40.9** | – | **4.75** | – | **194** | – | **6.3** | – |
| Merensky Reef | Indicated | **58.2** | – | **4.54** | – | **264** | – | **8.5** | – |
| | **Measured and Indicated** | **99.1** | – | **4.63** | – | **458** | – | **14.7** | – |
| | **Inferred** | **73.7** | – | **4.52** | – | **333** | – | **10.7** | – |
| | **Total** | **172.9** | – | **4.58** | – | **791** | – | **25.5** | – |
| Mototolo Complex (100%) | Measured | **108.0** | 7.5 | **3.99** | 3.81 | **431** | 29 | **13.9** | 0.9 |
| UG2 Reef | Indicated | **136.8** | 6.5 | **3.95** | 4.29 | **540** | 28 | **17.4** | 0.9 |
| | **Measured and Indicated** | **244.8** | 14.0 | **3.97** | 4.03 | **971** | 57 | **31.2** | 1.8 |
| | **Inferred** | **124.4** | – | **4.02** | – | **500** | – | **16.1** | – |
| | **Total** | **369.3** | 14.0 | **3.99** | 4.03 | **1,471** | 57 | **47.3** | 1.8 |
| Unki (100%) | Measured | **7.5** | 7.9 | **4.09** | 4.12 | **31** | 33 | **1.0** | 1.1 |
| MSZ | Indicated | **110.8** | 112.3 | **4.29** | 4.29 | **475** | 482 | **15.3** | 15.5 |
| | **Measured and Indicated** | **118.4** | 120.2 | **4.28** | 4.28 | **506** | 515 | **16.3** | 16.5 |
| | **Inferred** | **38.6** | 47.8 | **4.07** | 4.22 | **157** | 201 | **5.0** | 6.5 |
| | **Total** | **156.9** | 168.0 | **4.23** | 4.26 | **663** | 716 | **21.3** | 23.0 |
| Twickenham (100%) | Measured | **48.4** | 48.4 | **4.75** | 4.75 | **230** | 230 | **7.4** | 7.4 |
| Merensky Reef | Indicated | **87.3** | 87.3 | **4.97** | 4.97 | **434** | 434 | **14.0** | 14.0 |
| | **Measured and Indicated** | **135.7** | 135.7 | **4.89** | 4.89 | **664** | 664 | **21.3** | 21.3 |
| | **Inferred** | **165.7** | 165.7 | **5.26** | 5.26 | **872** | 872 | **28.0** | 28.0 |
| | **Total** | **301.4** | 301.4 | **5.09** | 5.09 | **1,536** | 1,536 | **49.4** | 49.4 |
| Twickenham (100%) | Measured | **54.6** | 54.6 | **6.29** | 6.29 | **344** | 344 | **11.1** | 11.1 |
| UG2 Reef | Indicated | **145.4** | 145.4 | **6.05** | 6.05 | **879** | 879 | **28.3** | 28.3 |
| | **Measured and Indicated** | **200.0** | 200.0 | **6.12** | 6.12 | **1,223** | 1,223 | **39.3** | 39.3 |
| | **Inferred** | **148.2** | 148.2 | **5.88** | 5.88 | **871** | 871 | **28.0** | 28.0 |
| | **Total** | **348.2** | 348.2 | **6.02** | 6.02 | **2,094** | 2,094 | **67.3** | 67.3 |
| Siphumelele 3 (100%) | Measured | **4.7** | 4.8 | **3.16** | 3.09 | **15** | 15 | **0.5** | 0.5 |
| UG2 Reef | Indicated | **–** | – | **–** | – | **–** | – | **–** | – |
| | **Measured and Indicated** | **4.7** | 4.8 | **3.16** | 3.09 | **15** | 15 | **0.5** | 0.5 |
| | **Inferred** | **–** | – | **–** | – | **–** | – | **–** | – |
| | **Total** | **4.7** | 4.8 | **3.16** | 3.09 | **15** | 15 | **0.5** | 0.5 |
| Der Brochen (100%) | Measured | **–** | 41.4 | **–** | 4.75 | **–** | 197 | **–** | 6.3 |
| Merensky Reef | Indicated | **–** | 59.2 | **–** | 4.51 | **–** | 267 | **–** | 8.6 |
| | **Measured and Indicated** | **–** | 100.6 | **–** | 4.61 | **–** | 464 | **–** | 14.9 |
| | **Inferred** | **–** | 74.4 | **–** | 4.53 | **–** | 337 | **–** | 10.8 |
| | **Total** | **–** | 175.0 | **–** | 4.58 | **–** | 801 | **–** | 25.7 |
| Der Brochen (100%) | Measured | **–** | 98.8 | **–** | 4.00 | **–** | 395 | **–** | 12.7 |
| UG2 Reef | Indicated | **–** | 135.1 | **–** | 3.94 | **–** | 532 | **–** | 17.1 |
| | **Measured and Indicated** | **–** | 233.9 | **–** | 3.97 | **–** | 927 | **–** | 29.8 |
| | **Inferred** | **–** | 124.5 | **–** | 4.02 | **–** | 501 | **–** | 16.1 |
| | **Total** | **–** | 358.5 | **–** | 3.98 | **–** | 1,428 | **–** | 45.9 |

## Mineral Resources summary: estimates continued

### Exclusive of Ore Reserves (4E) continued

| | | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| **Mine/project** | **Classification** | **2020** | 2019 | **2020** | 2019 | **2020** | 2019 | **2020** | 2019 |
| Modikwa (50%) Merensky Reef | Measured | **20.7** | 20.7 | **3.15** | 3.15 | **65** | 65 | **2.1** | 2.1 |
| | Indicated | **53.9** | 53.9 | **2.90** | 2.90 | **156** | 156 | **5.0** | 5.0 |
| | **Measured and Indicated** | **74.6** | 74.6 | **2.97** | 2.97 | **221** | 221 | **7.1** | 7.1 |
| | **Inferred** | **139.3** | 139.3 | **2.84** | 2.84 | **396** | 396 | **12.7** | 12.7 |
| | **Total** | **213.9** | 213.9 | **2.89** | 2.89 | **617** | 617 | **19.8** | 19.8 |
| Modikwa (50%) UG2 Reef | Measured | **48.2** | 48.1 | **5.91** | 5.91 | **285** | 284 | **9.2** | 9.1 |
| | Indicated | **90.3** | 90.7 | **5.90** | 5.90 | **533** | 535 | **17.1** | 17.2 |
| | **Measured and Indicated** | **138.5** | 138.8 | **5.90** | 5.90 | **818** | 819 | **26.3** | 26.3 |
| | **Inferred** | **77.5** | 77.5 | **6.22** | 6.22 | **482** | 482 | **15.5** | 15.5 |
| | **Total** | **216.0** | 216.2 | **6.01** | 6.02 | **1,300** | 1,301 | **41.8** | 41.8 |
| Bokoni (49%) Merensky Reef | Measured | **92.8** | 92.8 | **4.82** | 4.82 | **447** | 447 | **14.4** | 14.4 |
| | Indicated | **47.8** | 47.8 | **4.85** | 4.85 | **232** | 232 | **7.5** | 7.5 |
| | **Measured and Indicated** | **140.6** | 140.6 | **4.83** | 4.83 | **679** | 679 | **21.8** | 21.8 |
| | **Inferred** | **205.8** | 205.8 | **5.02** | 5.02 | **1,033** | 1,033 | **33.2** | 33.2 |
| | **Total** | **346.4** | 346.4 | **4.94** | 4.94 | **1,712** | 1,712 | **55.1** | 55.1 |
| Bokoni (49%) UG2 Reef | Measured | **198.6** | 198.6 | **6.43** | 6.43 | **1,277** | 1,277 | **41.1** | 41.1 |
| | Indicated | **92.3** | 92.3 | **6.57** | 6.57 | **606** | 606 | **19.5** | 19.5 |
| | **Measured and Indicated** | **290.9** | 290.9 | **6.47** | 6.47 | **1,883** | 1,883 | **60.6** | 60.6 |
| | **Inferred** | **174.6** | 174.6 | **6.71** | 6.71 | **1,172** | 1,172 | **37.7** | 37.7 |
| | **Total** | **465.5** | 465.5 | **6.56** | 6.56 | **3,055** | 3,055 | **98.2** | 98.2 |
| Kroondal (50%) UG2 Reef | Measured | **1.5** | 1.0 | **3.22** | 3.08 | **5** | 3 | **0.2** | 0.1 |
| | Indicated | **0.3** | 0.6 | **3.58** | 3.58 | **1** | 2 | **0.0** | 0.1 |
| | **Measured and Indicated** | **1.8** | 1.5 | **3.28** | 3.26 | **6** | 5 | **0.2** | 0.2 |
| | **Inferred** | **–** | – | **–** | – | **–** | – | **–** | – |
| | **Total** | **1.8** | 1.5 | **3.28** | 3.26 | **6** | 5 | **0.2** | 0.2 |
| Marikana (50%) UG2 Reef | Measured | **27.3** | 27.3 | **3.48** | 3.35 | **95** | 92 | **3.1** | 2.9 |
| | Indicated | **9.5** | 9.5 | **3.83** | 3.76 | **36** | 36 | **1.2** | 1.1 |
| | **Measured and Indicated** | **36.8** | 36.8 | **3.57** | 3.46 | **131** | 128 | **4.2** | 4.1 |
| | **Inferred** | **4.9** | 4.9 | **2.95** | 2.95 | **15** | 15 | **0.5** | 0.5 |
| | **Total** | **41.7** | 41.7 | **3.50** | 3.40 | **146** | 143 | **4.7** | 4.6 |
| **Reef** | | | | | | | | | |
| **South Africa** | | | | | | | | | |
| Merensky Reef | Measured | **233.7** | 237.5 | **4.91** | 4.94 | **1,148** | 1,174 | **36.9** | 37.7 |
| | Indicated | **304.0** | 305.1 | **4.88** | 4.88 | **1,484** | 1,488 | **47.7** | 47.8 |
| | **Measured and Indicated** | **537.7** | 542.5 | **4.90** | 4.91 | **2,632** | 2,661 | **84.6** | 85.6 |
| | Inferred in LOMP* | **1.1** | 1.0 | **6.33** | 6.62 | **7** | 7 | **0.2** | 0.2 |
| | Inferred ex LOMP* | **640.7** | 643.0 | **4.71** | 4.72 | **3,020** | 3,034 | **97.1** | 97.5 |
| | **Inferred** | **641.8** | 644.1 | **4.72** | 4.72 | **3,027** | 3,041 | **97.3** | 97.8 |
| | **Total** | **1,179.5** | 1,186.6 | **4.80** | 4.80 | **5,659** | 5,702 | **182.0** | 183.3 |
| UG2 Reef | Measured | **564.6** | 565.9 | **5.50** | 5.50 | **3,106** | 3,111 | **99.8** | 100.0 |
| | Indicated | **541.4** | 546.8 | **5.49** | 5.47 | **2,970** | 2,994 | **95.5** | 96.3 |
| | **Measured and Indicated** | **1,106.0** | 1,112.8 | **5.49** | 5.49 | **6,076** | 6,106 | **195.4** | 196.3 |
| | Inferred in LOMP* | **0.0** | 0.0 | **5.71** | 5.70 | **0.0** | 0.0 | **0.0** | 0.0 |
| | Inferred ex LOMP* | **585.9** | 585.7 | **5.74** | 5.74 | **3,362** | 3,362 | **108.1** | 108.1 |
| | **Inferred** | **585.9** | 585.7 | **5.74** | 5.74 | **3,362** | 3,362 | **108.1** | 108.1 |
| | **Total** | **1,691.9** | 1,698.5 | **5.58** | 5.57 | **9,438** | 9,468 | **303.5** | 304.4 |

## Mineral Resources summary: estimates continued

### Exclusive of Ore Reserves (4E) continued

| Reef | Classification | Mineral Resources Million tonnes (Mt) 2020 | 2019 | Grade 4E g/t 2020 | 2019 | Contained metal 4E tonnes 2020 | 2019 | Contained metal 4E Moz 2020 | 2019 |
|---|---|---|---|---|---|---|---|---|---|
| Platreef** | Measured | 246.4 | 221.1 | 2.17 | 2.18 | 535 | 482 | 17.2 | 15.5 |
| | Measured stockpiles | 3.9 | 4.4 | 3.22 | 3.20 | 12 | 14 | 0.4 | 0.4 |
| | Indicated | 1,389.7 | 1,375.7 | 2.30 | 2.31 | 3,196 | 3,178 | 102.8 | 102.2 |
| | **Measured and Indicated** | 1,639.9 | 1,601.2 | 2.28 | 2.29 | 3,743 | 3,674 | 120.3 | 118.1 |
| | Inferred in LOMP* | – | 0.6 | – | 3.76 | – | 2 | – | 0.1 |
| | Inferred ex LOMP* | 595.7 | 595.4 | 1.76 | 1.76 | 1,048 | 1,048 | 33.7 | 33.7 |
| | **Inferred** | 595.7 | 596.0 | 1.76 | 1.76 | 1,048 | 1,050 | 33.7 | 33.8 |
| | **Total** | 2,235.5 | 2,197.2 | 2.14 | 2.15 | 4,791 | 4,724 | 154.1 | 151.9 |
| South Africa reefs | Measured | 1,048.6 | 1,028.8 | 4.58 | 4.65 | 4,801 | 4,781 | 154.3 | 153.7 |
| | Indicated | 2,235.0 | 2,227.6 | 3.42 | 3.44 | 7,650 | 7,659 | 246.0 | 246.3 |
| | **Measured and Indicated** | 3,283.6 | 3,256.4 | 3.79 | 3.82 | 12,451 | 12,441 | 400.4 | 400.0 |
| | Inferred in LOMP* | 1.1 | 1.6 | 6.32 | 5.56 | 7 | 9 | 0.2 | 0.3 |
| | Inferred ex LOMP* | 1,822.3 | 1,824.2 | 4.08 | 4.08 | 7,430 | 7,443 | 238.9 | 239.3 |
| | **Inferred** | 1,823.4 | 1,825.8 | 4.08 | 4.08 | 7,437 | 7,453 | 239.1 | 239.6 |
| | **Total** | 5,107.0 | 5,082.2 | 3.89 | 3.92 | 19,888 | 19,894 | 639.5 | 639.6 |
| **Zimbabwe** | | | | | | | | | |
| Main Sulphide Zone (MSZ) | Measured | 7.5 | 7.9 | 4.09 | 4.12 | 31 | 33 | 1.0 | 1.1 |
| | Indicated | 110.8 | 112.3 | 4.29 | 4.29 | 475 | 482 | 15.3 | 15.5 |
| | **Measured and Indicated** | 118.4 | 120.2 | 4.28 | 4.28 | 506 | 515 | 16.3 | 16.5 |
| | Inferred in LOMP* | 0.0 | 0.0 | 3.41 | 3.41 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Inferred ex LOMP* | 38.5 | 47.7 | 4.07 | 4.22 | 157 | 201 | 5.0 | 6.5 |
| | **Inferred** | 38.6 | 47.8 | 4.07 | 4.22 | 157 | 201 | 5.0 | 6.5 |
| | **Total** | 156.9 | 168.0 | 4.23 | 4.26 | 663 | 716 | 21.3 | 23.0 |
| **South Africa and Zimbabwe** | | | | | | | | | |
| All reefs (Merensky, UG2, Platreef, MSZ) | Measured | 1,056.1 | 1,036.8 | 4.57 | 4.64 | 4,832 | 4,814 | 155.3 | 154.8 |
| | Indicated | 2,345.8 | 2,339.9 | 3.46 | 3.48 | 8,125 | 8,141 | 261.3 | 261.7 |
| | **Measured and Indicated** | 3,402.0 | 3,376.7 | 3.81 | 3.84 | 12,957 | 12,956 | 416.6 | 416.5 |
| | Inferred in LOMP* | 1.1 | 1.7 | 6.24 | 5.52 | 7 | 9 | 0.2 | 0.3 |
| | Inferred ex LOMP* | 1,860.9 | 1,871.9 | 4.08 | 4.08 | 7,587 | 7,644 | 244.0 | 245.8 |
| | **Inferred** | 1,862.0 | 1,873.6 | 4.08 | 4.08 | 7,594 | 7,654 | 244.2 | 246.1 |
| | **Total** | 5,264.0 | 5,250.2 | 3.90 | 3.93 | 20,551 | 20,610 | 660.8 | 662.6 |
| **South Africa – tailings** | | | | | | | | | |
| | Measured | 63.0 | 63.0 | 0.79 | 0.79 | 50 | 50 | 1.6 | 1.6 |
| | Indicated | 8.1 | 8.1 | 0.82 | 0.82 | 7 | 7 | 0.2 | 0.2 |
| | **Measured and Indicated** | 71.1 | 71.1 | 0.79 | 0.79 | 57 | 57 | 1.8 | 1.8 |
| | Inferred in LOMP* | – | – | – | – | – | – | – | – |
| | Inferred ex LOMP* | 1.2 | 1.2 | 0.91 | 0.91 | 1 | 1 | 0.0 | 0.0 |
| | **Inferred** | 1.2 | 1.2 | 0.91 | 0.91 | 1 | 1 | 0.0 | 0.0 |
| | **Total** | 72.3 | 72.3 | 0.80 | 0.80 | 58 | 58 | 1.9 | 1.9 |

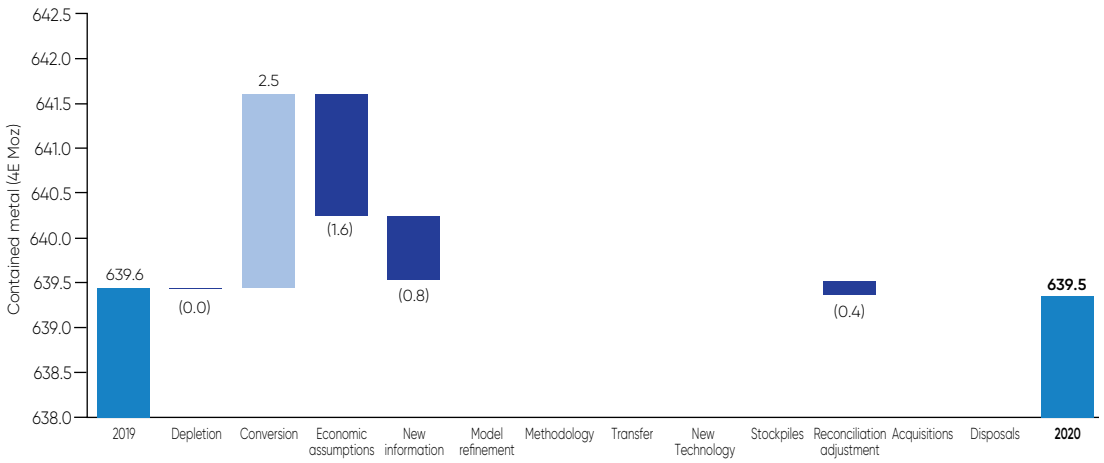
***Inferred in LOMP and Inferred ex LOMP:***
*Inferred Mineral Resources in the life-of-mine plan (LOMP) are described as 'Inferred in LOMP'. The portion of Inferred Resources with reasonable prospects for eventual economic extraction not considered in the LOMP are reported as 'Inferred ex LOMP'.*
*** For Platreef a cut-off grade of 1.0 4E g/t is used except for calc-silicate and oxidised material where a cut-off grade of 3.0 4E g/t is applied.*
*Inferred Mineral Resources are generally excluded from feasibility studies and life-of-mine plans, except at Dishaba and Unki, where insignificant amounts are included. Assessments have indicated that the exclusion of the Inferred Resources in LOMP will have no impact on the life-of-mine plans.*

## Exclusive Mineral Resources summary: reconciliation

**South Africa**

The reconciliation waterfall charts report total Measured, Indicated and Inferred Mineral Resources exclusive of Ore Reserves on a 100% basis. The 2019 estimates are restated on a 100% basis. Definitions of reconciliation categories are on page 87. Values of 0.0 represent numbers less than 0.05.

**Anglo American Platinum Merensky, UG2 and Platreef exclusive Mineral Resources – South Africa**
**2019 – 2020 reconciliation** (4E Moz)



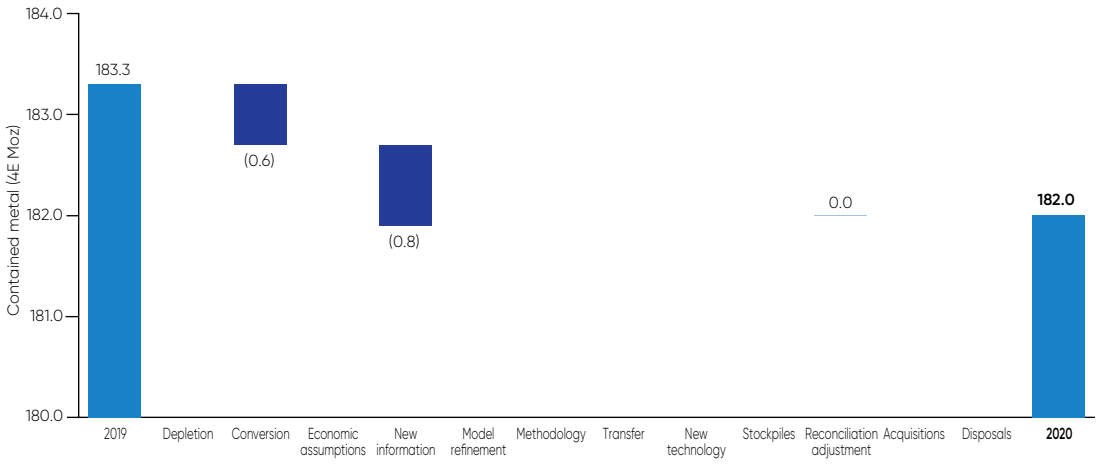

The South African Mineral Resources exclusive of Ore Reserves 4E content decreased marginally by 0.1 4E Moz and the tonnage slightly increased by 0.5% to 5,107.0Mt (2019: 5,082.2Mt) after the reallocation of Mineral Resources from Ore Reserves at Mogalakwena, updated economic assumptions at Mototolo and Modikwa, and geological model updates.

- Mogalakwena – reallocation of Platreef Ore Reserves to Mineral Resources due to a revised pit design: +2.4 4E Moz ▷ +39.3Mt
- Mototolo and Modikwa – economic assumption (tail management): –1.6 4E Moz ▷ –10.3Mt
- All underground mines– new information related to updated geological models: –0.8 4E Moz ▷ –5.3Mt
- All underground mines– net conversion and reallocation of Merensky and UG2 reefs: +0.1 4E Moz ▷ +2.6Mt

## Exclusive Mineral Resources summary: reconciliation continued

### Merensky Reef

**Anglo American Platinum Merensky Reef exclusive Mineral Resources – South Africa**
**2019 – 2020 reconciliation** (4E Moz)

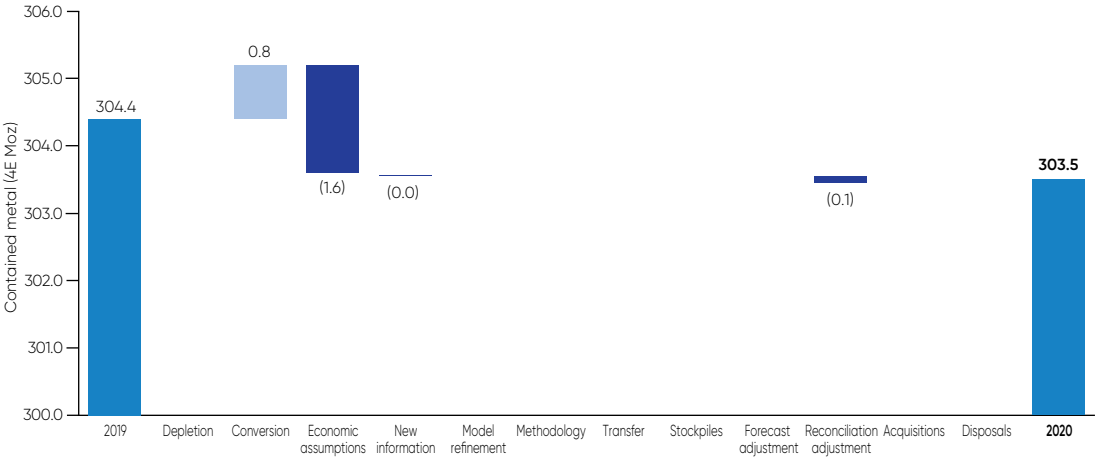



The Merensky exclusive Mineral Resource 4E ounce content decreased by 0.7% to 182.0 4E Moz and the tonnage decreased by 0.6% to 1179.5Mt (2019: 1186.6Mt) due to conversion and new information. Mototolo Mine and Der Brochen Project have been reported as a consolidated operation. The Der Brochen Merensky Reef Mineral Resource report at Mototolo Complex.

- Dishaba and Tumela – conversion: −0.6 4E Moz ▷ −2.8Mt
- Dishaba, Tumela and Mototolo – new information (higher geological losses): −0.8 4E Moz ▷ −4.3Mt

### UG2 Reef

**Anglo American Platinum UG2 Reef exclusive Mineral Resources – South Africa**
**2019 – 2020 reconciliation** (4E Moz)



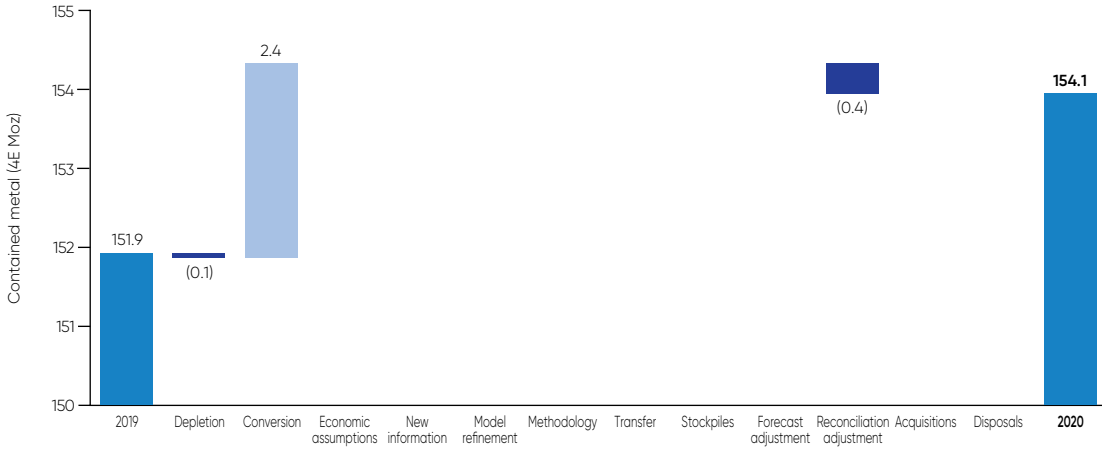

The UG2 exclusive Mineral Resource 4E ounce content decreased marginally by 0.9 4E Moz and the tonnage decreased by 0.4% to 1,691.9Mt (2019: 1,698.5Mt) due to economic assumptions. The decrease was slightly off set by conversion at various operations. Mototolo Mine and Der Brochen Project have been reported as a consolidated operation. The Der Brochen UG2 Reef Mineral Resource report at Mototolo Complex.

- Mototolo and Modikwa – economic assumptions (tail management): −1.6 4E Moz ▷ −10.3Mt
- Dishaba and Tumela – conversion of Mineral Resources to Ore Reserves: −0.4 4E Moz ▷ −2.2Mt
- Modikwa – reallocation of Ore Reserves to Mineral Resources due to a change in mine design: +0.5 4E Moz ▷ +2.6Mt
- Mototolo – reallocation of Ore Reserves to Mineral Resources as a result of improved modifying factors: +0.7 4E Moz ▷ +5.1Mt

## Exclusive Mineral Resources summary: reconciliation continued

### Platreef

**Anglo American Platinum Platreef exclusive Mineral Resources – South Africa**
**2019 – 2020 reconciliation** (4E Moz)




The Mogalakwena Platreef exclusive Mineral Resource 4E ounce content increased by 2.2 4E Moz (1.4%) and the tonnage increased from 2,197.2Mt to 2,235.5Mt (1.7%) primarily due to:

- Reallocation of Platreef Ore Reserves to Mineral Resources due to revised pit design: +2.4 4E Moz ▷ +39.3Mt
- Depletion of the calc-silicate and oxidized stockpile: –0.1 4E Moz ▷ –0.5Mt
- The resource statement includes stockpiled material from the open-pit operation that consists of calc-silicate and oxidised material with a 3.0 4E g/ t cut-off grade This Measured Mineral Resource is included in the Resource statement

## Exclusive Mineral Resources summary: reconciliation continued

### Zimbabwe - Main Sulphide Zone (MSZ)

**Anglo American Platinum MSZ exclusive Mineral Resources – Zimbabwe**
**2019 – 2020 reconciliation** (4E Moz)


The exclusive Mineral Resource 4E ounce content and tonnage decreased by 7.4% to 21.3 4E Moz and 6.6% to 156.9Mt (2019: 168.0Mt) respectively due to:

- Disposal of KV and SR Claims: –1.4 4E Moz ▷ –9.3Mt
- Conversion of Mineral Resources to Ore Reserves following a change in the extraction strategy: –0.3 4E Moz ▷ –2.1Mt

The Unki East and West mining areas are evaluated on a 180cm Resource cut width and the remaining area evaluated on a 120cm Resource cut width.

### Tailings

Operating tailings storage facilities are not reported as part of the Mineral Resources. A dormant tailings storage facility at Amandelbult complex has been evaluated and reported as a tailings Mineral Resource.

No Ore Reserves are declared for this storage facility.

# Ore Reserves summary

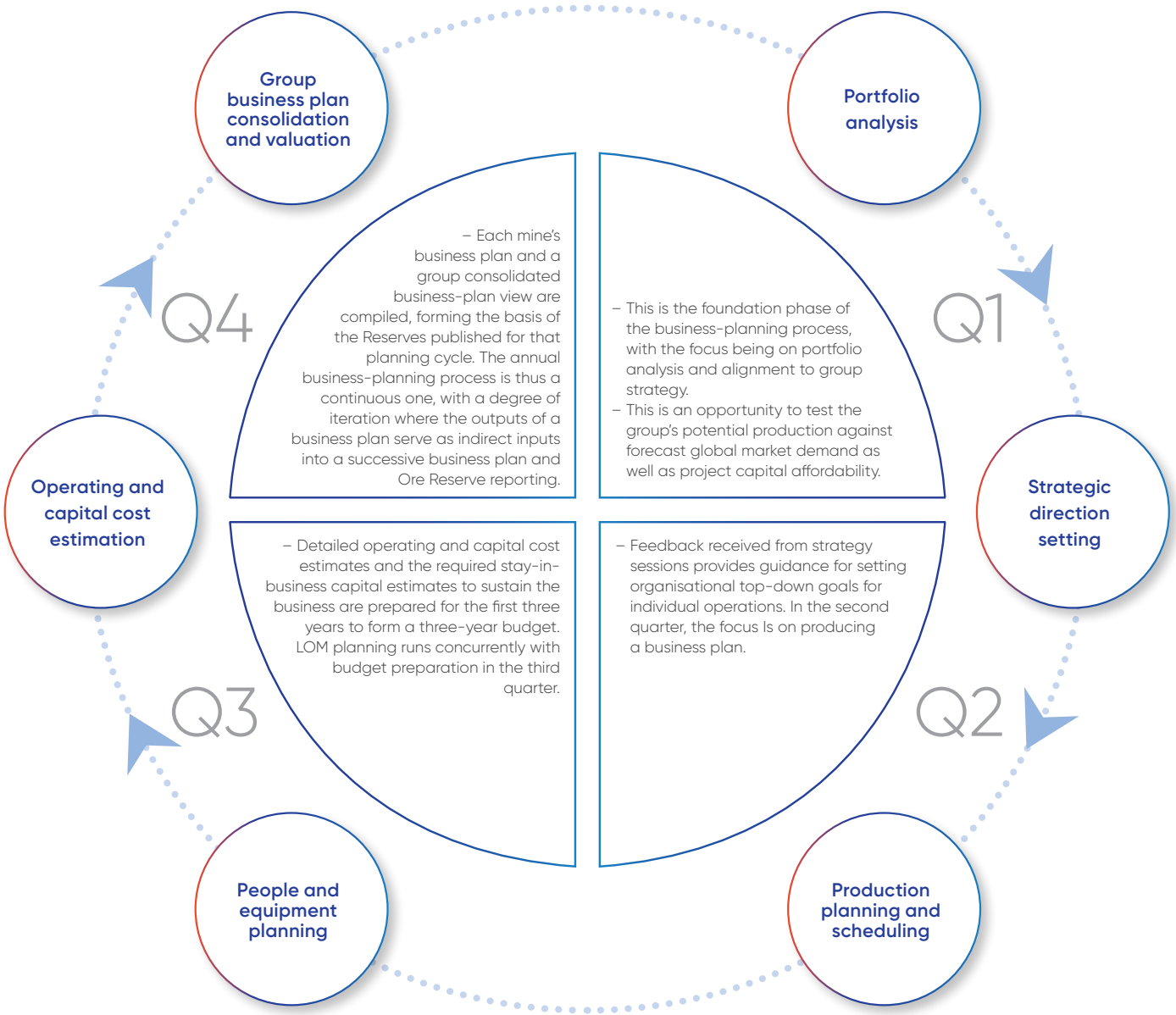
as at 31 December 2020

## Ore Reserves: managed operations

### Business planning process

The process of defining Ore Reserves from Mineral Resources has not changed materially for the 2020 reporting cycle. The process of defining Ore Reserves is supported by an integrated planning process, an approved Anglo American Platinum and Anglo American Group policy. The process outlines the methodology used when Mineral Resources are converted to Ore Reserves based on current economic considerations and other modifying factors. The main activities of the process are: plan alignment and development, LOM planning and scheduling, budgeting and LOM costing, business plan and Ore Reserve reporting. They are supported by six essential processes as outlined in the planning cycle.

## Planning cycle




Q1 = Strategy and plan alignment and plan development
Q2 = Life of Mine planning and scheduling
Q3 = Budgeting and costing
Q4 = Business plan and Ore Reserves and Mineral Resources reporting

## Modifying factors

The business-planning process starts by defining the terms of reference and collating the input parameters used to determine the economically viable portion of the defined Mineral Resources. The modifying factors that impact conversion of Mineral Resources to Ore Reserves are mining; geotechnical; processing and recovery; financial; legal; market; infrastructure; and social/governmental. Modifying factors for each operation are tabled in the individual operational sections of this report.

### Underground operations: Merensky, UG2 and MSZ

For underground operations, application of modifying factors is implemented in three distinct phases:

1 **Mine design and scheduling.** The modifying factors for mine-design criteria as applicable to different reefs and mining methods are benchmarked and signed off in the first quarter of the year. Geotechnical and ventilation considerations as well as factors that impact on dilution of the Mineral Resource (i.e. stope width versus Resource width, tertiary development and other mining done on the reef horizon) are applied. Discounting factors include unknown geological losses, dimensions and position of in-stope pillars, boundary pillar, barrier pillars and regional pillars where required. Modifying factors that define mining losses (reef in hanging/reef in foot and mining inefficiencies) are also applied to specific mine-design criteria.
2 **Processing.** Those modifying factors that influence the efficiency of processing and recovery are applied to the scheduled resource. The factors considered include: throughput capacity, recoveries, mass pull, recovery potential and blending of ore from different sources. The result is a Mineable Reserve.
3 **Economics.** The subsequent application of modifying factors that influence the economic aspects of the mining operation results in a portion of the scheduled Resource not being converted into Reserve. This portion, known as the uneconomic tail, reverts to Mineral Resources to be considered in subsequent planning processes. Its exclusion results in a scheduled Reserve that is equivalent to the operation's published Ore Reserve estimates.

For the purposes of Ore Reserve conversion, only the Measured and Indicated Mineral Resource categories are converted. Only those current operations and approved projects in execution, featured in the business plan, are included as Ore Reserves.

The scheduled Ore Reserves are peer reviewed and signed off by the Competent Person(s).

### Platreef open-pit operations:

1 **Pit design.** The open-pit planning process also starts by defining the terms of reference and collating the input parameters used to determine the economically viable portion of defined Mineral Resources. With this information, the 3D Mineral Resource model can be improved to incorporate new economic fields and the profit (revenue-cost) for each block can be calculated. The *in situ* Mineral Resource model is then regularised to the smallest mining unit size that corresponds to the mining parameters for a specific mining area, considering the overall mining recovery (loss and dilution) as estimated from operational reconciliation resource model to metal reporting to the processing facilities. This output, the so-called economic model, is used as input for optimising pit designs.
2 **Pit optimisation.** Based on inputs collected, mine optimisation studies are undertaken to define the economically exploitable pit shell, excluding benefits derived from Inferred Resources. The Lerchs-Grossman algorithm or floating cone methodology seeks to maximise net present value (NPV), but does not account for risk. The envelope that defines the theoretical pit for maximum NPV is seldom the envelope selected by the planning engineer as the final pit envelope. The latter is usually contained within the former and is often decided according to diminishing return, geometric (e.g. constrained by existing infrastructure) and/or geotechnical constraint.
3 **Mine design and scheduling.** After selecting the optimal pit shell, detailed mine design and production scheduling follows. The detailed pit design and production schedule will include cutback sequence, ramps, inter-ramp slope angles, safety berms, step-outs, bench stacking, etc. Material contained in the final pit design will include Measured, Indicated and Inferred Resources. In other words, despite having allocated a zero value for revenue to Inferred Resources during the pit optimisation, in the final pit design and production schedule it is necessary to recognise this material.

Material in the mine plan defined as Ore Reserves is material above the economic cut-off value, depending on technical and financial considerations, and includes in-pit and stockpiled material. Material that falls below the cut-off value for all primary and secondary process methods is deemed to be waste.

The next step is to determine logical mining phases and complete detailed mine designs. Operational constraints are applied to these designs which, after operational mining and processing schedules are developed, optimise the defined exploitation sequence and meet the business strategy.

All material included in the life-of-asset production schedule (i.e. ore treated) and categorised Measured or Indicated Resource is converted to Ore Reserves. Inferred Resource in the LOM production schedule (i.e. ore treated) is classified as scheduled Mineral Resources.

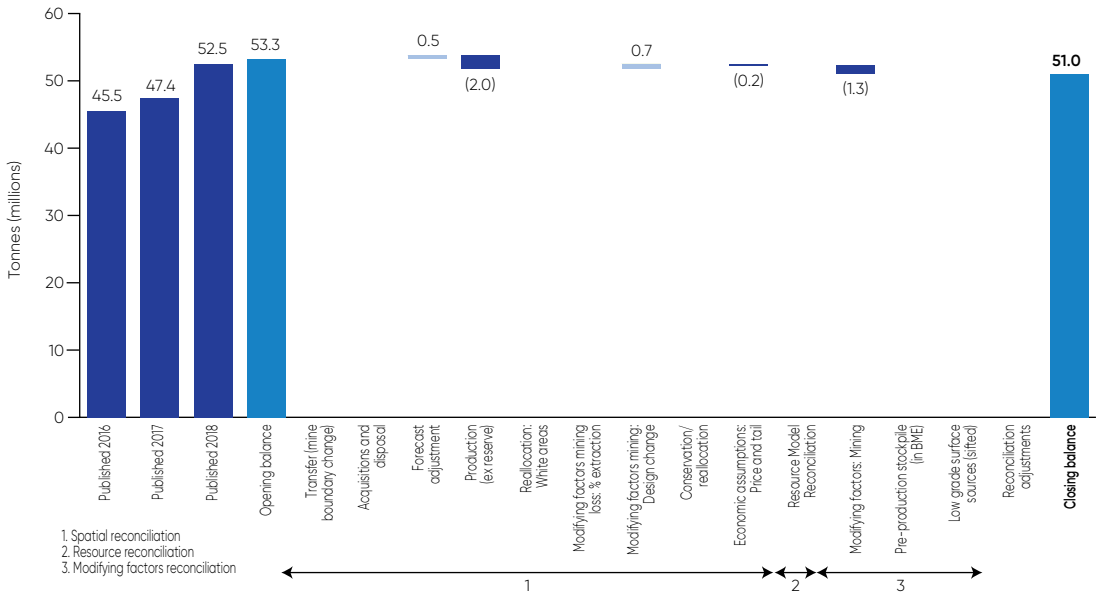
The scheduled Ore Reserves are peer reviewed and signed off by the Competent Person(s).

## Reconciliation

In the process of continuous improvement, Anglo American Platinum continues to use a three-stage reconciliation of year-on-year changes as well as a consistent and auditable process for tracking and reconciling year-on-year movements in Ore Reserves using the basic resource to reserve reports.

The first stage is a spatial reconciliation that defines the impact of boundary changes, face-position adjustments, mine-design changes, as well as areas that are no longer economically viable for current price forecasts. The second stage of the reconciliation defines changes in the Resource model which is updated annually incorporating new drilling and sampling data. The final stage defines changes in the modifying factors being applied to mine design to produce the production profile.

**Example: Waterfall chart of year-on-year changes created from the reconciliation methodology (Unki Mine)**




## Chromite by-product from UG2 tailings

Under current market conditions, the recovery of saleable chromite concentrate as a by-product from UG2 Reef processing is economically viable. Currently chrome recovery plants, with a community partner, are operating at Amandelbult complex. The Amandelbult complex UG2 Reef at Tumela and Dishaba mines has an average *in situ* $Cr_2O_3$ grade of approximately 32%.

Recovery from inter-stage or final UG2 flotation tail streams produces saleable chromite product. The amount of chromite concentrate produced is directly linked to UG2 Reef production and recovered as a by-product in processing. Chromite recoveries are between 13% and 23% from every tonne of UG2 ore processed (overall yield factor) when the $Cr_2O_3$ content in the UG2 ore is greater than 20%. The resultant chrome concentrate has an average $Cr_2O_3$ grade of between 41% and 44%. The contained monetary value of the chromite by-product is included when assessing UG2 reef Ore Reserves where the chromite recovery plants are in production.

## Low grade surface storage facilities (surface sources)

Bulk samples taken on historical surface storage facilities have demonstrated the intermittent presence of low-grade reef material. This stems from historical haulage development on PGM-bearing horizons such as the Pseudo 1 (P1) horizon at Amandelbult Complex, and from historical ore-handling processes.

Owing to the difficulty of effectively evaluating these large-scale facilities, they are, across operations not reported under the Ore Reserve and Mineral Resource estimates but categorised as Mineralisation.

Where concentrator capacity is available, low grade material that has indicated potential is sampled and evaluated on a localised basis for processing as part of surface-sources material.

## Tailings storage facilities (surface sources)

Operational tailings storage facilities are not fully evaluated and therefore not reported as part of published Ore Reserves. Dormant or non-operational tailings storage facilities at the Amandelbult Complex have been evaluated and reported as Mineral Resources, but no Ore Reserves have been declared.

**Note:** Sibanye-Stillwater provided revised Ore Reserves estimates for Kroondal Mine and Siphumelele 3 Shaft post the finalisation of the 2020 Ore Reserves and Mineral Resources Report. This revision is not considered material and is not reflected in the tables in this report. For additional details please refer to the Sibanye-Stillwater Annual Report.

**Nico Nel** HND, MRM
SAIMM (706878)

*Principal mine planner*
Anglo American Platinum

Johannesburg
15 March 2021

## Ore Reserves summary: estimates

### Ore Reserves (4E)

The estimates below are reported on a 100% basis. The 2019 estimates for joint and non-managed operations are restated on a 100% basis. Estimates of 0.0 represent numbers less than 0.05.

| | | Ore Reserves (ROM Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| **Mine** | **Classification** | **2020** | 2019 | **2020** | 2019 | **2020** | 2019 | **2020** | 2019 |
| Tumela (100%) Merensky Reef | Proved | **0.1** | 0.1 | **5.51** | 5.74 | **0** | 0 | **0.0** | 0.0 |
| | Probable | **0.4** | – | **3.90** | – | **2** | – | **0.1** | – |
| | **Total** | **0.5** | 0.1 | **4.12** | 5.74 | **2** | 0 | **0.1** | 0.0 |
| Tumela (100%) UG2 Reef | Proved | **36.7** | 37.8 | **4.62** | 4.62 | **169** | 175 | **5.4** | 5.6 |
| | Probable | **0.3** | 0.3 | **3.92** | 4.10 | **1** | 1 | **0** | 0.0 |
| | **Total** | **37.0** | 38.1 | **4.62** | 4.61 | **170** | 176 | **5.5** | 5.6 |
| Dishaba (100%) Merensky Reef | Proved | **5.3** | 4.4 | **5.18** | 5.27 | **27** | 23 | **0.9** | 0.7 |
| | Probable | **5.0** | 4.4 | **4.93** | 4.76 | **25** | 21 | **0.8** | 0.7 |
| | **Total** | **10.3** | 8.7 | **5.06** | 5.02 | **52** | 44 | **1.7** | 1.4 |
| Dishaba (100%) UG2 Reef | Proved | **54.7** | 53.4 | **4.33** | 4.19 | **237** | 224 | **7.6** | 7.2 |
| | Probable | **8.3** | 8.9 | **4.35** | 4.22 | **36** | 37 | **1.2** | 1.2 |
| | **Total** | **63.0** | 62.3 | **4.33** | 4.20 | **273** | 261 | **8.8** | 8.4 |
| Mogalakwena (100%) Platreef (*in-situ*) | Proved | **763.4** | 767.3 | **2.90** | 2.96 | **2,214** | 2,271 | **71.2** | 73 |
| | Probable | **444.3** | 428.0 | **3.00** | 3.07 | **1,333** | 1,314 | **42.8** | 42.2 |
| | **Total** | **1,207.8** | 1,195.3 | **2.94** | 3.00 | **3,547** | 3,585 | **114.1** | 115.3 |
| Mogalakwena (100%) Platreef primary stockpile | Proved | **19.3** | 20.0 | **1.96** | 2.54 | **38** | 51 | **1.2** | 1.6 |
| | Probable | **40.9** | 40.9 | **1.47** | 1.47 | **60** | 60 | **1.9** | 1.9 |
| | **Total** | **60.2** | 60.8 | **1.63** | 1.82 | **98** | 111 | **3.1** | 3.6 |
| Mototolo Complex (100%) UG2 Reef | Proved | **18.2** | 21.8 | **3.46** | 3.36 | **63** | 73 | **2.0** | 2.4 |
| | Probable | **7.5** | 6.0 | **3.50** | 3.26 | **26** | 20 | **0.8** | 0.6 |
| | **Total** | **25.7** | 27.8 | **3.47** | 3.34 | **89** | 93 | **2.9** | 3.0 |
| Unki (100%) MSZ | Proved | **24.3** | 27.2 | **3.33** | 3.29 | **81** | 89 | **2.6** | 2.9 |
| | Probable | **26.7** | 26.1 | **3.28** | 3.24 | **87** | 85 | **2.8** | 2.7 |
| | **Total** | **51.0** | 53.3 | **3.30** | 3.27 | **168** | 174 | **5.4** | 5.6 |
| Siphumelele 3# (100%) UG2 Reef | Proved | **14.7** | 17.1 | **2.62** | 2.52 | **38** | 43 | **1.2** | 1.4 |
| | Probable | **–** | – | **–** | – | **–** | – | **–** | – |
| | **Total** | **14.7** | 17.1 | **2.62** | 2.52 | **38** | 43 | **1.2** | 1.4 |
| Modikwa (50%) UG2 Reef | Proved | **15.9** | 13.5 | **4.33** | 4.45 | **69** | 60 | **2.2** | 1.9 |
| | Probable | **29.2** | 32.5 | **4.14** | 4.12 | **121** | 134 | **3.9** | 4.3 |
| | **Total** | **45.1** | 46.0 | **4.21** | 4.22 | **190** | 194 | **6.1** | 6.2 |
| Kroondal (50%) UG2 Reef | Proved | **9.3** | 12.1 | **2.50** | 2.62 | **23** | 32 | **0.7** | 1.0 |
| | Probable | **–** | – | **–** | – | **–** | – | **–** | – |
| | **Total** | **9.3** | 12.1 | **2.50** | 2.62 | **23** | 32 | **0.7** | 1.0 |

## Ore Reserves summary: estimates continued

### Ore Reserves (4E) continued

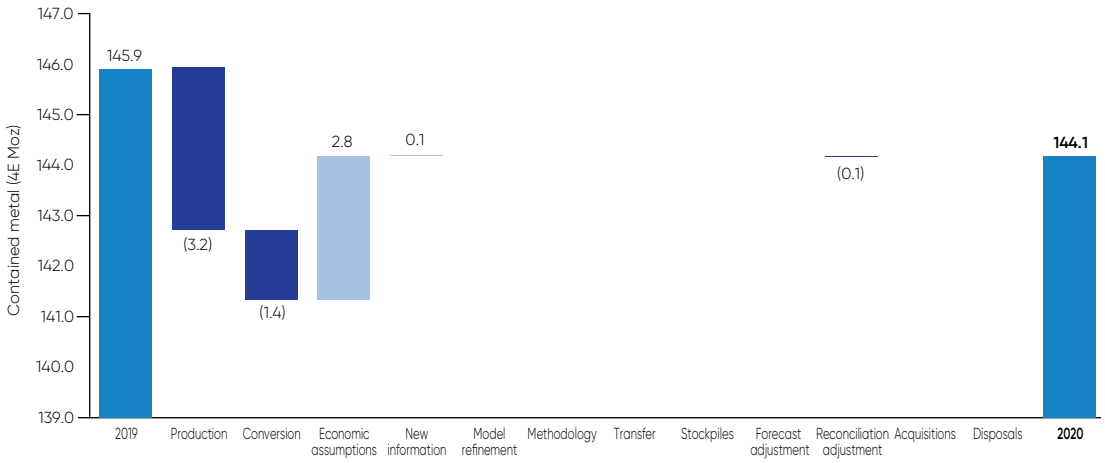
| Reef | Classification | Ore Reserves (ROM Mt) 2020 | Ore Reserves (ROM Mt) 2019 | Grade 4E g/t 2020 | Grade 4E g/t 2019 | Contained metal 4E tonnes 2020 | Contained metal 4E tonnes 2019 | Contained metal 4E Moz 2020 | Contained metal 4E Moz 2019 |
|---|---|---|---|---|---|---|---|---|---|
| **South Africa** | | | | | | | | | |
| Merensky Reef | Proved | **5.3** | 4.4 | **5.19** | 5.28 | **27** | 23 | **0.9** | 0.8 |
| | Probable | **5.4** | 4.4 | **4.85** | 4.76 | **27** | 21 | **0.8** | 0.7 |
| | Total | **10.8** | 8.8 | **5.01** | 5.03 | **54** | 44 | **1.7** | 1.4 |
| UG2 Reef | Proved | **149.4** | 155.7 | **4.01** | 3.90 | **599** | 607 | **19.3** | 19.5 |
| | Probable | **45.3** | 47.6 | **4.07** | 4.03 | **184** | 192 | **5.9** | 6.2 |
| | Total | **194.7** | 203.3 | **4.03** | 3.93 | **783** | 799 | **25.2** | 25.7 |
| Platreef | Proved | **763.4** | 767.3 | **2.90** | 2.96 | **2,214** | 2,271 | **71.2** | 73.0 |
| | Proved primary stockpiles | **19.3** | 20.0 | **1.96** | 2.54 | **38** | 51 | **1.2** | 1.6 |
| | Total proved | **782.7** | 787.3 | **2.88** | 2.95 | **2,252** | 2,322 | **72.5** | 74.7 |
| | Probable | **444.3** | 428.0 | **3.00** | 3.07 | **1,333** | 1,314 | **42.8** | 42.2 |
| | Probable primary stockpiles | **40.9** | 40.9 | **1.47** | 1.47 | **60** | 60 | **1.9** | 1.9 |
| | Total probable | **485.2** | 468.9 | **2.87** | 2.93 | **1,393** | 1,374 | **44.7** | 44.2 |
| | Total | **1,267.9** | 1,256.2 | **2.88** | 2.94 | **3,645** | 3,696 | **117.2** | 118.8 |
| South Africa reefs | Proved | **937.4** | 947.4 | **3.07** | 3.12 | **2,878** | 2,952 | **92.6** | 94.9 |
| | Probable | **535.9** | 520.8 | **2.99** | 3.05 | **1,604** | 1,587 | **51.5** | 51.0 |
| | Total | **1,473.4** | 1,468.3 | **3.05** | 3.09 | **4,482** | 4,539 | **144.1** | 145.9 |
| **Zimbabwe** | | | | | | | | | |
| Main Sulphide Zone (MSZ) | Proved | **24.3** | 27.2 | **3.33** | 3.29 | **81** | 89 | **2.6** | 2.9 |
| | Probable | **26.7** | 26.1 | **3.28** | 3.24 | **87** | 85 | **2.8** | 2.7 |
| | Total | **51.0** | 53.3 | **3.30** | 3.27 | **168** | 174 | **5.4** | 5.6 |
| **South Africa and Zimbabwe** | | | | | | | | | |
| All reefs (Merensky, UG2, Platreef, MSZ) | Proved | **961.8** | 974.6 | **3.08** | 3.12 | **2,959** | 3,041 | **95.2** | 97.8 |
| | Probable | **562.6** | 546.9 | **3.01** | 3.06 | **1,691** | 1,672 | **54.3** | 53.7 |
| | Total | **1,524.4** | 1,521.6 | **3.05** | 3.10 | **4,650** | 4,713 | **149.6** | 151.5 |

## Ore Reserves summary: reconciliation

The reconciliation waterfall charts report the total Proved and Probable Ore Reserves on a 100% basis. The 2019 estimates are restated on a 100% basis. Definitions of reconciliation categories are on page 87. Estimates of 0.0 represent numbers less than 0.05.

### South Africa

**Anglo American Platinum Merensky, UG2 and Platreef Ore Reserves – South Africa**
**2019 – 2020 reconciliation** (4E Moz)



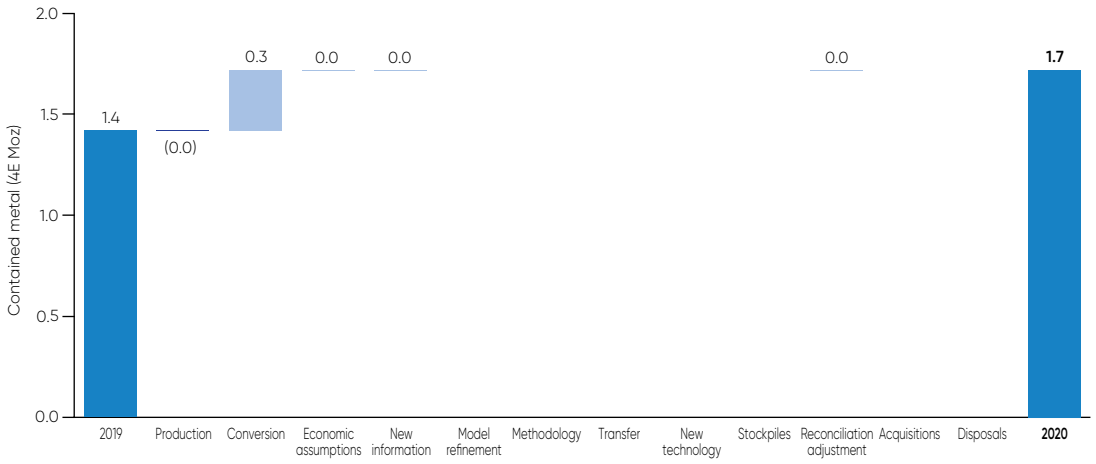

The Ore Reserve 4E content decreased by 1.2% to 144.1 4E Moz and the tonnage marginally increased by 0.3% to 1,473.4Mt (2019:1,468.3Mt). This was primarily due to annual production and net reallocation of Ore Reserves to Mineral Resources. The decrease was partially offset by conversion of additional Mineral Resources at Mogalakwena due to improved economic assumptions.

- Annual production– Merensky Reef, UG2 Reef and Platreef: −3.2 4E Moz ▷ −31.9Mt
- Mogalakwena – reallocation of Platreef Ore Reserves to Mineral Resources following pit design changes: −2.6 4E Moz ▷ −42.3Mt
- Dishaba, Tumela and Modikwa – conversion of UG2 Reef Mineral Resources to Ore Reserves due to mine design changes: +0.9 4E Moz ▷ +4.5Mt
- Dishaba and Tumela – conversion of Merensky Reef Mineral Resources to Ore Reserves in the 15 E drop-down project area: +0.3 4E Moz ▷ +1.5Mt
- Mogalakwena – improved economic assumptions resulted in the conversion of additional Mineral Resources to Ore Reserves: +2.8 4E Moz ▷ +69.2Mt

## Ore Reserves summary: reconciliation continued

### Merensky Reef

**Anglo American Platinum Merensky Reef Ore Reserves – South Africa**
**2019 – 2020 reconciliation** (4E Moz)

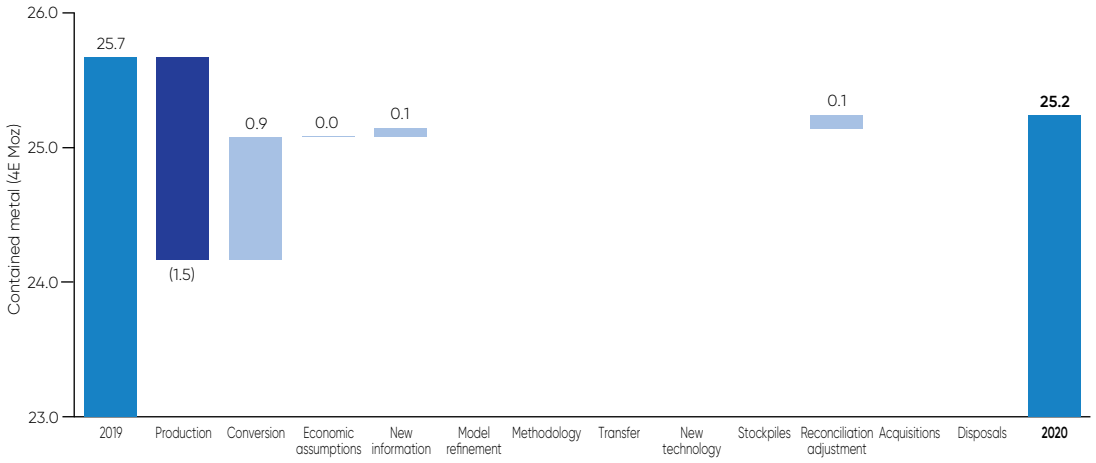



The Ore Reserve 4E ounce content increased by 22.2% to 1.7 4E Moz and the tonnage increased by 22.4% to 10.8Mt (2019: 8.8Mt), primarily due to the conversion of Mineral Resources to Ore Reserves at the 15E drop-down project area at Tumela.

- Tumela – conversion: +0.3 4E Moz ▷ +1.5Mt
- Dishaba annual production: –0.0 4E Moz ▷ –0.3Mt

### UG2 Reef

**Anglo American Platinum UG2 Reef Ore Reserves – South Africa**
**2019 – 2020 reconciliation** (4E Moz)



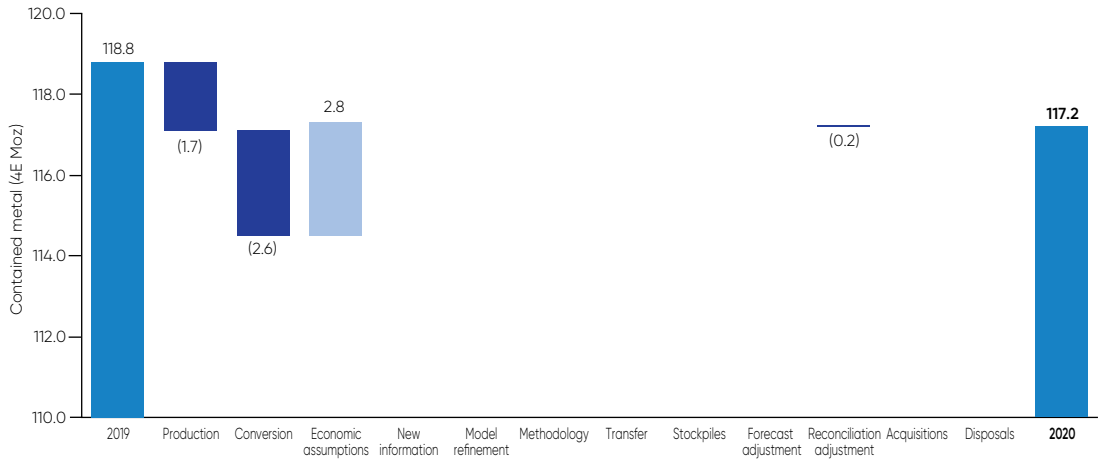

The Ore Reserve 4E ounce content slightly decreased by 1.8% to 25.2 4E Moz and the tonnage decreased by 8.6Mt to 194.7Mt (2019: 203.3Mt) due to production which is partially offset by conversion of Mineral Resources to Ore Reserves at Dishaba, Tumela and Modikwa.

- Total annual production: –1.5 4E Moz ▷ –14.4Mt
- Dishaba, Tumela and Modikwa – conversion of Mineral Resources to Ore Reserves due to mine design changes: +0.9 4E Moz ▷ +4.5Mt

## Ore Reserves summary: reconciliation continued

### Platreef

**Anglo American Platinum Platreef Ore Reserves – South Africa**
**2019 – 2020 reconciliation** (4E Moz)

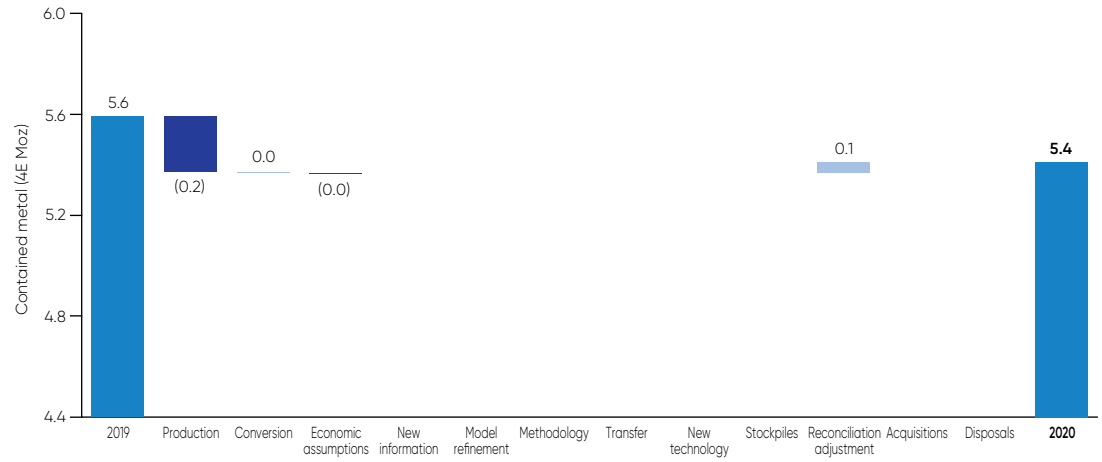



The Ore Reserves 4E ounce content (including primary ore stockpiles) decreased by 1.4% to 117.2 4E Moz and the tonnage increased by 0.9% to 1,267.9Mt (2019: 1,256.2Mt) mainly due to:

- Annual production: –1.7 4E Moz ▷ –17.2Mt
- Reallocation of Ore Reserves to Mineral Resources following pit design changes: –2.6 4E Moz ▷ –42.3Mt
- Economic assumptions – improved economics resulted in the conversion of additional ore previously classified as low value to Ore Reserves: +2.8 4E Moz ▷ +69.2Mt

### Zimbabwe – Main Sulphide Zone (MSZ)

**Anglo American Platinum MSZ Ore Reserves – Zimbabwe**
**2019 – 2020 reconciliation** (4E Moz)




The Ore Reserve 4E ounce content decreased by 3.3% to 5.4 4E Moz and the tonnage decreased by 4.3% (53.3Mt to 51.0 Mt) mainly due to:.

- Annual production: –0.2 4E Moz ▷ –2.0Mt

# Estimates and reconciliation – managed operations

as at 31 December 2020

## Mogalakwena Mine (100%)

Mogalakwena Mine complex is located 30km north-west of the town of Mokopane in Limpopo province, South Africa. It is wholly owned and managed by Anglo American Platinum. The mine is at steady-state production, and is positioned for optimised organic growth and to deliver maximum value. The mine is also focusing on exceeding industry benchmarks through technology and innovation.

**Phuthela Myeni**
Competent Person: Mineral Resources
*Resource Geologist*
SACNASP, PrSciNat
12 years

**Marlon van Heerden**
Competent Person: Ore Reserves
*Principal LOM planning*
SAIMM, member
13 years

### Property description

The mine exploits the Platreef, the primary PGM-bearing horizon developed in the Northern Limb of the Bushveld Complex. The reef averages 150m in thickness, with a prominently top-loaded grade profile, hosting optimal mineralisation in the upper 30m to 40m of the reef package.

### Brief history

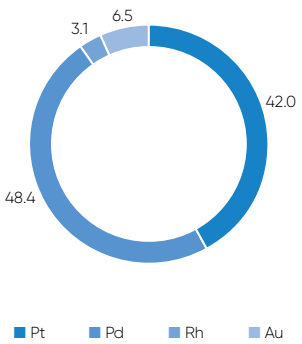
The earliest recorded prospecting activity commenced on the farms Tweefontein and Sandsloot in 1925. Trenching, drilling and bulk sampling preceded the start of mining activities on the Zwartfontein, Sandsloot and Vaalkop farms. This was accompanied by construction and commissioning the beneficiation plant.

Mining and production halted following the Great Depression of 1929, with activity on the tenement only resuming in 1968, by Johannesburg Consolidated Investments (JCI), the predecessor entity of Anglo American Platinum. Between 1968 and 1989, building on a comprehensive framework and sampling programme, significant exploration involving field mapping, drilling and geophysics, was completed along the strike extent on the Northern Limb. The results of this exploration allowed for effective target assessment, and vectored focus on the originally identified properties of Sandsloot, Tweefontein, Vaalkop, along with Overysel immediately to the north.

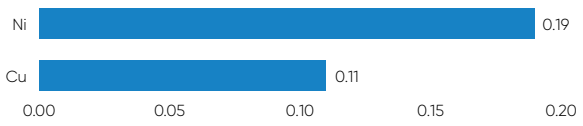
In the late 1980s and early 1990s, evaluation activities which included bulk sampling and underground trial mining were undertaken, with the latter focused on the Overysel portion of the property. The outcome of these activities became key drivers in adopting a high-tonnage, low-grade extractive method of the extraordinarily thick and variable Platreef orebody. Bulk open-pit was selected as the preferred mining method, with primary production beginning at Sandsloot in 1993. This was followed by extensive exploration programmes and development of the Zwartfontein pit in the early 2000s. The exploitation of Central and North pits followed in 2006 and 2008 respectively, now the primary mining areas of Mogalakwena Mine.

In 2019, Anglo American Platinum and Atlatsa Resources completed the acquisition and inclusion of the mineral endowment specified in the Central Block and Kwanda North Prospecting Rights into Mogalakwena Mining Right. The Central Block and Kwanda North areas have not been classified as Mineral Resources while further exploration and evaluation work is under way and therefore will not have an impact on the 2020 Mogalakwena reported Mineral Resource base.

Mogalakwena Platreef 4E Prill
(%)




Mogalakwena Platreef base metal grades
(%)



## Mineral rights

The Mogalakwena Mining Right covers an area of 37,211ha. This includes the Central Block and Kwanda North Mineral Rights that are incorporated into the Mogalakwena Mining Right. Anglo American Platinum holds a converted Mining Right under the Department of Mineral Resources and Energy (DMRE) ref LP 50 MR, valid from July 2010 to July 2040. The anticipated life-of-mine plan (LOMP) exceeds the current Mining Right expiry date (2040). An application to extend the Mining Right will be submitted at the appropriate time. There is reasonable expectation that this extension will not be withheld.

There are no known impediments to the Right.

## Mining method

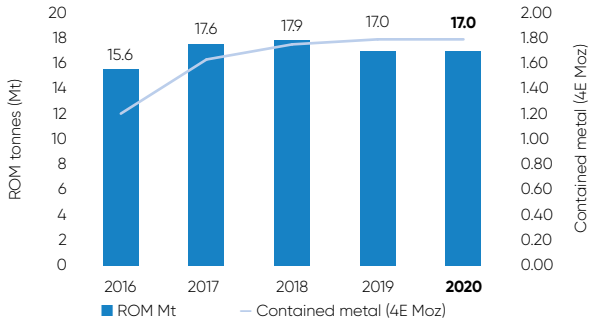
Mining of the orebody is by open-pit methods (truck-and-shovel).

## Operational infrastructure

Current mining areas comprises five open-pits: Sandsloot, Zwartfontein, Mogalakwena South, North and Central. Pit depths vary from 30m to 260m. Ore is milled on-mine at the North and South concentrators as well as at the Baobab concentrator.

| | Units | Platreef |
|---|---|---|
| **Mineral Resource assumptions** | | |
| Grade cut-off | 4E g/t | **1.0** |
| Average density | g/cm$^3$ | **3.1** |
| **Ore Reserves modifying factors** | | |
| Mining dilution | % | **3.2** |
| Stripping ratio (waste:ore) | | **6.9** |
| 4E concentrator recoveries | % | **78 – 82** |
| Mine call factor | % | **100** |
| Paylimit grade *(in situ)* | 4E g/t | **2.1** |
| Paylimit grade (stockpiles) | 4E g/t | **1.0 – 1.7** |

Mogalakwena Platreef production history
(ROM)



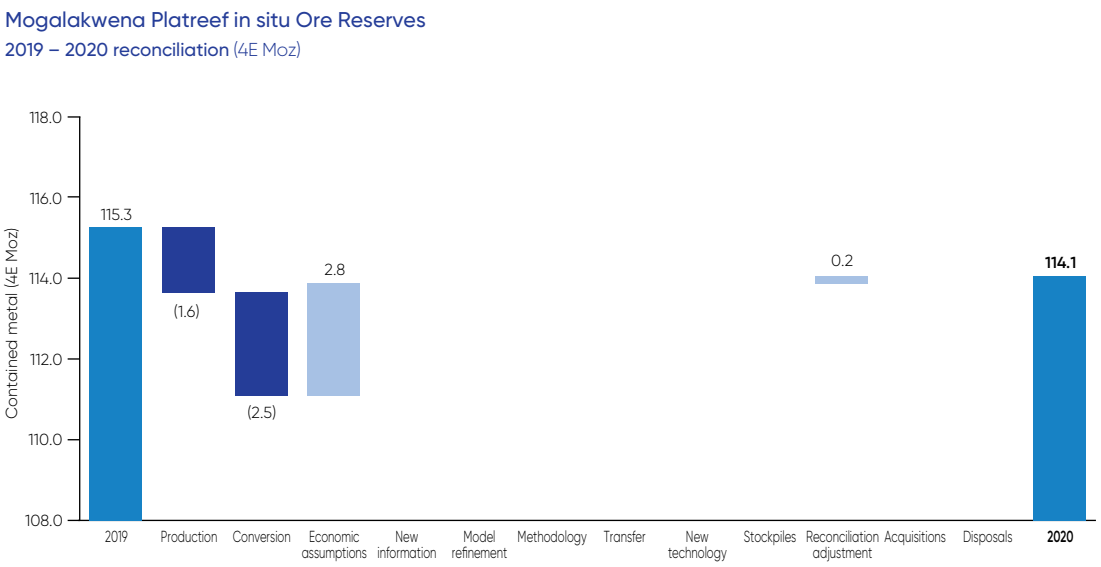

## Ore Reserves

| Mogalakwena (100%) | Reserve life | Classification | Ore Reserves (ROM) Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | **2020** | 2019 | **2020** | 2019 | **2020** | 2019 | **2020** | 2019 |
| Platreef *(in situ)* | >20 | Proved | **763.4** | 767.3 | **2.90** | 2.96 | **2,214** | 2,271 | **71.2** | 73.0 |
| | | Probable | **444.3** | 428.0 | **3.00** | 3.07 | **1,333** | 1,314 | **42.8** | 42.2 |
| | | **Total** | **1,207.8** | 1,195.3 | **2.94** | 3.00 | **3,547** | 3,585 | **114.1** | 115.3 |
| Platreef primary stockpiles | | Proved | **19.3** | 20.0 | **1.96** | 2.54 | **38** | 51 | **1.2** | 1.6 |
| | | Probable | **40.9** | 40.9 | **1.47** | 1.47 | **60** | 60 | **1.9** | 1.9 |
| | | **Total** | **60.2** | 60.8 | **1.63** | 1.82 | **98** | 111 | **3.1** | 3.6 |

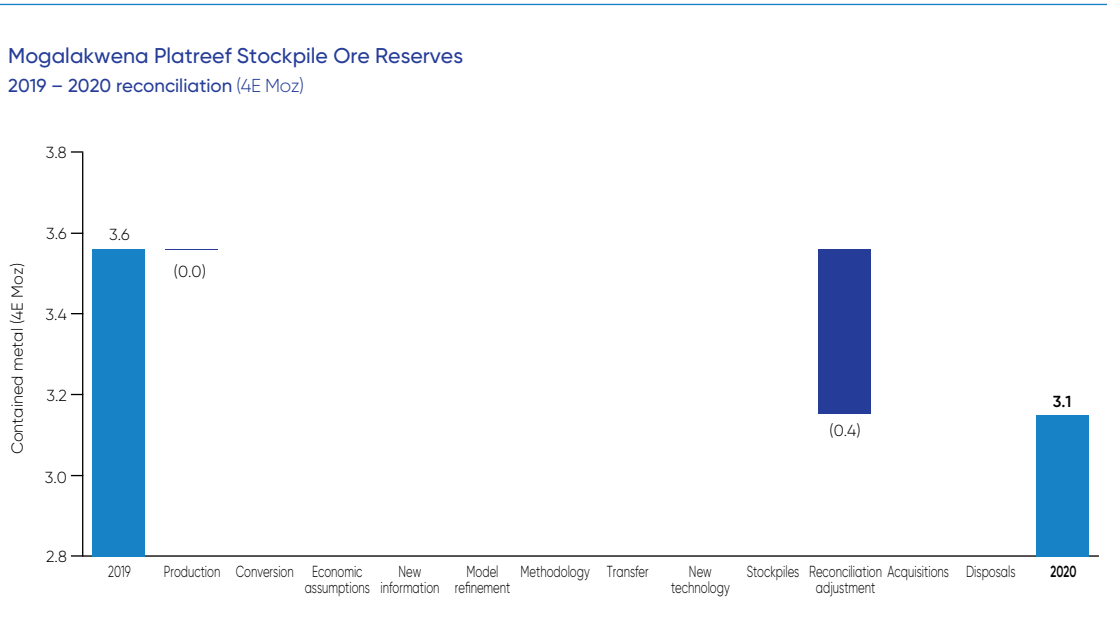
# Mogalakwena Mine (100%) continued

## **Ore Reserves** continued

### Platreef *in situ* Ore Reserves reconciliation




### Platreef primary stockpile Ore Reserves reconciliation

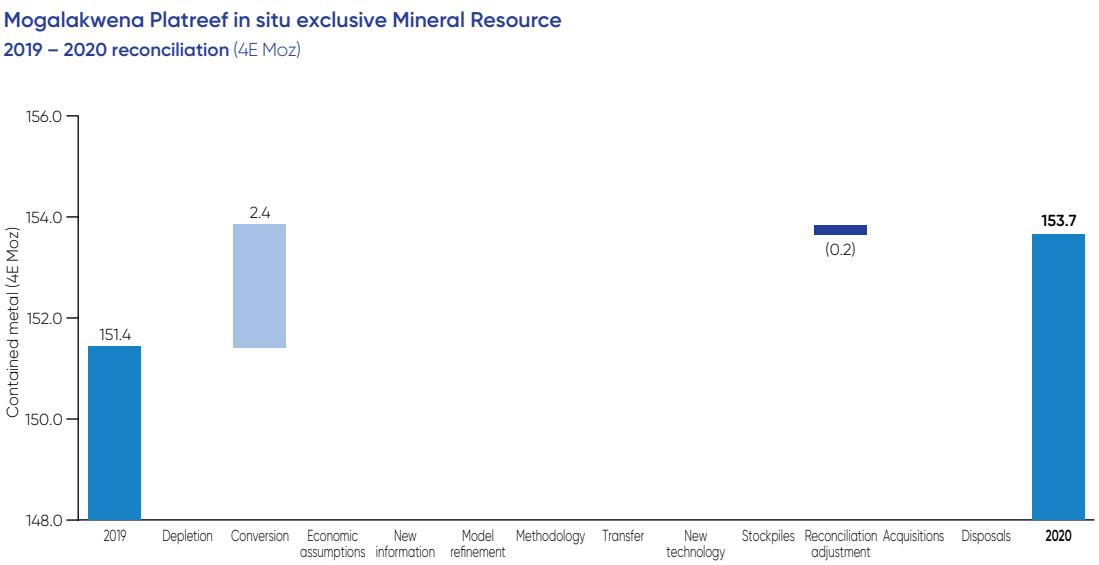


## Exclusive Mineral Resources

| Mogalakwena* (100%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| Platreef *(in situ)* | Measured | **246.4** | 221.1 | **2.17** | 2.18 | **535** | 482 | **17.2** | 15.5 |
| | Indicated | **1,389.7** | 1,375.7 | **2.30** | 2.31 | **3,196** | 3,178 | **102.8** | 102.2 |
| | Measured and Indicated | **1,636.0** | 1,596.8 | **2.28** | 2.29 | **3,731** | 3,660 | **119.9** | 117.7 |
| | Inferred | **595.7** | 596.0 | **1.76** | 1.76 | **1,048** | 1,050 | **33.7** | 33.8 |
| | Total | **2,231.7** | 2,192.8 | **2.14** | 2.15 | **4,779** | 4,710 | **153.7** | 151.4 |
| Platreef stockpiles | Measured | **3.9** | 4.4 | **3.22** | 3.20 | **12** | 14 | **0.4** | 0.4 |
| | Indicated | **–** | – | **–** | – | **–** | – | **–** | – |
| | Measured and Indicated | **3.9** | 4.4 | **3.22** | 3.20 | **12** | 14 | **0.4** | 0.4 |
| | Inferred | **–** | – | **–** | – | **–** | – | **–** | – |
| | Total | **3.9** | 4.4 | **3.22** | 3.20 | **12** | 14 | **0.4** | 0.4 |

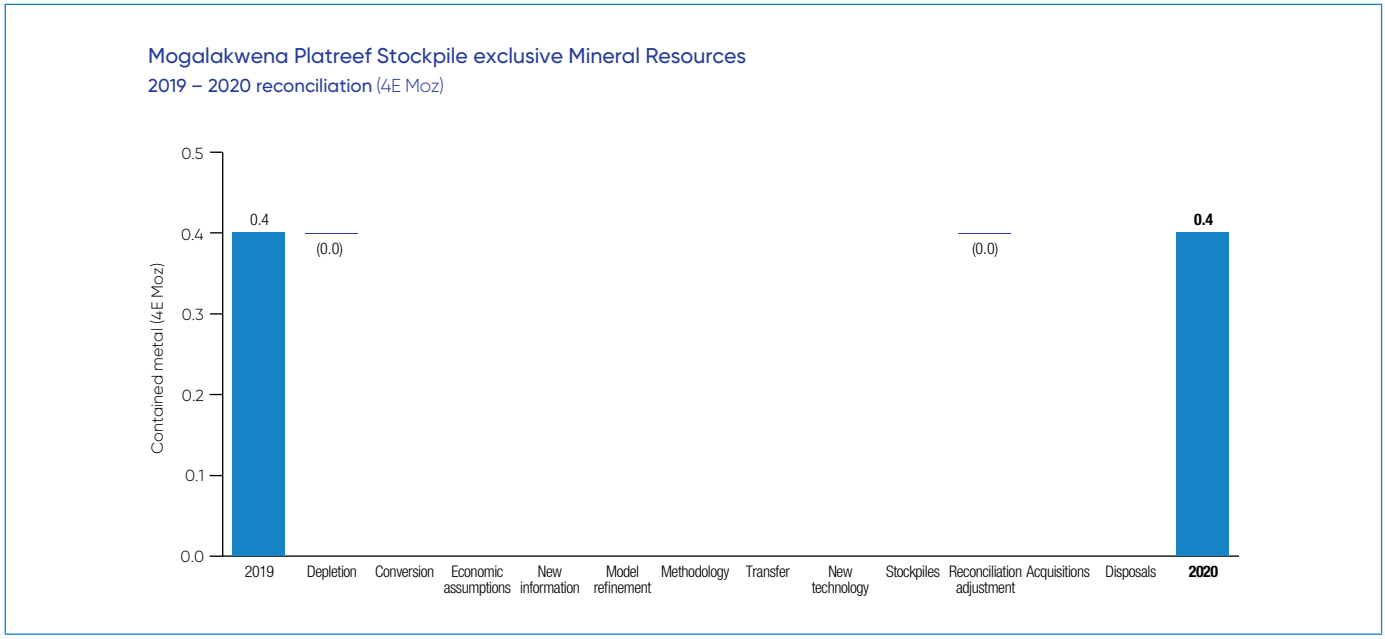
* *A 1.0 4E g/t cut-off grade is used to define Platreef Mineral Resources (excluding oxidised and calc-silicate stockpile material for which a 3.0 4E g/t cut-off grade is applied).*

### Platreef *in situ* exclusive Mineral Resources reconciliation



# Mogalakwena Mine (100%) continued

## Platreef primary stockpile exclusive Mineral Resources reconciliation

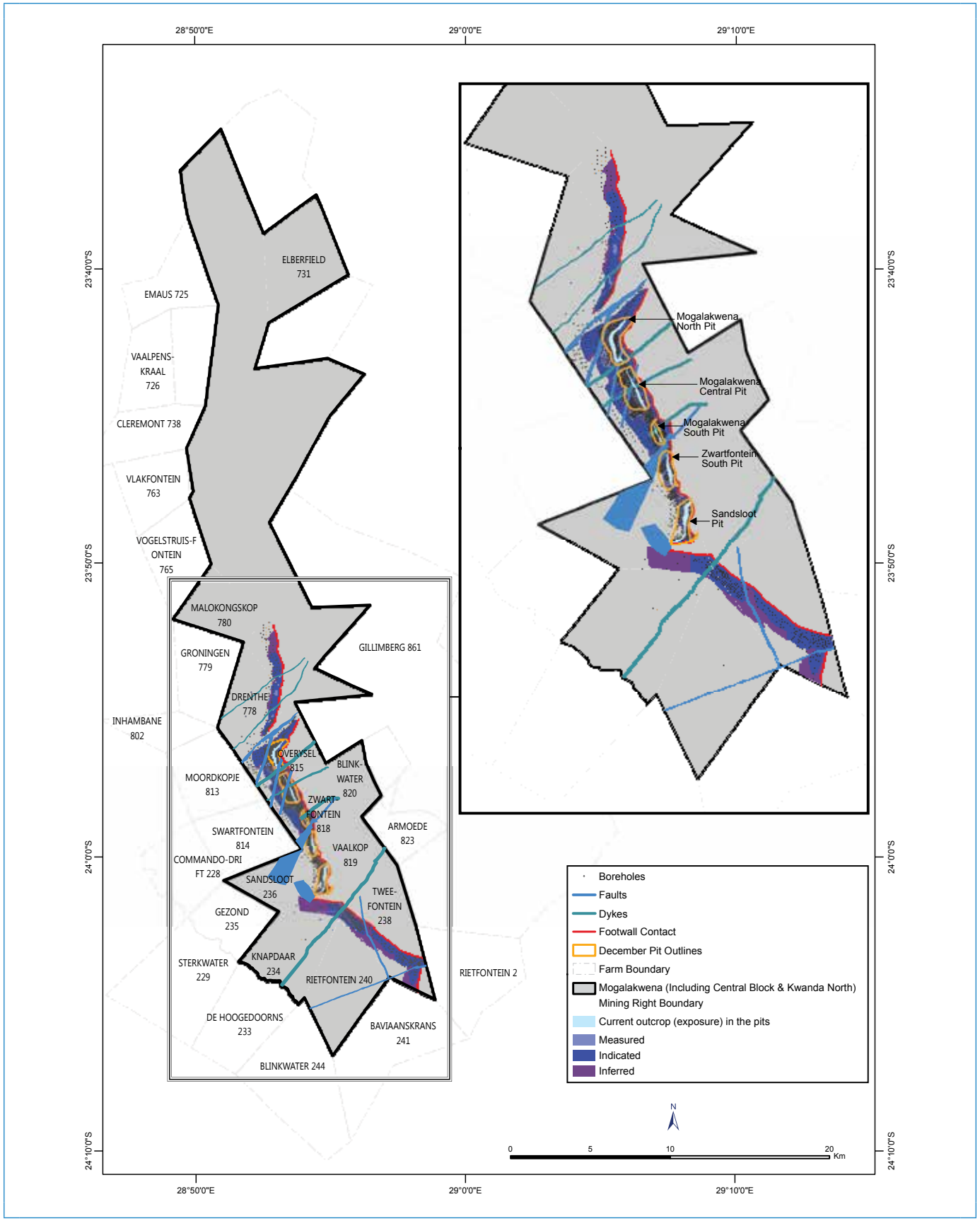



## Inclusive Mineral Resources

| Mogalakwena* (100%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| Platreef *(in situ)* | Measured | **980.9** | 997.6 | **2.82** | 2.83 | **2,768** | 2,819 | **89.0** | 90.6 |
| | Indicated | **1,835.4** | 1,832.8 | **2.52** | 2.51 | **4,614** | 4,604 | **148.3** | 148.0 |
| | Measured and Indicated | **2,816.3** | 2,830.4 | **2.62** | 2.62 | **7,382** | 7,423 | **237.3** | 238.7 |
| | Inferred | **595.7** | 596.0 | **1.76** | 1.76 | **1,048** | 1,050 | **33.7** | 33.8 |
| | Total | **3,412.0** | 3,426.4 | **2.47** | 2.47 | **8,430** | 8,473 | **271.0** | 272.4 |
| Platreef stockpiles | Measured | **64.0** | 67.5 | **1.73** | 1.83 | **110** | 124 | **3.6** | 4.0 |
| | Indicated | **–** | – | **–** | – | **–** | – | **–** | – |
| | Measured and Indicated | **64.0** | 67.5 | **1.73** | 1.83 | **110** | 124 | **3.6** | 4.0 |
| | Inferred | **–** | – | **–** | – | **–** | – | **–** | – |
| | Total | **64.0** | 67.5 | **1.73** | 1.83 | **110** | 124 | **3.6** | 4.0 |

* *A 1.0 4E g/t cut-off grade is used to define Platreef Mineral Resources (excluding oxidised and calc-silicate material for which a 3.0 4E g/t cut-off grade is applied).*

## Mogalakwena Mine Platreef Mineral Resources classification map



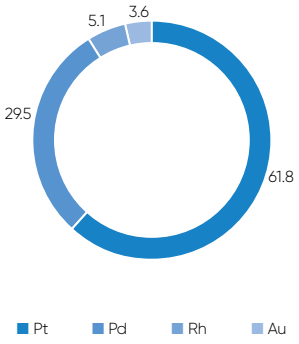
# Amandelbult Complex (100%)

The Amandelbult Complex is in Limpopo, between the towns of Northam and Thabazimbi, on the north-western Limb of the Bushveld Complex in South Africa. The complex is wholly owned and managed by Anglo American Platinum, with two mines: Tumela and Dishaba. The complex is at a steady-state phase, with specific focus on modernisation and mechanisation.

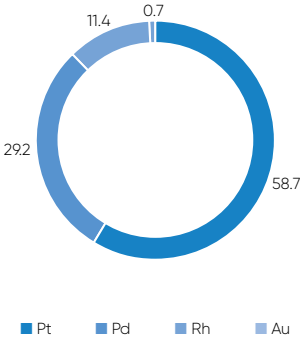
**Kavita Mohanlal**
*Competent Person: Mineral Resources*
*Principal resource estimation platinum*
SACNASP, PrSciNat
17 years

**Johan Laubscher**
Competent Person: Ore Reserves
*Chief surveyor*
SAIMM, member
8 years

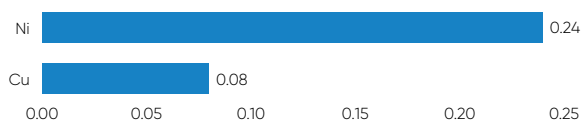
Tumela Merensky Reef 4E Prill
(%)



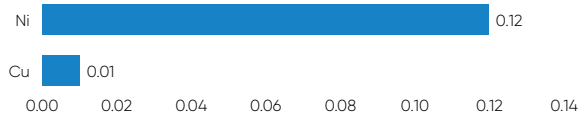

Tumela UG2 Reef 4E Prill
(%)




Tumela Merensky Reef base metal grades
(%)




Tumela UG2 Reef base metal grades
(%)




Chrome grade : 32.3%

## Property description

Dishaba and Tumela mines are at steady-state production, and focused on organic growth and value extraction through mechanisation and modernisation.

The primary reef mined is UG2 Reef, with limited mining of Merensky Reef.

## Brief history

Soon after the discovery of platinum in the eastern Bushveld Complex in the 1920's, attention focused on the geologically similar, but further exposed, western Bushveld. The discovery of the Merensky Reef near Rustenburg in 1925, prompted exploration in other parts of the western Bushveld, including the Amandelbult area. The Steelpoort Platinum Syndicate first prospected the Amandelbult section in 1926. The syndicate was acquired by Potgietersrus Platinum Limited, but the Great Depression of 1929 halted most mining operations in the Bushveld Complex and interest in the Amandelbult area waned.

Later, Rustenburg Platinum Mines (Anglo American Platinum) acquired the Mineral Rights in the area, starting in 1964 with the farm Amandelbult and in 1974 with the acquisition of the Mineral Rights of the farm Elandskuil from Amcor. A mining lease was applied for in 1974.

Mining operations at Amandelbult started on the farm Schilpadsnest but, due to lack of demand for platinum, operations were curtailed in January 1975, and only essential maintenance work was performed. With an improvement in the market, production resumed on a small scale in March 1976, building up to current production. In 2009, Amandelbult Complex was split into two mines, Dishaba and Tumela. Ore Reserves and Mineral Resources are reported separately. The feasibility study for a chrome recovery plant was completed in 2013 and project execution approved in 2014. Construction and commissioning were completed in 2016.

## Mineral rights

The Mining Right covers an area of 12,504ha. Anglo American Platinum holds a converted Mining Right under the DMRE ref LP 48 MR, valid from July 2010 to July 2040. A section 102 application to amend the Amandelbult Mining Right by extending the current Mining Right area to include the "Trainsmash block". The Reg 29(a) NEMA (National Environment Management Act 107 of 1998) application and environmental authorisation is now approved, paving the way for further adjudication of the section 102 amendment application.

There are no known impediments to the Right.

## Mining method

Primarily conventional scattered breast mining method with strike pillars, transitioning into mechanised trackless mining in certain sections. At Dishaba Mine, short-life, low tonnage outcrop strip mining supplements underground production.

## Operational infrastructure

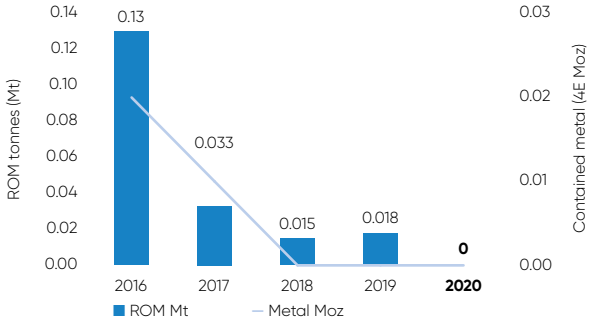
The complex has two vertical shafts at Tumela and Dishaba, three concentrators and two chrome plants. Current working infrastructure has five vertical and seven decline shaft systems to transport rock, employees and material, with mining on the Merensky and UG2 reef horizons. The operating depth for current workings extends from surface to 1.3km below surface.

## Tumela Mine (100%)

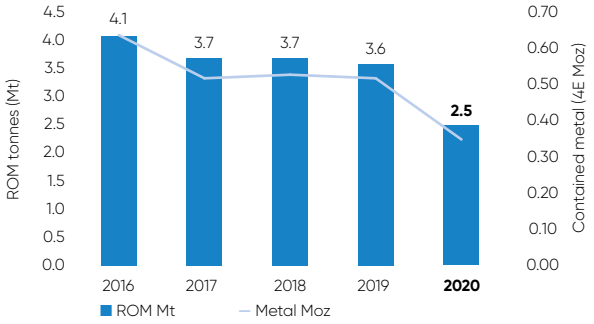
| | Units | MR | UG2 |
|---|---|---|---|
| **Mineral Resource assumptions** | | | |
| Average geological loss | % | 35 | 23 |
| Minimum Resource cut width | cm | 120 | 120 |
| Average density | g/cm³ | 3.2 | 4.1 |
| **Ore Reserves modifying factors** | | | |
| Mining loss factor | % | 5* | 26 |
| Mining dilution | % | 15* | 18 |
| Planned stoping width | cm | 146* | 151 |
| 4E concentrator recoveries | % | 83.6 | 85.4 |
| Mine call factor | % | 100 | 100 |
| Paylimit grade | 4E g/t | 3.62 | 3.62 |

* *Conventional mining method only*

Tumela Merensky Reef production history
(ROM)




Tumela UG2 Reef production history
(ROM)



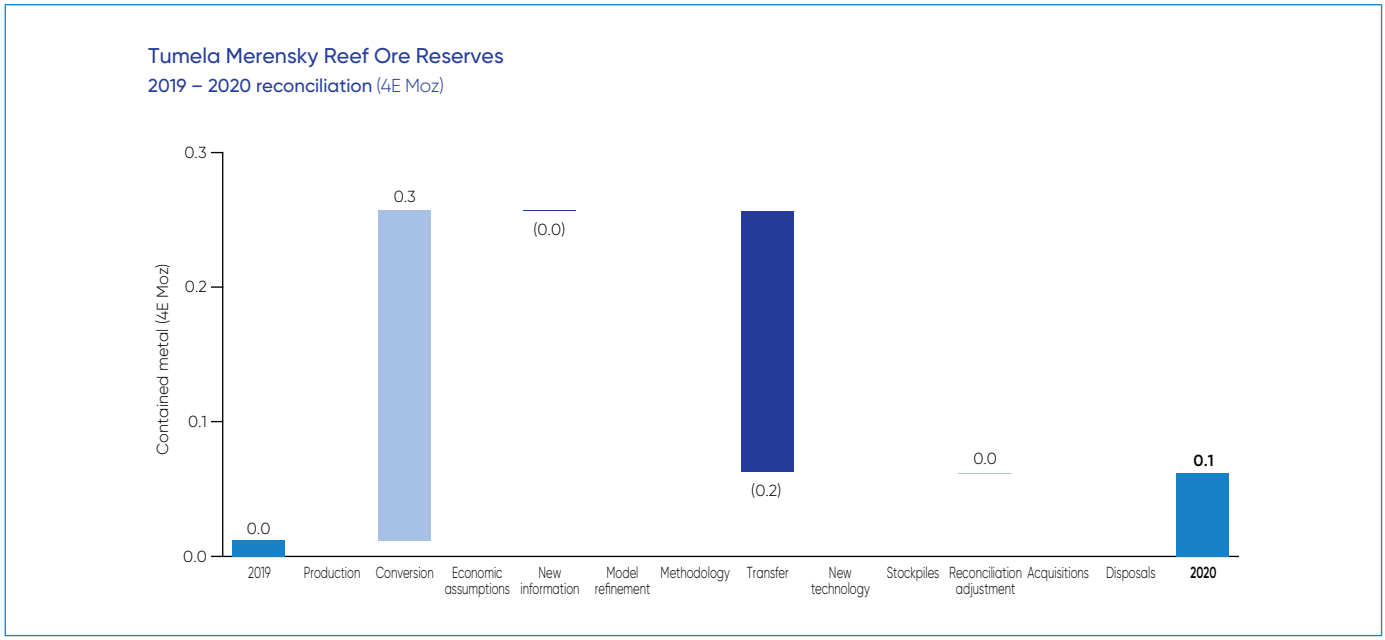

## Ore Reserves

| Amandelbult Complex – Tumela Mine (100%) | Reserve life | Classification | Ore Reserves (ROM) Million tonnes (Mt) 2020 | 2019 | Grade 4E g/t 2020 | 2019 | Contained metal 4E tonnes 2020 | 2019 | Contained metal 4E Moz 2020 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|
| Merensky Reef | 14 | Proved | 0.1 | 0.1 | 5.51 | 5.74 | 0 | 0 | 0.0 | 0.0 |
| | | Probable | 0.4 | – | 3.90 | – | 2 | – | 0.1 | – |
| | | Total | 0.5 | 0.1 | 4.12 | 5.74 | 2 | 0 | 0.1 | 0.0 |
| UG2 Reef | | Proved | 36.7 | 37.8 | 4.62 | 4.62 | 169 | 175 | 5.4 | 5.6 |
| | | Probable | 0.3 | 0.3 | 3.92 | 4.10 | 1 | 1 | 0.0 | 0.0 |
| | | Total | 37.0 | 38.1 | 4.62 | 4.61 | 170 | 176 | 5.5 | 5.6 |

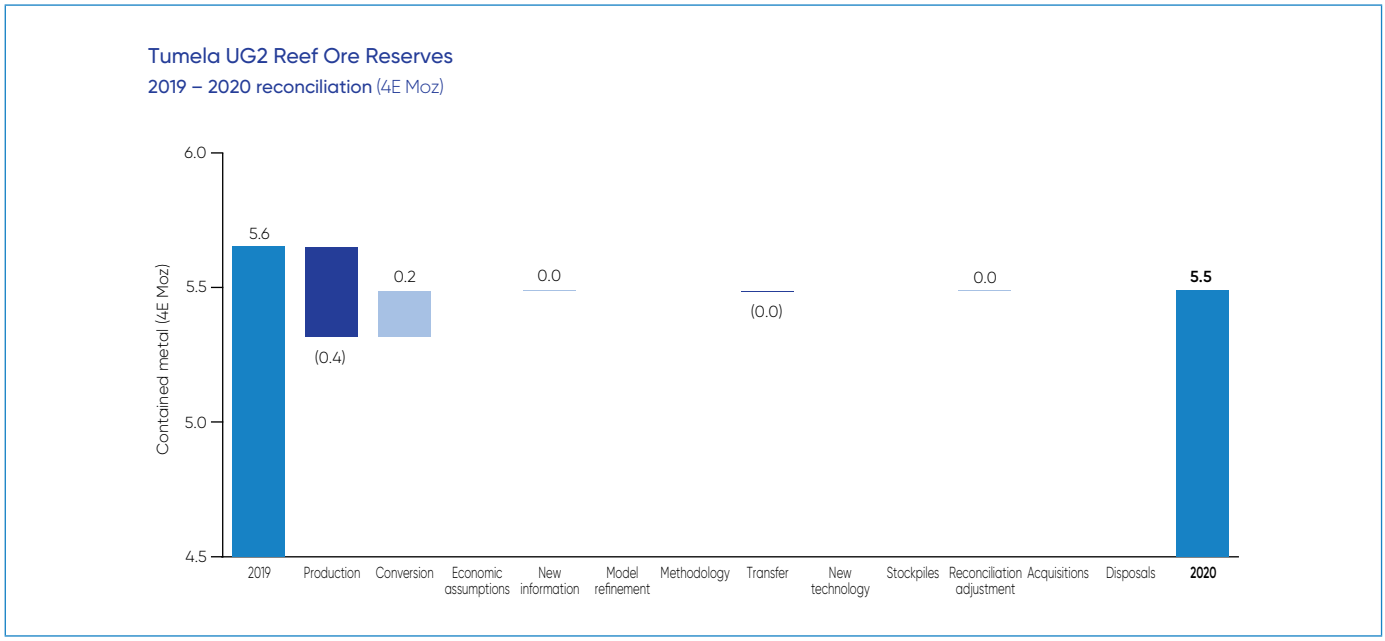
# Amandelbult Complex (100%) continued

## Tumela Mine (100%) continued

### Merensky Reef Ore Reserves reconciliation




### UG2 Reef Ore Reserves reconciliation



## Tumela Mine (100%) continued

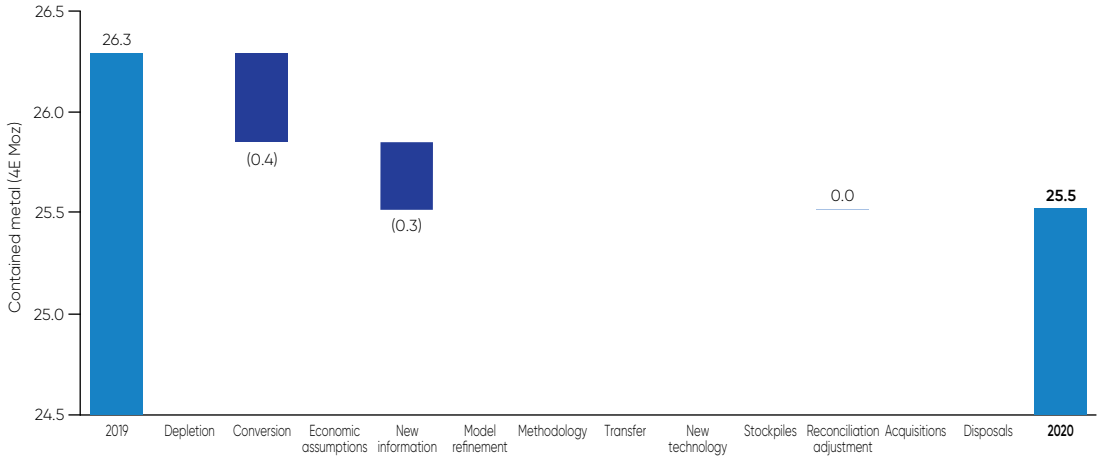
### Exclusive Mineral Resources

| Amandelbult Complex – Tumela Mine (100%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| Merensky Reef | Measured | 23.0 | 24.8 | 6.74 | 6.82 | 155 | 169 | 5.0 | 5.4 |
| | Indicated | 46.2 | 46.5 | 7.04 | 7.04 | 325 | 327 | 10.5 | 10.5 |
| | Measured and Indicated | 69.2 | 71.3 | 6.94 | 6.96 | 480 | 496 | 15.4 | 16.0 |
| | Inferred | 44.6 | 45.8 | 7.04 | 7.02 | 314 | 321 | 10.1 | 10.3 |
| | Total | 113.7 | 117.1 | 6.98 | 6.99 | 794 | 817 | 25.5 | 26.3 |
| UG2 Reef | Measured | 102.4 | 105.6 | 5.40 | 5.40 | 553 | 571 | 17.8 | 18.3 |
| | Indicated | 44.1 | 44.3 | 5.52 | 5.52 | 243 | 244 | 7.8 | 7.9 |
| | Measured and Indicated | 146.5 | 149.9 | 5.44 | 5.44 | 796 | 815 | 25.6 | 26.2 |
| | Inferred | 47.4 | 47.0 | 5.77 | 5.77 | 273 | 271 | 8.8 | 8.7 |
| | Total | 193.8 | 196.9 | 5.52 | 5.52 | 1,069 | 1,086 | 34.4 | 34.9 |

* *The inclusive Measured Resources include low tonnage open cast Merensky Reef Resources of 0.1 4E Moz (0.3Mt at 7.91 (4E) g/t) and UG2 Reef Resources of 0.2 4E Moz (1.3Mt at 5.45 (4E) g/t)*

### Merensky Reef exclusive Mineral Resources reconciliation

**Tumela Merensky Reef exclusive Mineral Resources**
**2019 – 2020 reconciliation** (4E Moz)

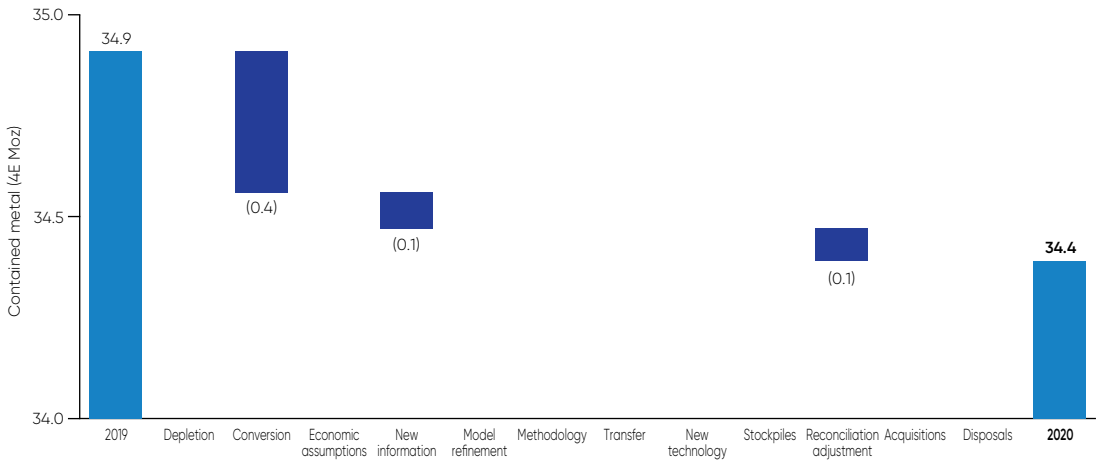


# Amandelbult Complex (100%) continued

## Tumela Mine (100%) continued

### Exclusive Mineral Resources continued

#### UG2 Reef exclusive Mineral Resources reconciliation




### Inclusive Mineral Resources

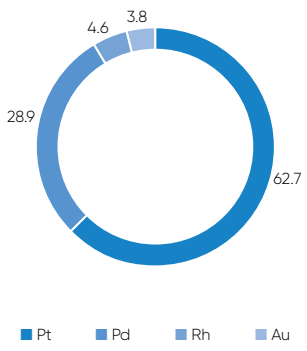
| Amandelbult Complex – Tumela Mine (100%)* | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| Merensky Reef | Measured | 24.0 | 24.9 | 6.78 | 6.81 | 163 | 169 | 5.2 | 5.4 |
| | Indicated | 46.2 | 46.5 | 7.04 | 7.04 | 325 | 327 | 10.5 | 10.5 |
| | Measured and Indicated | 70.2 | 71.4 | 6.95 | 6.96 | 488 | 496 | 15.7 | 16.0 |
| | Inferred | 44.6 | 45.8 | 7.04 | 7.02 | 314 | 321 | 10.1 | 10.3 |
| | Total | 114.8 | 117.1 | 6.99 | 6.98 | 802 | 817 | 25.8 | 26.3 |
| UG2 Reef | Measured | 144.9 | 149.1 | 5.41 | 5.40 | 783 | 805 | 25.2 | 25.9 |
| | Indicated | 44.6 | 44.7 | 5.52 | 5.52 | 246 | 246 | 7.9 | 7.9 |
| | Measured and Indicated | 189.4 | 193.8 | 5.44 | 5.43 | 1,029 | 1,051 | 33.1 | 33.8 |
| | Inferred | 47.4 | 47.0 | 5.77 | 5.77 | 273 | 271 | 8.8 | 8.7 |
| | Total | 236.8 | 240.7 | 5.50 | 5.49 | 1,302 | 1,322 | 41.9 | 42.5 |
| Tailings | Measured | 63.0 | 63.0 | 0.79 | 0.79 | 50 | 50 | 1.6 | 1.6 |
| | Indicated | 8.1 | 8.1 | 0.82 | 0.82 | 7 | 7 | 0.2 | 0.2 |
| | Measured and Indicated | 71.1 | 71.1 | 0.79 | 0.79 | 57 | 57 | 1.8 | 1.8 |
| | Inferred | 1.2 | 1.2 | 0.91 | 0.91 | 1 | 1 | – | – |
| | Total | 72.3 | 72.3 | 0.80 | 0.80 | 58 | 58 | 1.9 | 1.9 |

* *The inclusive Measured Resources include low tonnage open cast Merensky Reef Resources of 0.1 4E Moz (0.3Mt at 7.91 (4E) g/t) and UG2 Reef Resources of 0.2 4E Moz (1.3Mt at 5.45 (4E) g/t).*

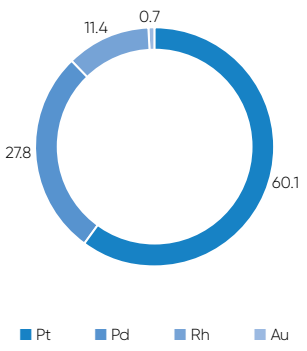
## Dishaba Mine (100%)

| | Units | MR | UG2 |
|---|---|---|---|
| **Mineral Resource assumptions** | | | |
| Average geological loss | % | 22 | 18 |
| Minimum Resource cut width | cm | 120 | 120 |
| Average density | g/cm³ | 3.1 | 4 |
| **Ore Reserves modifying factors** | | | |
| Mining loss factor | % | 35 | 36 |
| Mining dilution | % | 37 | 21 |
| Planned stoping width | cm | 147 | 158 |
| 4E concentrator recoveries | % | 83 | 85 |
| Mine call factor | % | 100 | 100 |
| Paylimit grade | 4E g/t | 3.96 | 3.96 |

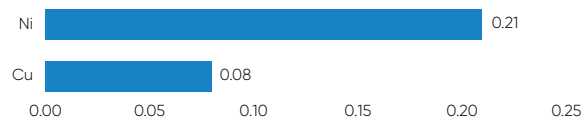
### Dishaba Merensky Reef 4E Prill
(%)



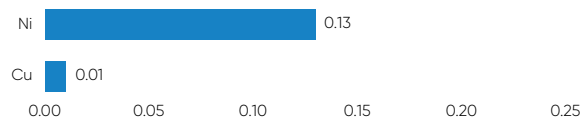

### Dishaba UG2 Reef 4E Prill
(%)




### Dishaba Merensky Reef base metal grades
(%)

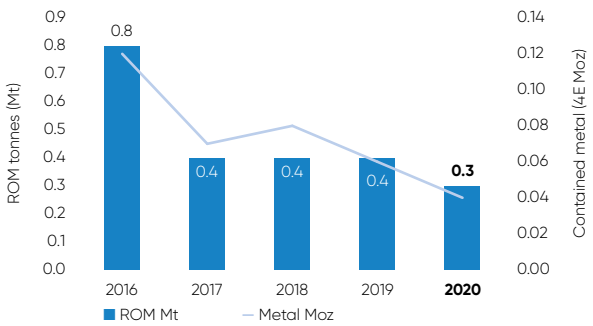



### Dishaba UG2 Reef base metal grades
(%)

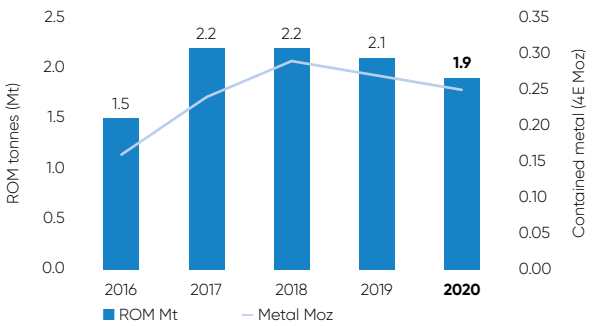



## Chrome grade : 32.2%

### Dishaba Merensky Reef production history
(ROM)




### Dishaba UG2 Reef production history
(ROM)



# Amandelbult Complex (100%) continued

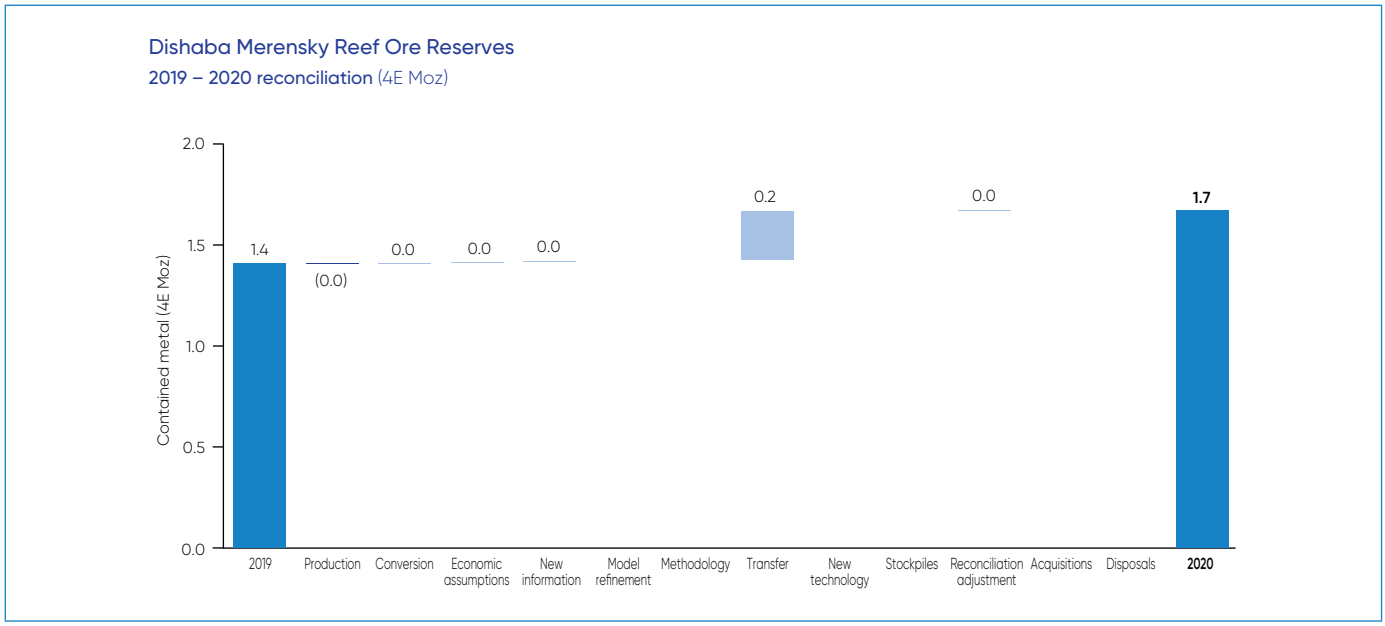
## Dishaba Mine (100%) continued

### Ore Reserves

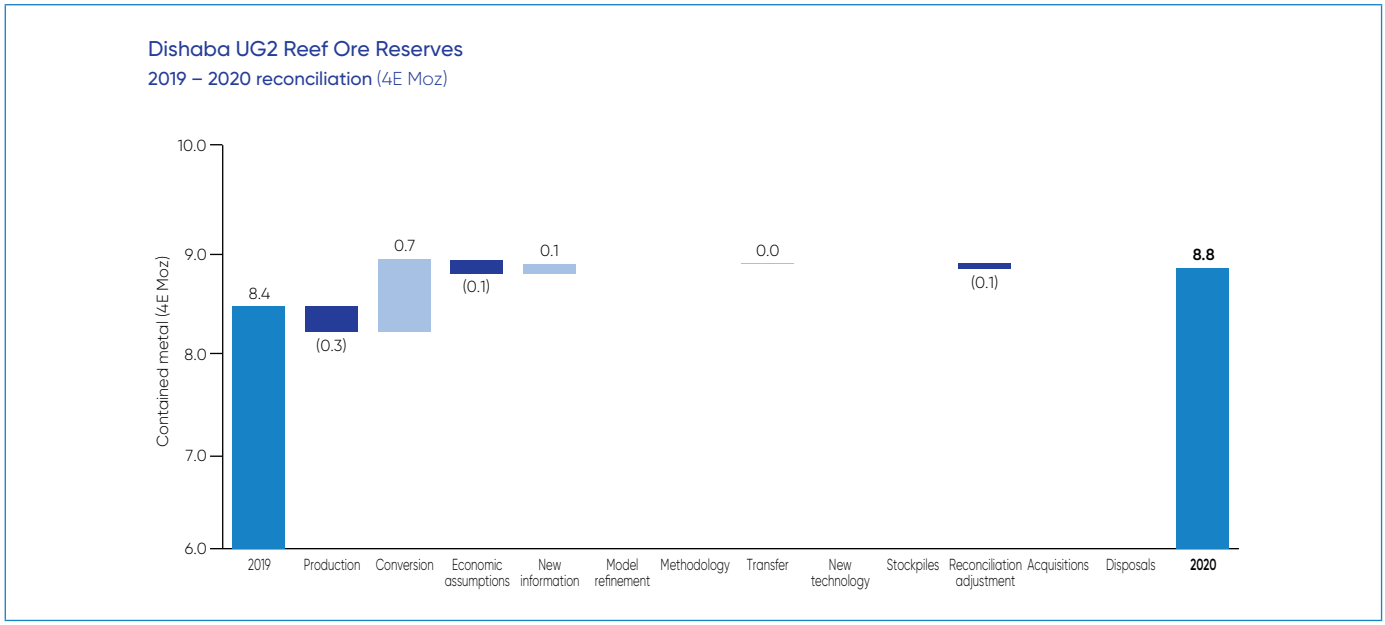
| Amandelbult Complex – Dishaba Mine (100%)* | Reserve life | Classification | Ore Reserves (ROM) Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| Merensky Reef | >20 | Proved | 5.3 | 4.4 | 5.18 | 5.27 | 27 | 23 | 0.9 | 0.7 |
| | | Probable | 5.0 | 4.4 | 4.93 | 4.76 | 25 | 21 | 0.8 | 0.7 |
| | | Total | 10.3 | 8.7 | 5.06 | 5.02 | 52 | 44 | 1.7 | 1.4 |
| UG2 Reef | | Proved | 54.7 | 53.4 | 4.33 | 4.19 | 237 | 224 | 7.6 | 7.2 |
| | | Probable | 8.3 | 8.9 | 4.35 | 4.22 | 36 | 37 | 1.2 | 1.2 |
| | | Total | 63.0 | 62.3 | 4.33 | 4.20 | 273 | 261 | 8.8 | 8.4 |

* *The Proved Ore Reserves includes short life, low tonnage, open cast Merensky Reef Ore Reserves of 0.1 4E Moz ( 0.7Mt at 4.51 (4E) g/t) and UG2 Reef Ore Reserves of 0.02 4E Moz (0.1Mt at 4.94 (4E) g/t).*

### Merensky Reef Ore Reserves reconciliation




### UG2 Reef Ore Reserves reconciliation



## Dishaba Mine (100%) continued

### Exclusive Mineral Resources

| Amandelbult Complex – Dishaba Mine (100%)* | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| Merensky Reef | Measured | 8.0 | 9.4 | 7.11 | 7.01 | 57 | 66 | 1.8 | 2.1 |
| | Indicated | 10.6 | 10.4 | 6.92 | 6.88 | 73 | 71 | 2.4 | 2.3 |
| | Measured and Indicated | 18.5 | 19.8 | 7.00 | 6.94 | 130 | 137 | 4.2 | 4.4 |
| | Inferred | 12.6 | 13.0 | 6.28 | 6.29 | 79 | 82 | 2.6 | 2.6 |
| | Total | 31.2 | 32.8 | 6.71 | 6.68 | 209 | 219 | 6.7 | 7.0 |
| UG2 Reef | Measured | 19.2 | 19.5 | 5.25 | 5.27 | 101 | 103 | 3.2 | 3.3 |
| | Indicated | 22.8 | 22.7 | 5.78 | 5.79 | 132 | 131 | 4.2 | 4.2 |
| | Measured and Indicated | 42.0 | 42.1 | 5.54 | 5.55 | 233 | 234 | 7.5 | 7.5 |
| | Inferred | 8.9 | 9.0 | 5.54 | 5.55 | 49 | 50 | 1.6 | 1.6 |
| | Total | 50.9 | 51.1 | 5.54 | 5.55 | 282 | 284 | 9.1 | 9.1 |

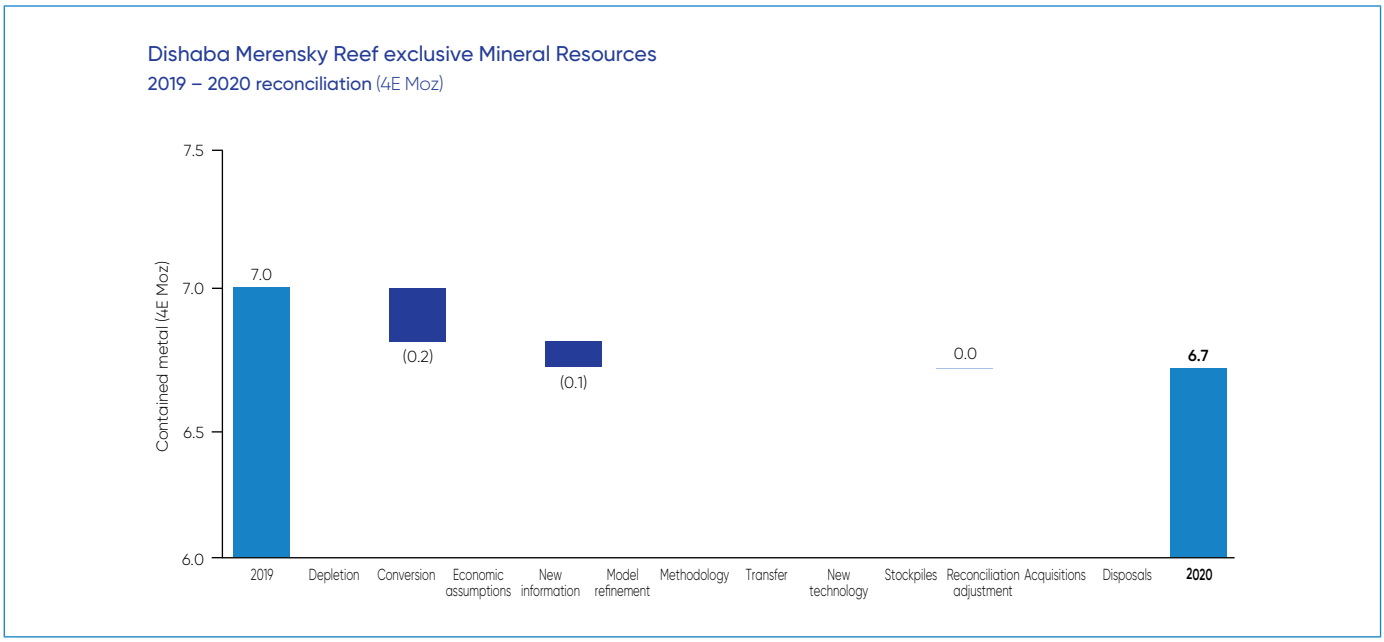
* *The exclusive Measured Resources include low tonnage open cast Merensky Reef Resources of 0.1 4E Moz (0.3Mt at 6.13 (4E) g/t) and UG2 Reef Resources of 0.1 4E Moz (0.5Mt at 5.07 (4E) g/t).*

# Amandelbult Complex (100%) continued

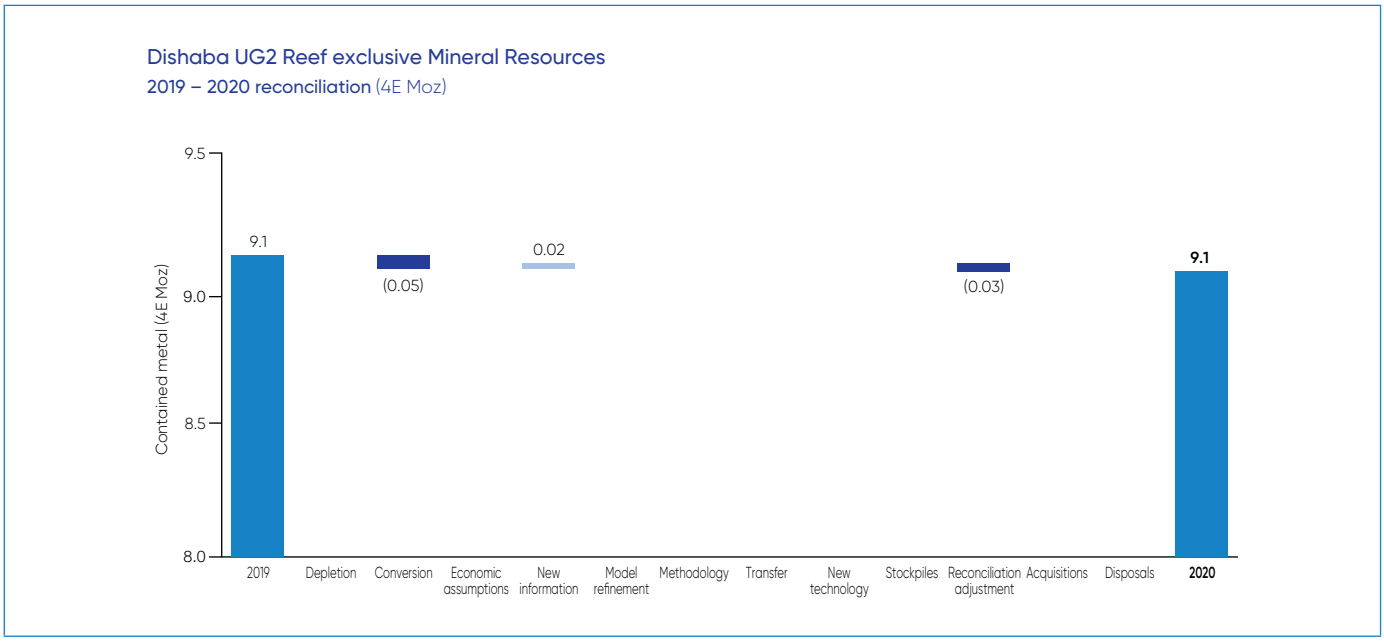
## Dishaba Mine (100%) continued

### Exclusive Mineral Resources continued

#### Merensky Reef exclusive Mineral Resources reconciliation




#### UG2 Reef exclusive Mineral Resources reconciliation



## Dishaba Mine (100%) continued

### Inclusive Mineral Resources

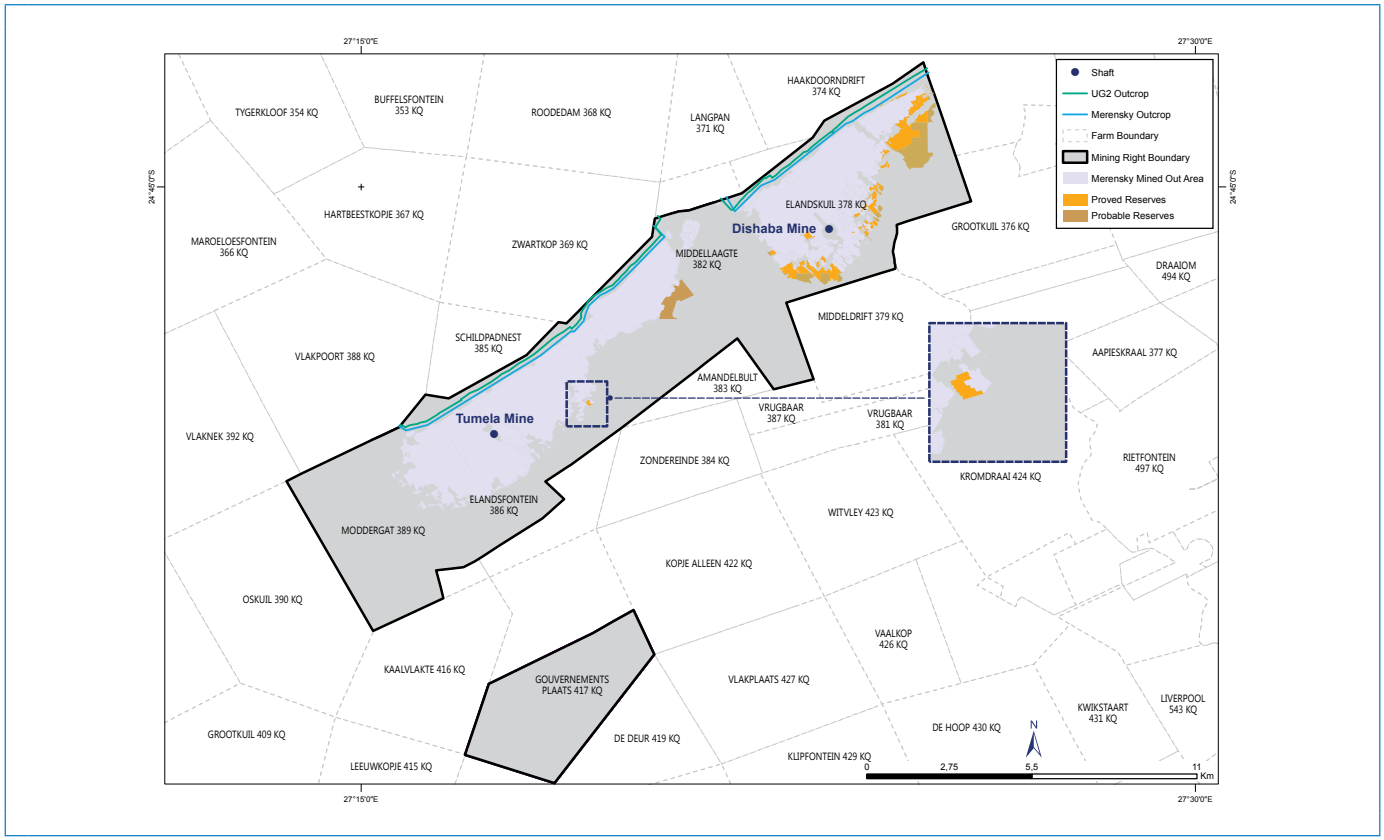
| Amandelbult Complex – Dishaba Mine (100%)* | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| Merensky Reef | Measured | 15.0 | 14.4 | 6.95 | 6.90 | 105 | 99 | 3.3 | 3.2 |
| | Indicated | 15.2 | 15.3 | 6.61 | 6.61 | 100 | 101 | 3.2 | 3.3 |
| | Measured and Indicated | 30.2 | 29.7 | 6.78 | 6.75 | 205 | 200 | 6.6 | 6.5 |
| | Inferred | 12.6 | 13.0 | 6.28 | 6.29 | 79 | 82 | 2.6 | 2.6 |
| | Total | 42.8 | 42.7 | 6.63 | 6.61 | 284 | 282 | 9.1 | 9.1 |
| UG2 Reef | Measured | 91.1 | 91.9 | 5.33 | 5.34 | 486 | 491 | 15.6 | 15.8 |
| | Indicated | 32.6 | 32.5 | 5.68 | 5.69 | 185 | 185 | 6.0 | 5.9 |
| | Measured and Indicated | 123.7 | 124.4 | 5.42 | 5.43 | 671 | 676 | 21.6 | 21.7 |
| | Inferred | 8.9 | 9.0 | 5.54 | 5.55 | 49 | 50 | 1.6 | 1.6 |
| | Total | 132.7 | 133.4 | 5.43 | 5.44 | 720 | 726 | 23.2 | 23.3 |

* *The inclusive Measured Resources include low tonnage open cast Merensky Reef Resources of 0.1 4E Moz (0.5Mt at 6.12 (4E) g/t) and UG2 Reef Resources of 0.2 4E Moz (1.2Mt at 5.18 (4E) g/t).*

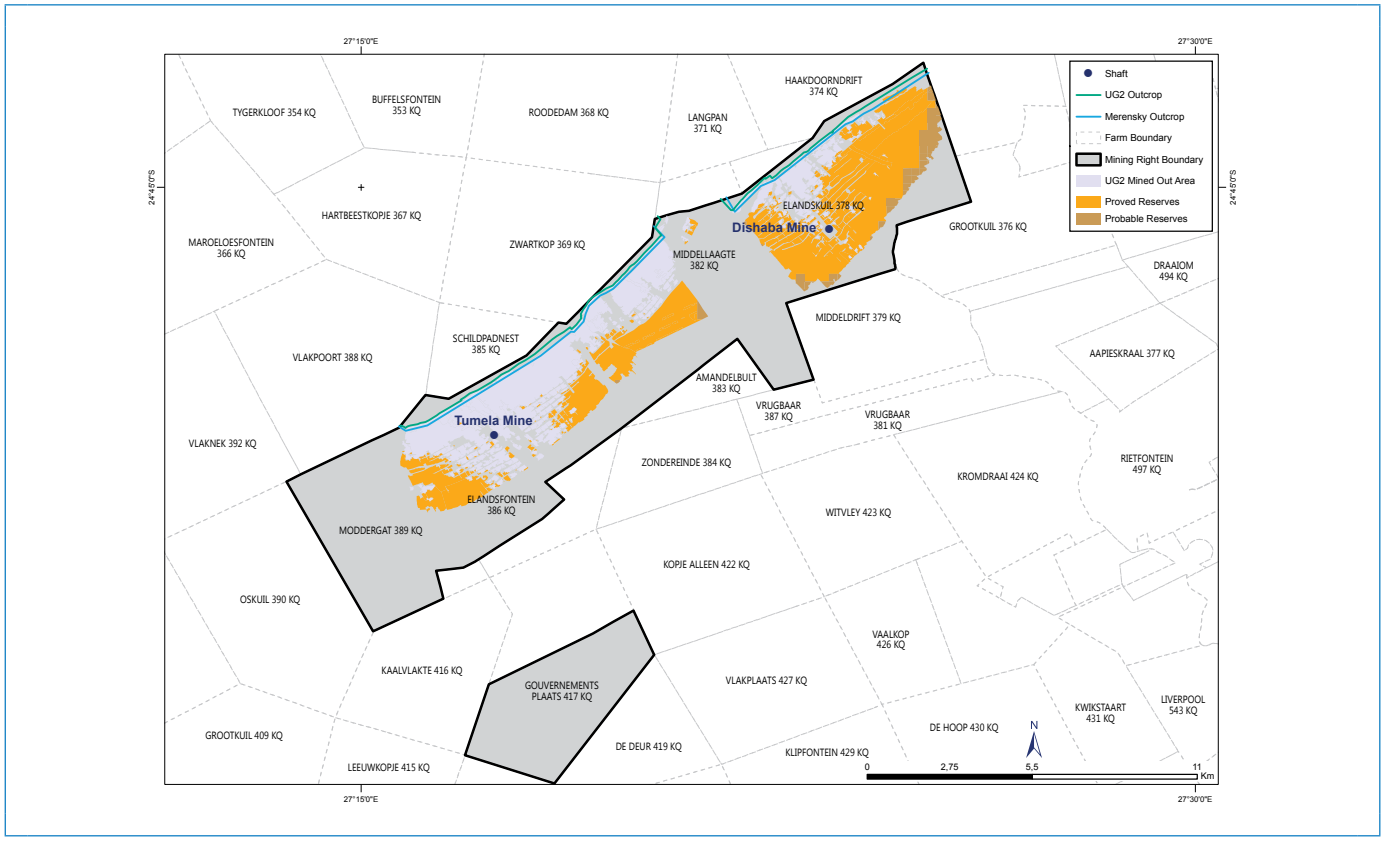
Klass Kokhutja (Instructor) at Dishaba 62 East 3 Level, Amandelbult

# Amandelbult Complex (100%) continued

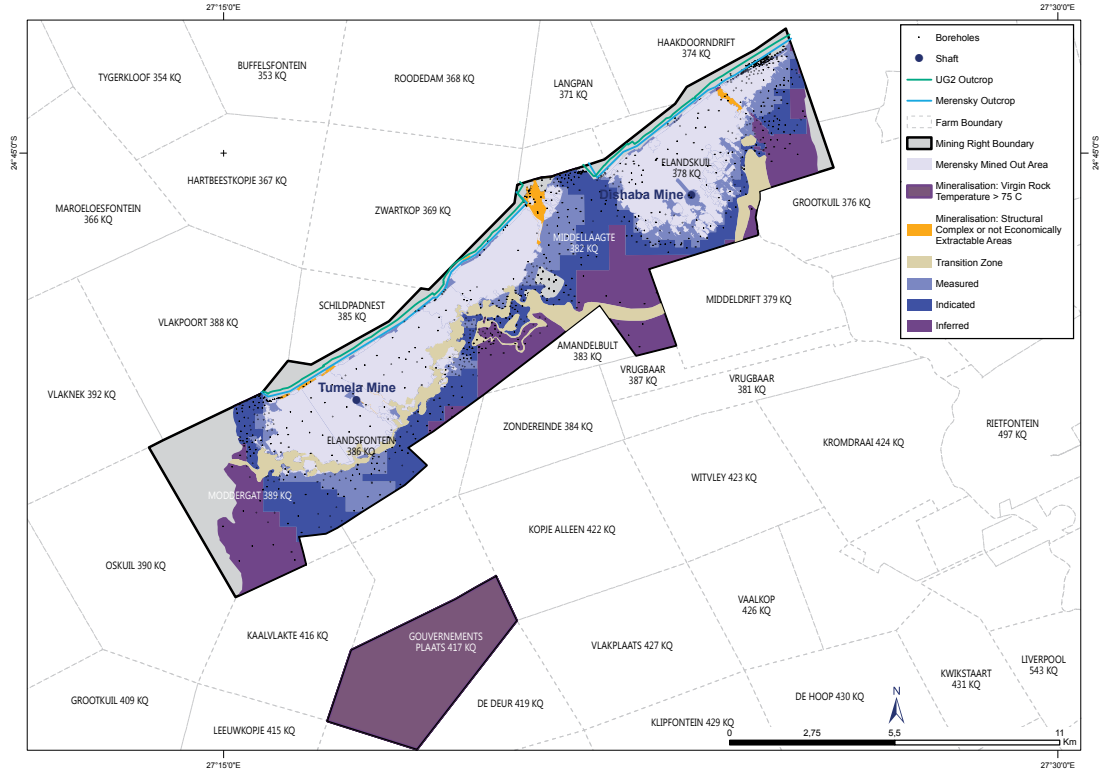
## Amandelbult Complex Merensky Reef Ore Reserves classification map



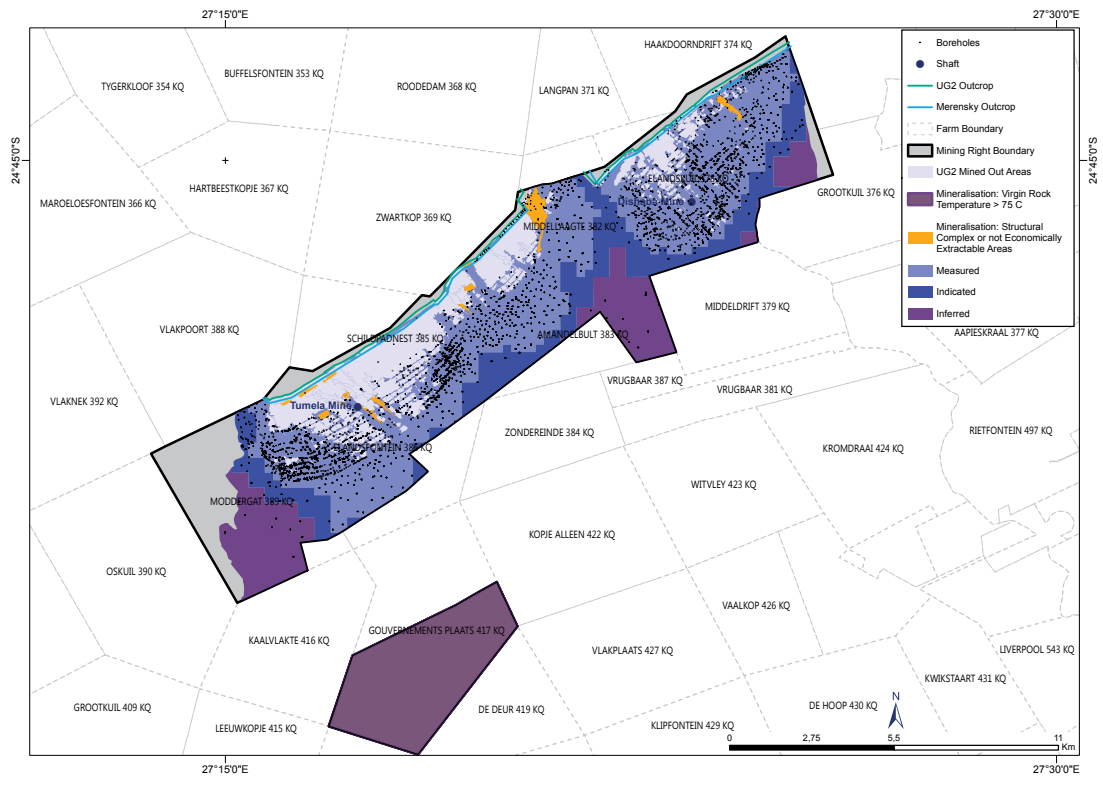

## Amandelbult Complex UG2 Reef Ore Reserves classification map



## Amandelbult Complex Merensky Reef Mineral Resources classification map




## Amandelbult Complex UG2 Reef Mineral Resources classification map



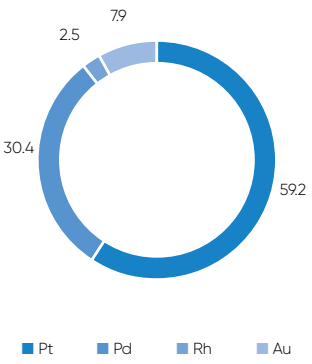
# Mototolo Complex (100%)

Located in the Limpopo province, Mototolo Complex is 30km west of the town of Burgersfort. Mototolo Mine and Der Brochen Project have merged and now report as a consolidated operation. The complex is focused on overall integration and performance improvement.

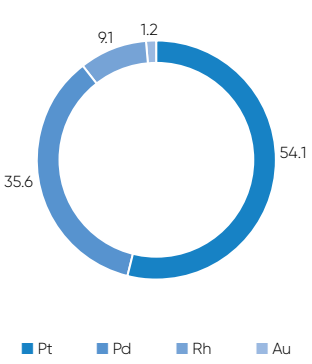
**Iain Colquhoun**
Competent Person: Mineral Resources
*Principal resource estimation platinum*
SACNASP, PrSciNat
23 years

**Raymond Makgato**
Competent Person: Ore Reserves
*Technical assistant: strategy and business development*
SACNASP, PrSciNat
13 years

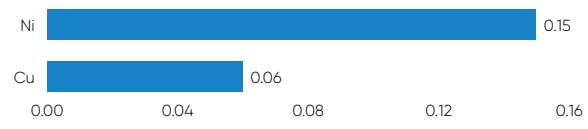
Mototolo Complex Merensky Reef 4E Prill
(%)



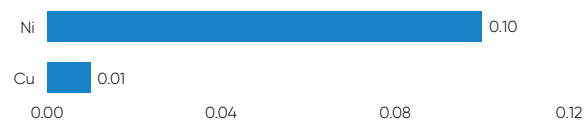

Mototolo Complex UG2 Reef 4E Prill
(%)




Mototolo Complex Merensky Reef base metal grades
(%)




Mototolo Complex UG2 Reef base metal grades
(%)




Chrome grade : 18.2%

## Property description

It forms part of the Eastern Limb of the Bushveld Complex and the primary reef mined is the UG2 Reef.

The consolidated operation allows for the development of a new PGM complex on the Eastern Limb for future replacement and growth optionality. The Der Brochen Project Merensky and UG2 Mineral Resources have been transferred and now report within the Mototolo Complex. Various technical studies are currently under way within the Der Brochen portion of the complex and they are expected to be included and have an impact on the 2021 life-of-mine plan reporting cycle.

## Brief history

The Eastern Limb of the Bushveld Complex has, since the 1920's, been the subject of numerous exploration programmes. Exploration in the Groot and Klein Dwarsrivier Valleys also dates to 1924, with Platinum Proprietary exploring Richmond and Helena between 1924 and 1930. At the same time, Transvaal Consolidated Land and Exploration Company explored the Der Brochen farm, opening up adits and winzes on the Merensky Reef.

In 1999, Xstrata South Africa purchased Consolidated Metallurgical Industries (CMI) and acquired rights for chromitite and platinum on the Thorncliffe farm. At that time, Thorncliffe was viewed as a chromitite resource and the platinum potential was disregarded. In 2002, drilling targeting the Merensky and UG2 reefs allowed for the preferential selection targets for these reefs to be determined.

In 2005, Anglo American Platinum and Xstrata (later acquired by Glencore), formed a 50:50 joint partnership, the Mototolo joint operation, and contributed individual portions of Mining Rights. Anglo American Platinum contributed rights over Richmond farm and Glencore contributed rights over Thorncliffe farm. The first blast in November 2005 marked the start of 2 x 4 barrel, on-reef shaft clusters that eventually reached steady-state production in June 2009.

In 2018 Anglo American Platinum acquired the 50% stake in Mototolo Mine from Glencore and minority shareholders. Following the 100% acquisition of Mototolo Mine and the subsequent transfer of Mining Rights to Anglo American Platinum, a section 102 application has been submitted to the Department of Mineral Resources and Energy to consolidate the Right.

In 2020 Anglo American Platinum entered into a royalty mining agreement with Two Rivers Platinum Mine to access UG2 mining areas from the Mototolo Complex Lebowa shaft to the north adjacent to the Thorncliffe farm boundary.

Mototolo concentrator with Helena tailings dam in background

## Mineral rights

The Der Brochen Mining Right covers an area of 9,063ha. Anglo American Platinum holds a converted Mining Right under DMRE ref LP 182 MR, valid from July 2010 to July 2040. A section 102 application submitted to the DMRE in order to consolidate the Mototolo and Der Brochen areas Mineral Rights, is expected to be concluded in 2021.

There are no known impediments to the current Rights.

## Mining method

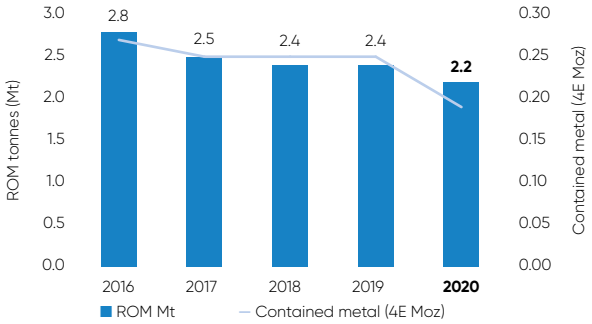
Mototolo complex is a mechanised, trackless, bord-and-pillar underground operation which extracts the UG2 Reef from near outcrop, extending to in excess of 450m below surface.

## Operational infrastructure

Current mine infrastructure consists of two decline shafts, Lebowa and Borwa, a concentrator and a chrome processing plant.

| | Units | MR | UG2 |
|---|---|---|---|
| **Mineral Resource assumptions** | | | |
| Average geological loss | % | 22 | 18 |
| Minimum Resource cut width | cm | 90 | 180 |
| Average density | g/cm$^3$ | 3.3 | 3.7 |
| **Ore Reserves modifying factors** | | | |
| Mining loss factor | % | | 0.45 |
| Mining dilution | % | | 10.8 |
| Mine extraction factor | % | | 58 – 85 |
| Planned stoping width | cm | | 206 |
| 4E concentrator recoveries | % | | 84 |
| Mine call factor | % | | 96 |
| Paylimit grade | 4E g/t | | 3.15 |

### Mototolo Complex UG2 Reef production history
(ROM)



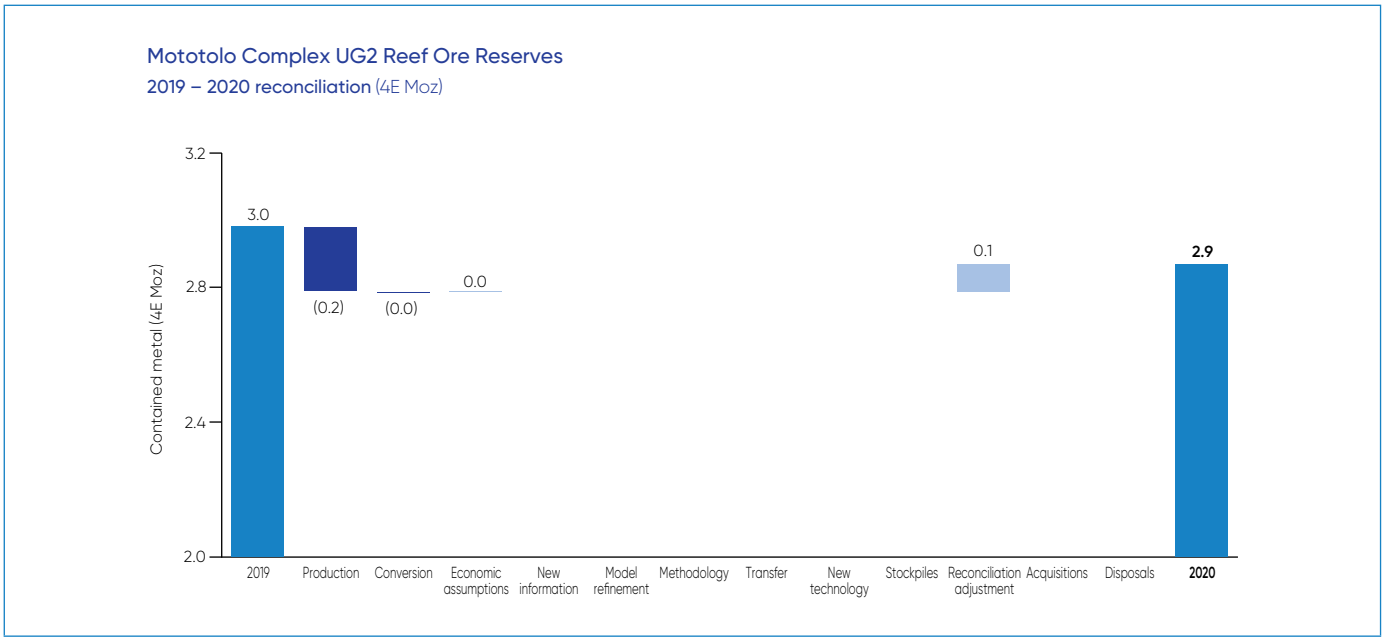

* *2020 Production figures exclude production from the Two Rivers Mine royalty mining area*

# Mototolo Complex (100%) continued

## Ore Reserves

| Mototolo Complex (100%) | Reserve life | Classification | Ore Reserves (ROM) Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| UG2 Reef | 16 | Proved | 18.2 | 21.8 | 3.46 | 3.36 | 63 | 73 | 2.0 | 2.4 |
| | | Probable | 7.5 | 6.0 | 3.50 | 3.26 | 26 | 20 | 0.8 | 0.6 |
| | | Total | 25.7 | 27.8 | 3.47 | 3.34 | 89 | 93 | 2.9 | 3.0 |

### UG2 Reef Ore Reserves reconciliation

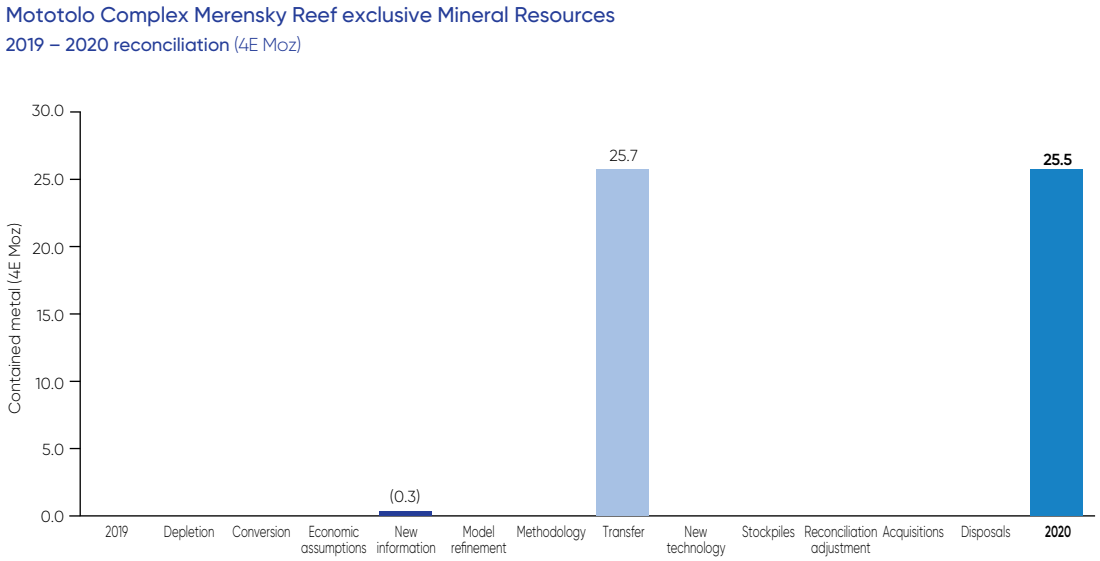



* *Production figures exclude production from the Two Rivers Mine royalty mining area*

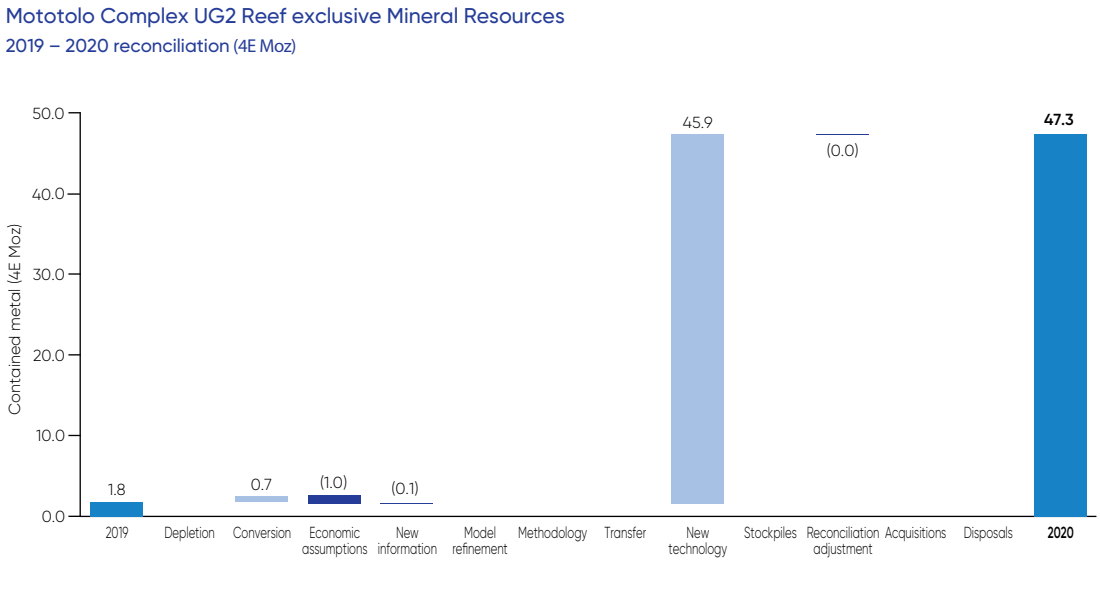
## Exclusive Mineral Resources

| Mototolo Complex (100%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| Merensky Reef | Measured | 40.9 | – | 4.75 | – | 194 | – | 6.3 | – |
| | Indicated | 58.2 | – | 4.54 | – | 264 | – | 8.5 | – |
| | Measured and Indicated | 99.1 | – | 4.63 | – | 458 | – | 14.7 | – |
| | Inferred | 73.7 | – | 4.52 | – | 333 | – | 10.7 | – |
| | Total | 172.9 | – | 4.58 | – | 791 | – | 25.5 | – |
| UG2 Reef | Measured | 108.0 | 7.5 | 3.99 | 3.81 | 431 | 29 | 13.9 | 0.9 |
| | Indicated | 136.8 | 6.5 | 3.95 | 4.29 | 540 | 28 | 17.4 | 0.9 |
| | Measured and Indicated | 244.8 | 14.0 | 3.97 | 4.03 | 971 | 57 | 31.2 | 1.8 |
| | Inferred | 124.4 | – | 4.02 | – | 500 | – | 16.1 | – |
| | Total | 369.3 | 14.0 | 3.99 | 4.03 | 1,471 | 57 | 47.3 | 1.8 |

## Merensky Reef exclusive Mineral Resources reconciliation




## UG2 Reef exclusive Mineral Resources reconciliation

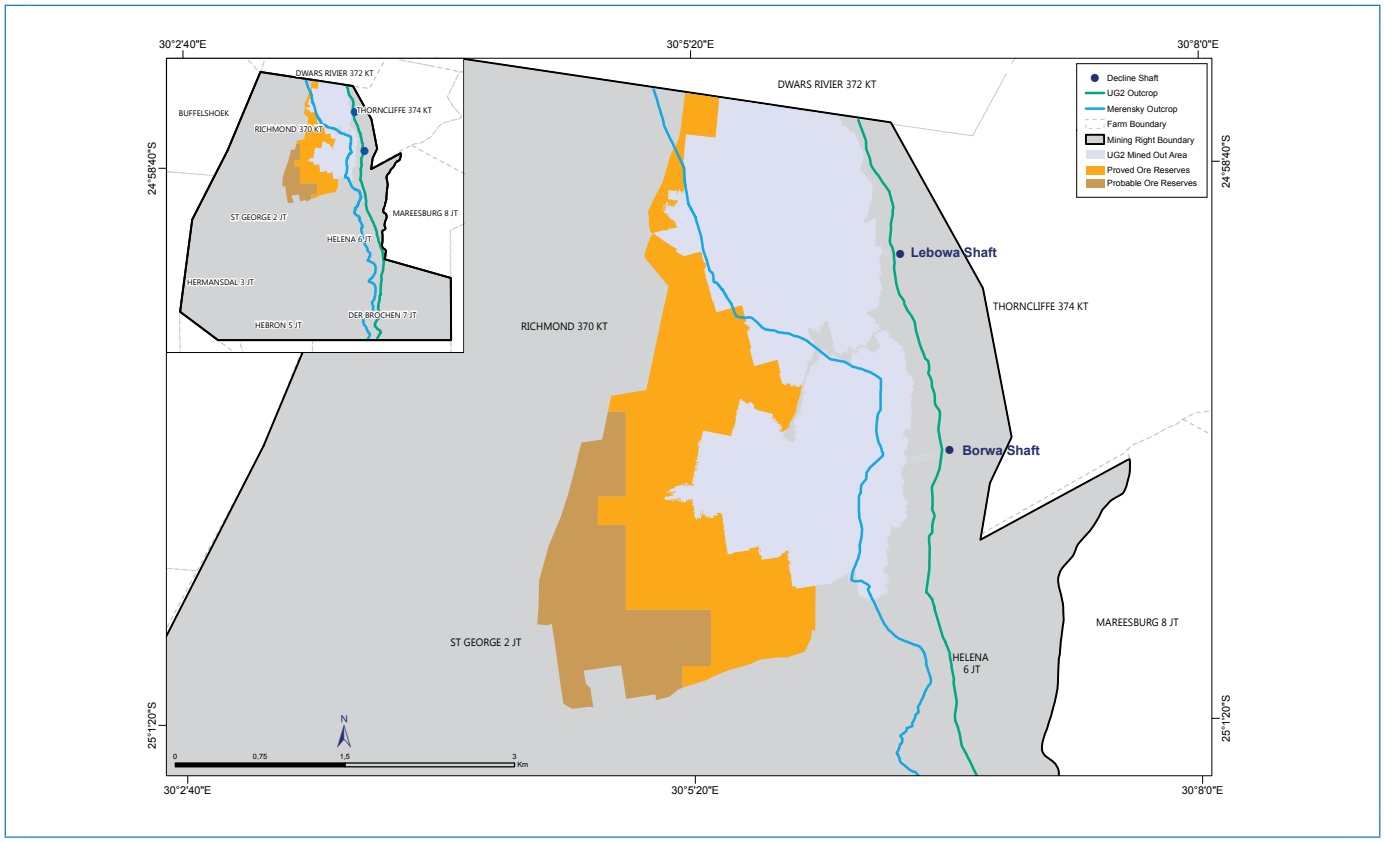


# Mototolo Complex (100%) continued

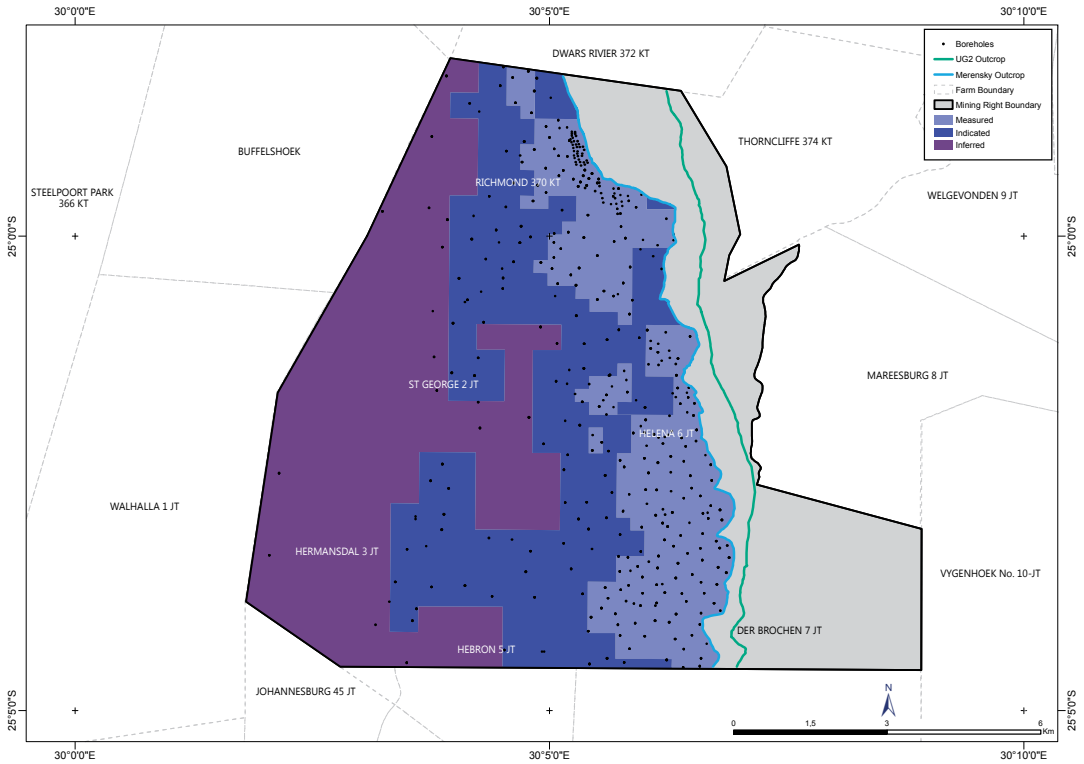
## Inclusive Mineral Resources

| Mototolo Complex (100%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| Merensky Reef | Measured | 40.9 | – | 4.75 | – | 194 | – | 6.3 | – |
| | Indicated | 58.2 | – | 4.54 | – | 264 | – | 8.5 | – |
| | Measured and Indicated | 99.1 | – | 4.63 | – | 458 | – | 14.7 | – |
| | Inferred | 73.7 | – | 4.52 | – | 333 | – | 10.7 | – |
| | Total | 172.9 | – | 4.58 | – | 791 | – | 25.5 | – |
| UG2 Reef | Measured | 130.5 | 34.0 | 3.99 | 4.02 | 521 | 137 | 16.8 | 4.4 |
| | Indicated | 147.6 | 13.8 | 3.96 | 4.15 | 585 | 57 | 18.8 | 1.8 |
| | Measured and Indicated | 278.2 | 47.8 | 3.97 | 4.06 | 1,106 | 194 | 35.6 | 6.2 |
| | Inferred | 124.4 | – | 4.02 | – | 500 | – | 16.1 | – |
| | Total | 402.6 | 47.8 | 3.99 | 4.06 | 1,606 | 194 | 51.6 | 6.2 |

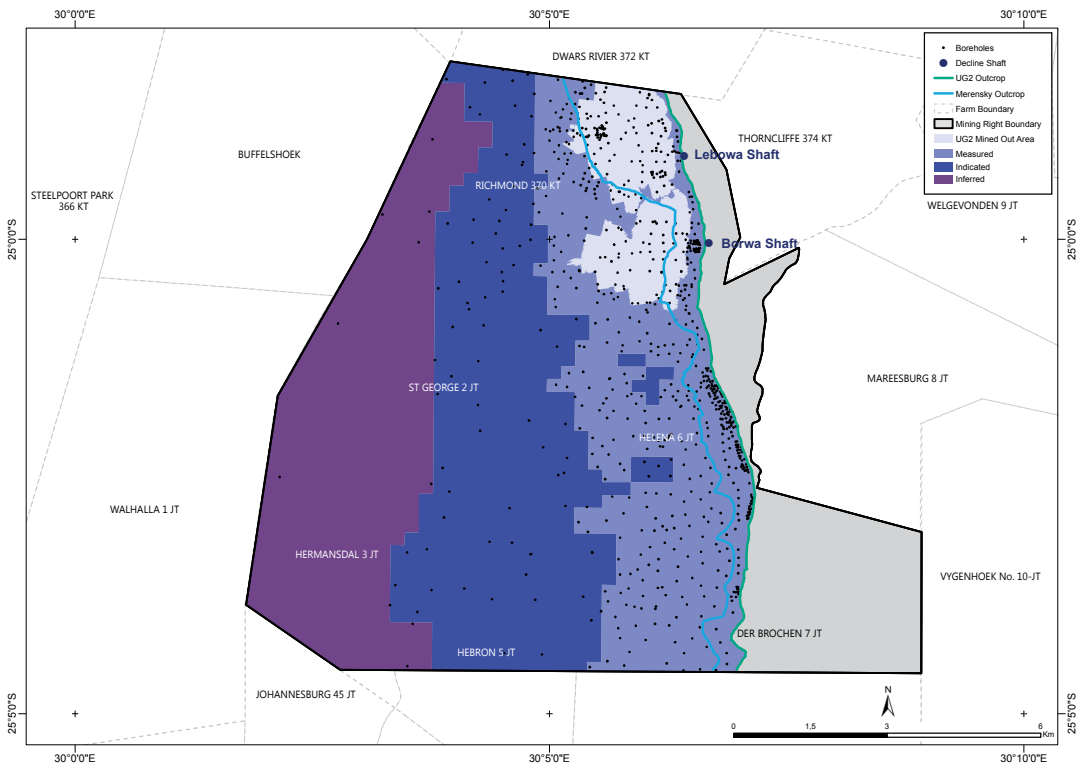
### Mototolo Complex UG2 Reef Ore Reserves classification map



## Mototolo Complex Merensky Reef Mineral Resources classification map




## Mototolo Complex UG2 Reef Mineral Resources classification map

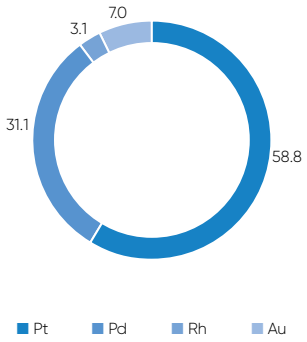


# Twickenham Mine (100%)

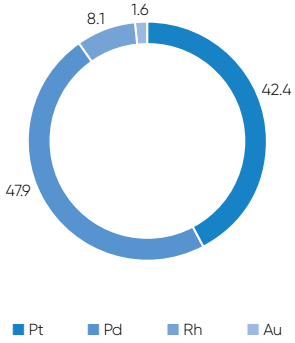
Twickenham Mine is in the Eastern Limb of the Bushveld Complex, immediately south-east of Bokoni Mine and some 35km north-west of the town of Burgersfort.

**Iain Colquhoun**
Competent Person: Mineral Resources
*Principal resource estimation platinum*
SACNASP, PrSciNat
23 years

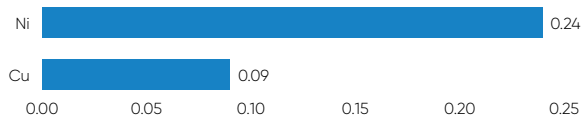
Twickenham Merensky Reef 4E Prill
(%)



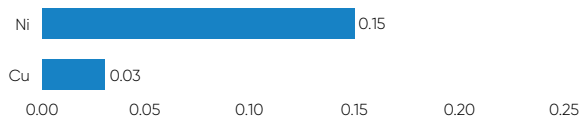

Twickenham UG2 Reef 4E Prill
(%)




Twickenham Merensky Reef base metal grades
(%)




Twickenham UG2 Reef base metal grades
(%)




Chrome grade : 24.6%

## Property description

Twickenham Mine was placed on care and maintenance in 2016.

The mine offers long-term prospects for shallow mechanised mining on both the Merensky and UG2 Reef horizons. In the current commodity price environment, all expansionary project decisions have been delayed.

## Brief history

After the Merensky Reef was discovered in the mid-1920s on Maandagshoek farm, in the Eastern Limb of the Bushveld Complex, the Twickenham area has since then been the subject of different exploration programmes. A phase of trenching and numerous small adits were excavated on both the Merensky and UG2 Reef horizons, notably where these occurred in the hills on the eastern side of the area. In the 1960s, diamond-drilling programmes were undertaken throughout the area to determine the basic characteristics of the orebody. Comparisons with the Western Limb Bushveld Complex PGM orebodies were unfavourable for the Eastern Limb Bushveld and this, as well as market factors, reduced the level of exploration and development.

Hackney area was the focus of extensive exploration from 1966 to the late-1990s, with trial mining of UG2 between 1977 and 1979.

Since 2001, Anglo American Platinum exploration activities have included several major exploration drilling programmes and related activities. The UG2 was identified as the primary target at the mine, based on geological continuity, grade consistency and precious metal values. The development of the mine started in 2001 and was planned to peak at 250,000 t/m by 2008.

However, due to economic reasons, Twickenham was placed on care and maintenance in 2016, and some of the mining footprint was used to research new mining technology.

## Mineral rights

The current Mining Right covers an area of 17,747ha. Anglo American Platinum holds a converted Mining Right under DMRE ref LP 89 MR, valid from March 2011 to March 2041.

There are no known impediments to the Right.

| | Units | MR | UG2 |
|---|---|---|---|
| **Mineral Resource assumptions** | | | |
| Average geological loss | % | 22 | 21 |
| Minimum Resource cut width | cm | 105 | 95 |
| Average density | g/cm$^3$ | 3.4 | 4 |

## Exclusive Mineral Resources

| Twickenham (100%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| Merensky Reef | Measured | 48.4 | 48.4 | 4.75 | 4.75 | 230 | 230 | 7.4 | 7.4 |
| | Indicated | 87.3 | 87.3 | 4.97 | 4.97 | 434 | 434 | 14.0 | 14.0 |
| | Measured and Indicated | 135.7 | 135.7 | 4.89 | 4.89 | 664 | 664 | 21.3 | 21.3 |
| | Inferred | 165.7 | 165.7 | 5.26 | 5.26 | 872 | 872 | 28.0 | 28.0 |
| | Total | 301.4 | 301.4 | 5.09 | 5.09 | 1,536 | 1,536 | 49.4 | 49.4 |
| UG2 Reef | Measured | 54.6 | 54.6 | 6.29 | 6.29 | 344 | 344 | 11.1 | 11.1 |
| | Indicated | 145.4 | 145.4 | 6.05 | 6.05 | 879 | 879 | 28.3 | 28.3 |
| | Measured and Indicated | 200.0 | 200.0 | 6.12 | 6.12 | 1,223 | 1,223 | 39.3 | 39.3 |
| | Inferred | 148.2 | 148.2 | 5.88 | 5.88 | 871 | 871 | 28.0 | 28.0 |
| | Total | 348.2 | 348.2 | 6.02 | 6.02 | 2,094 | 2,094 | 67.3 | 67.3 |

### Merensky Reef exclusive Mineral Resources reconciliation

Twickenham Mine is on care and maintenance. Estimates are unchanged from previous reporting.

### UG2 Reef exclusive Mineral Resources reconciliation

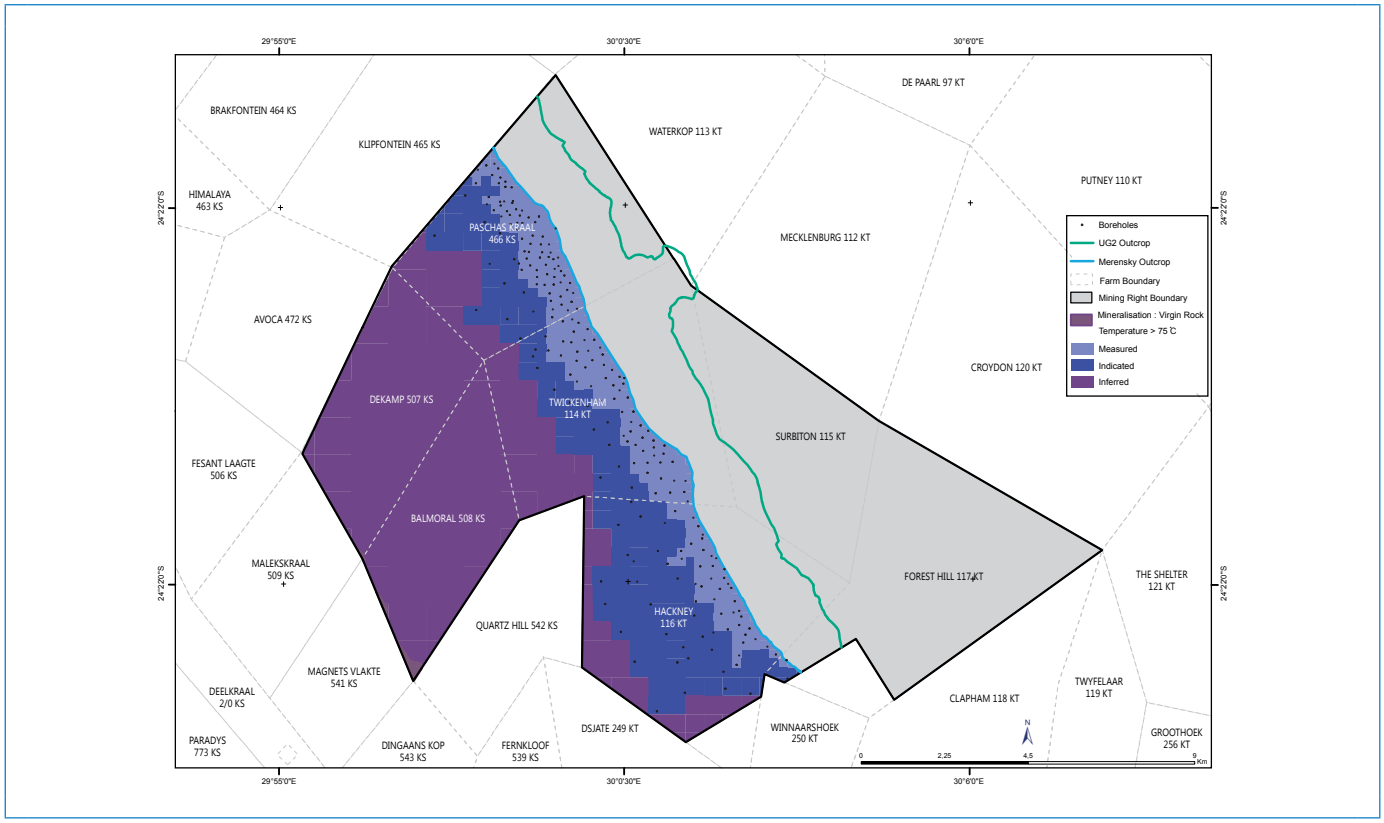
Twickenham Mine is on care and maintenance. Estimates are unchanged from previous reporting.

## Inclusive Mineral Resources

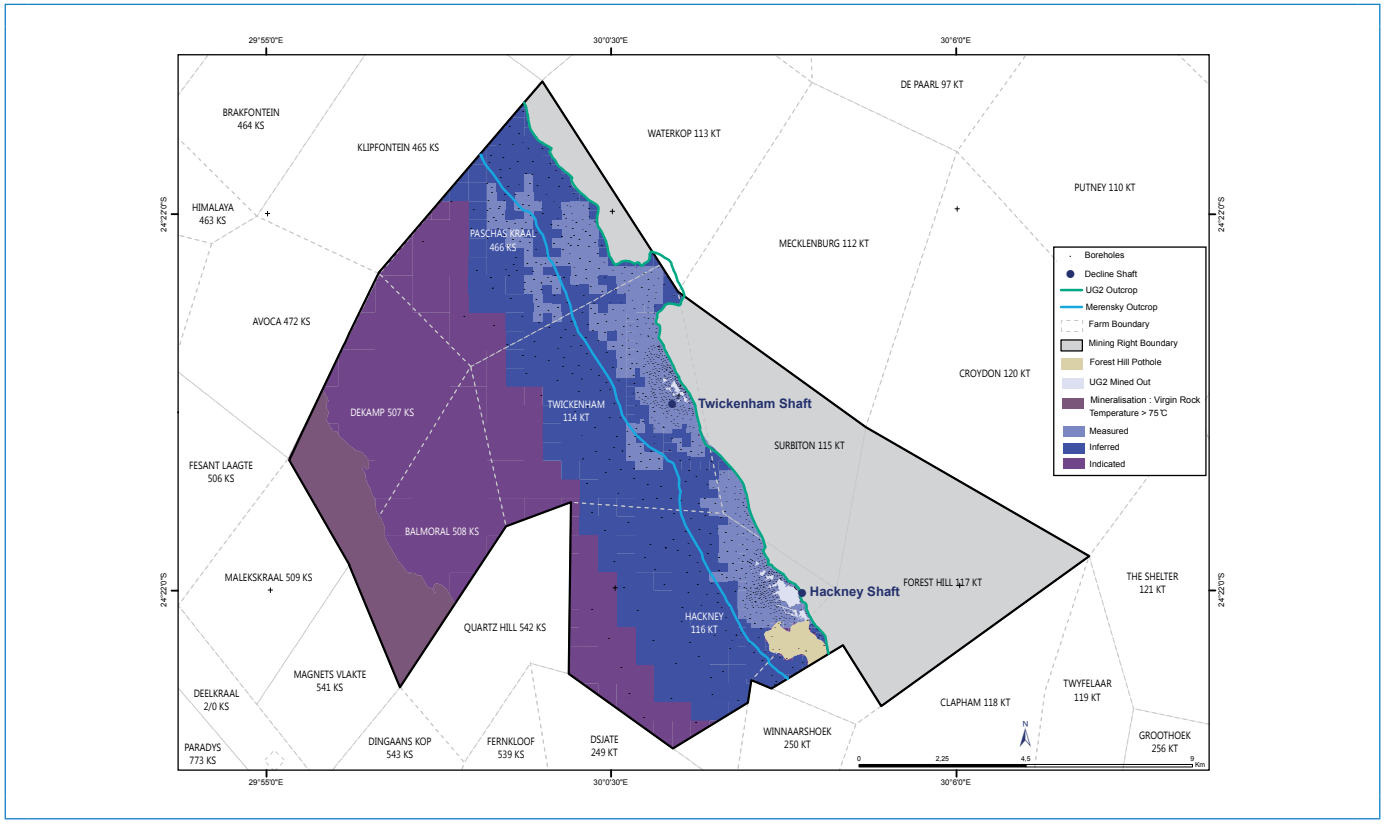
| Twickenham (100%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| Merensky Reef | Measured | 48.4 | 48.4 | 4.75 | 4.75 | 230 | 230 | 7.4 | 7.4 |
| | Indicated | 87.3 | 87.3 | 4.97 | 4.97 | 434 | 434 | 14.0 | 14.0 |
| | Measured and Indicated | 135.7 | 135.7 | 4.89 | 4.89 | 664 | 664 | 21.3 | 21.3 |
| | Inferred | 165.7 | 165.7 | 5.26 | 5.26 | 872 | 872 | 28.0 | 28.0 |
| | Total | 301.4 | 301.4 | 5.09 | 5.09 | 1,536 | 1,536 | 49.4 | 49.4 |
| UG2 Reef | Measured | 54.6 | 54.6 | 6.29 | 6.29 | 344 | 344 | 11.1 | 11.1 |
| | Indicated | 145.4 | 145.4 | 6.05 | 6.05 | 879 | 879 | 28.3 | 28.3 |
| | Measured and Indicated | 200.0 | 200.0 | 6.12 | 6.12 | 1,223 | 1,223 | 39.3 | 39.3 |
| | Inferred | 148.2 | 148.2 | 5.88 | 5.88 | 871 | 871 | 28.0 | 28.0 |
| | Total | 348.2 | 348.2 | 6.02 | 6.02 | 2,094 | 2,094 | 67.3 | 67.3 |

# Twickenham Mine (100%) continued

## Twickenham Merensky Reef Mineral Resources classification map




## Twickenham UG2 Reef Mineral Resources classification map



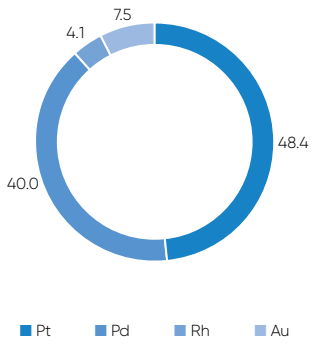
# Unki Mine (100%)

Unki Mine operations are on the Great Dyke in Zimbabwe, 60km south-east of the town of Gweru. The mine is at steady-state production, with long dated strategic growth potential. It is wholly owned and managed by Anglo American Platinum.

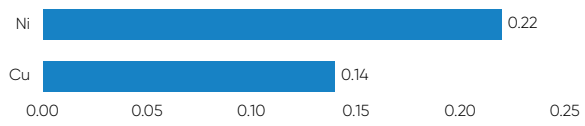
**Kavita Mohanlal**
Competent Person: Mineral Resources
*Principal resource estimation platinum*
SACNASP, PrSciNat
17 years

**Clever Dick**
Competent Person: Ore Reserves
*Chief surveyor*
SAIMM, Member
17 years

Unki MSZ 4E Prill
(%)




Unki MSZ base metal grades
(%)




## Property description

The Unki Special Mining Lease (SML) lies in the Selukwe sub-chamber of the Great Dyke. The mine exploits the Main Sulphide Zone (MSZ).

## Brief history

Exploration for PGMs and associated base metals in the Great Dyke dates back over 50 years, when PGM and base metal zones were delineated from soil geochemical surveys. The first phase of drilling began in 1967 near the Paarl area and expanded to cover the rest of the Middleridge claims. In 1969, trial mining started at Paarl where a winze was developed on-reef and two mining levels established.

In 1972, focus shifted to the Unki area – regarded as having better PGM grades than Paarl. A vertical prospect shaft which was used for various trial mining initiatives was sunk in 1974 in the Unki area. This was followed by intermittent exploration and feasibility studies on the Unki project. The project failed to take off due to several challenges, primarily the price of the metals and difficulties of MSZ identification. However, understanding of the MSZ has improved over the years and it is generally successfully mined on the Great Dyke.

The development of the Unki mine began in 2006 after the 2005 feasibility study. Unki mine ramped production to planned output of 120,000t/m in late 2011 and is investigating opportunities to increase production two-fold by 2026.

More recently, the KV-SR Claims, which were previously reported at Unki Mine have been sold to Mimosa Platinum Mine.

## Mineral rights

The current Mining Right covers an area of 10,386ha. On 5 October 2009, Unki Mines and Southridge Limited were granted a Special Mining Lease, valid until October 2034.

There are no known impediments to the Right.

## Mining method

Unki Mine is a mechanised, trackless, bord-and-pillar underground operation.

## Operational infrastructure

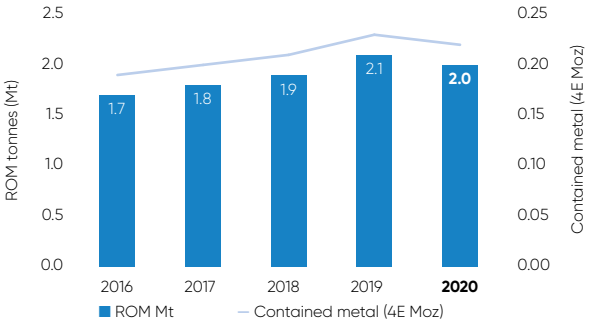
A twin-decline shaft system provides access to underground workings for employees and material, as well as ore conveyance. Both shafts are now 2,822m from the portal on surface. Currently there are sixteen established mining sections with two additional sections planned for 2021. The equipped sections have strikes belts for transferring ore directly to the main incline shaft conveyor. Run-of-mine ore is processed at the concentrator plant on site, which was commissioned in 2011. The Unki smelter was completed and commissioned in 2018.

# Unki Mine (100%) continued

| | Units | MSZ |
|---|---|---|
| **Mineral Resource assumptions** | | |
| Average geological loss | % | **6** |
| Minimum Resource cut width | cm | **180/120*** |
| Average density | g/cm$^3$ | **3.2** |
| **Ore Reserves modifying factors** | | |
| Mining loss factor | % | **3** |
| Mining dilution | % | **12** |
| Mine extraction factor | % | **80 – 83** |
| Planned stoping width | cm | **200** |
| 4E concentrator recoveries | % | **81** |
| Mine call factor | % | **95** |
| Paylimit grade | 4E g/t | **2.46** |

* *The current mining areas at Unki East and West are estimated over a Resource cut of 180cm. The remaining area is estimated over a Resource cut of 120cm.*

**Unki MSZ production history**
(ROM)

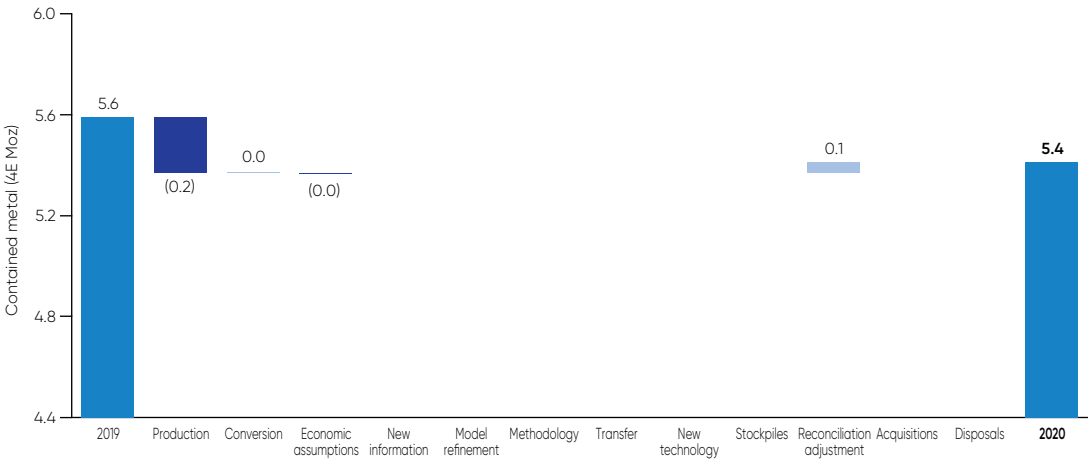



## Ore Reserves

| Unki Mine (100%) | Reserve life | Classification | Ore Reserves (ROM) Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| MSZ | 20 | Proved | **24.3** | 27.2 | **3.33** | 3.29 | **81** | 89 | **2.6** | 2.9 |
| | | Probable | **26.7** | 26.1 | **3.28** | 3.24 | **87** | 85 | **2.8** | 2.7 |
| | | Total | **51.0** | 53.3 | **3.30** | 3.27 | **168** | 174 | **5.4** | 5.6 |

### MSZ Ore Reserves reconciliation

**Unki Main Sulphide Zone Ore Reserves**
2019 – 2020 reconciliation (4E Moz)

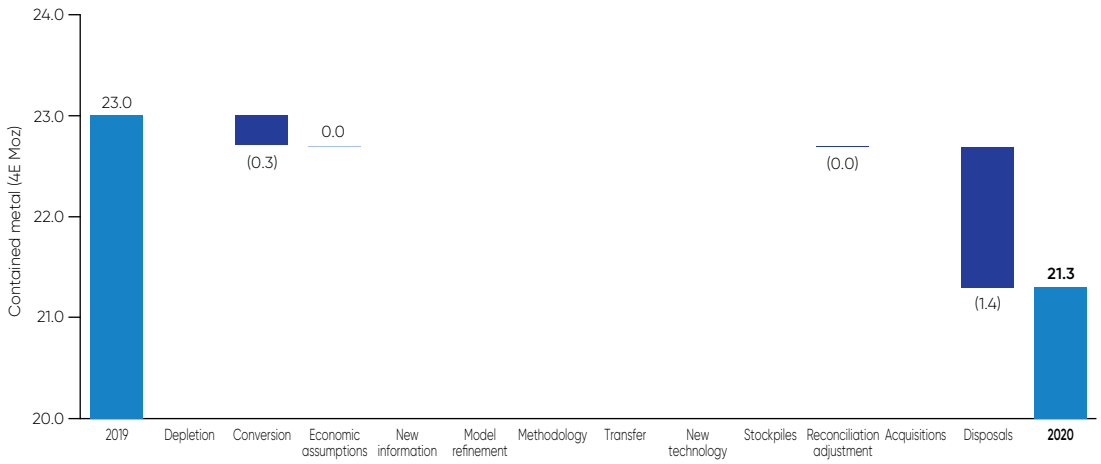


## Exclusive Mineral Resources

| Unki Mine (100%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| MSZ | Measured | 7.5 | 7.9 | 4.09 | 4.12 | 31 | 33 | 1.0 | 1.1 |
| | Indicated | 110.8 | 112.3 | 4.29 | 4.29 | 475 | 482 | 15.3 | 15.5 |
| | Measured and Indicated | 118.4 | 120.2 | 4.28 | 4.28 | 506 | 515 | 16.3 | 16.5 |
| | Inferred | 38.6 | 47.8 | 4.07 | 4.22 | 157 | 201 | 5.0 | 6.5 |
| | Total | 156.9 | 168.0 | 4.23 | 4.26 | 663 | 716 | 21.3 | 23.0 |

### MSZ exclusive Mineral Resources reconciliation

Unki Main Sulphide Zone exclusive Mineral Resources
2019 – 2020 reconciliation (4E Moz)

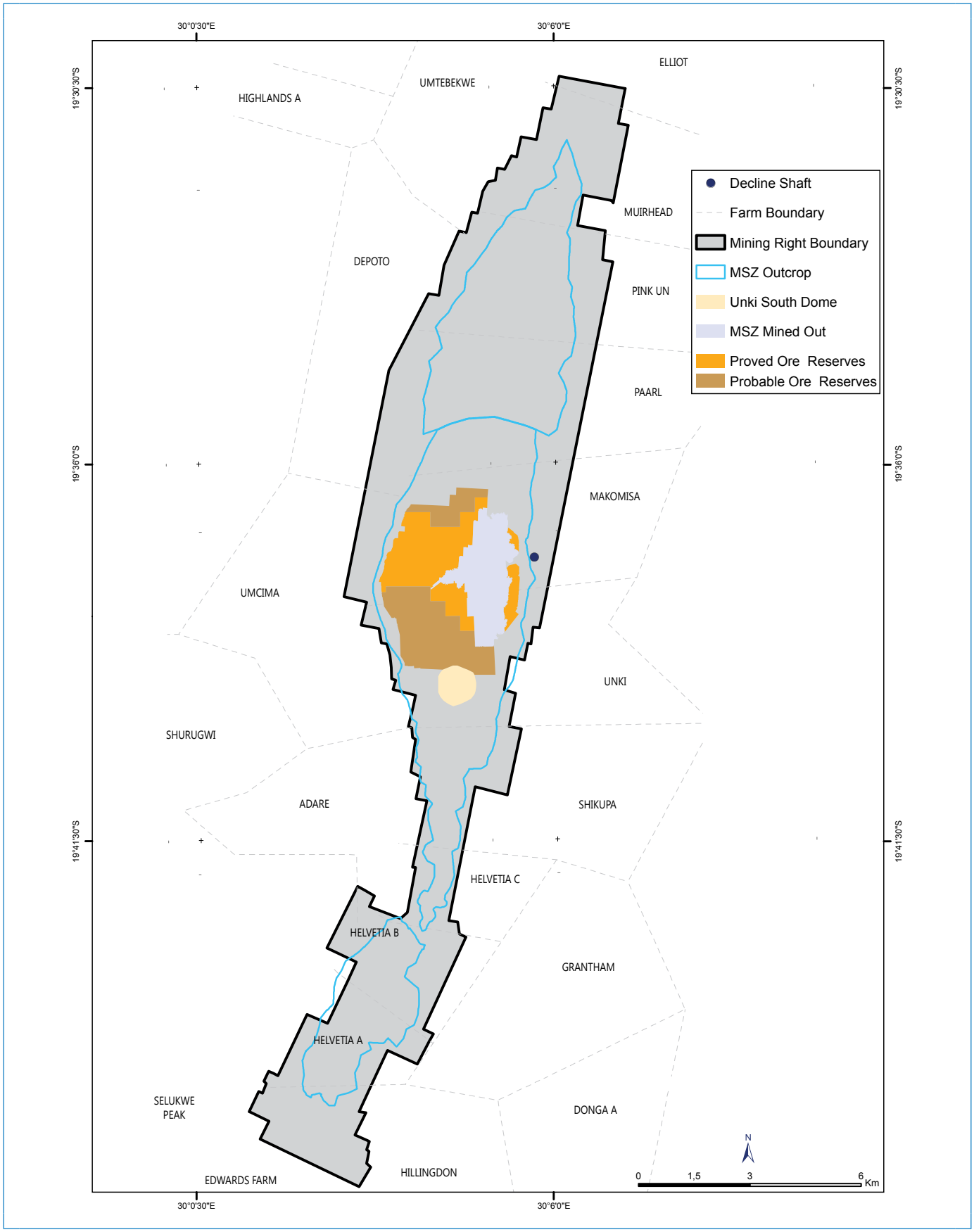



## Inclusive Mineral Resources

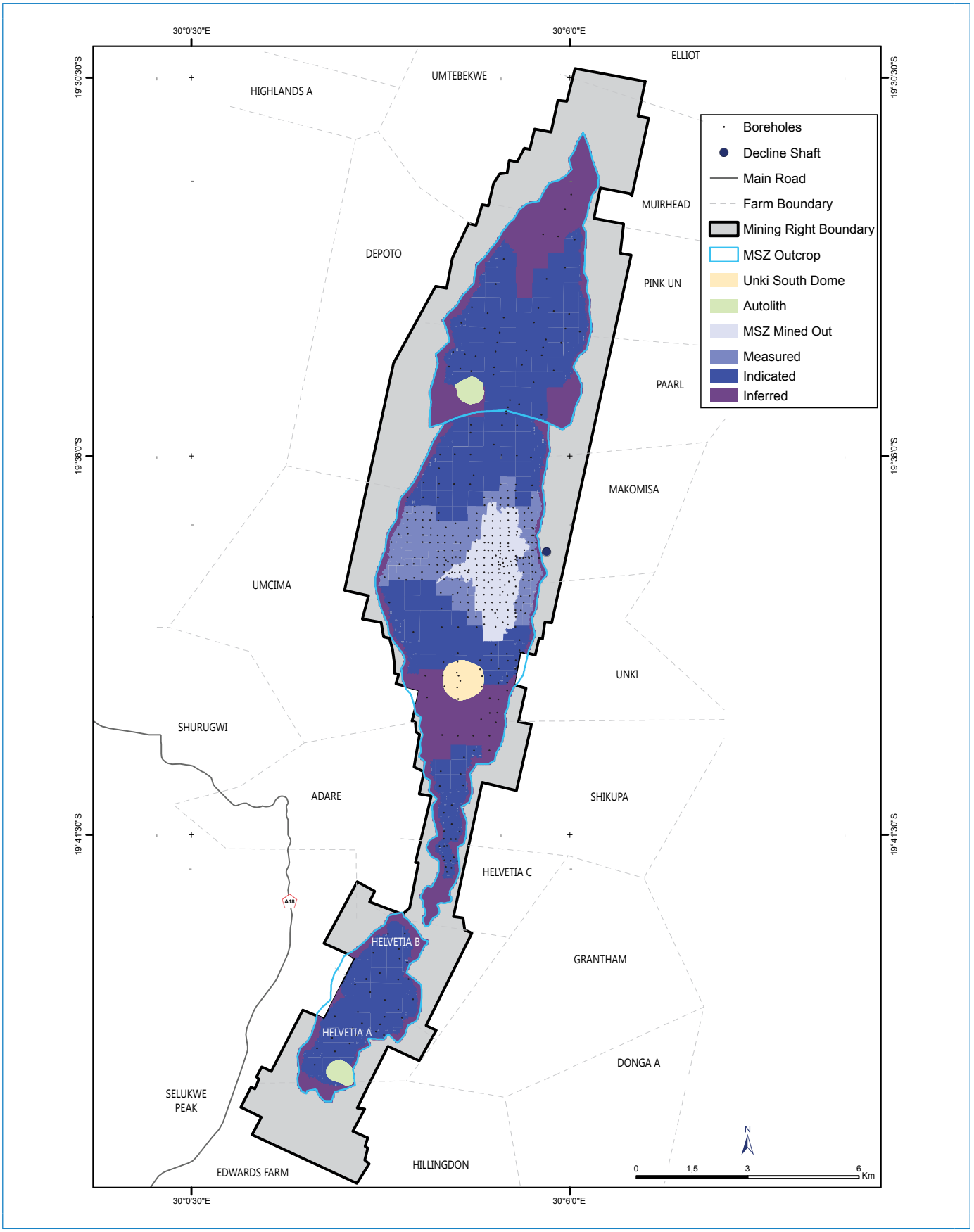
| Unki Mine (100%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| MSZ | Measured | 34.5 | 36.8 | 3.97 | 3.99 | 137 | 147 | 4.4 | 4.7 |
| | Indicated | 139.1 | 139.3 | 4.21 | 4.21 | 585 | 586 | 18.8 | 18.9 |
| | Measured and Indicated | 173.6 | 176.1 | 4.16 | 4.16 | 722 | 733 | 23.2 | 23.6 |
| | Inferred | 38.6 | 47.8 | 4.07 | 4.22 | 157 | 202 | 5.0 | 6.5 |
| | Total | 212.2 | 223.9 | 4.15 | 4.18 | 879 | 935 | 28.3 | 30.1 |

# Unki Mine (100%) continued

## Unki Mine MSZ Ore Reserves classification map



## Unki Mine MSZ Mineral Resources classification map



# Estimates and reconciliation – non-managed operations

as at 31 December 2020

## Modikwa Mine (50%)

Modikwa Platinum Mine is 25km north-west of the town of Burgersfort and 15km north of Steelpoort, along the border of Mpumalanga and Limpopo provinces in South Africa. It is an independently managed joint-venture partnership between Anglo American Platinum (50%), African Rainbow Minerals (41.5%) and Modikwa communities (8.5%).

**Martha Hlangwane**
Competent Person: Mineral Resources
*Resources and reserves reporting: platinum*
*SACNASP, PrSciNat*
15 years

**Jurie de Kock***
Competent Person: Ore Reserves
*Chief surveyor*
*SAIMM, member*
39 years

* *Employed by Modikwa Mine.*

Information for non-managed operations is provided by joint operation partners. For additional details please refer to the applicable annual reports.

As at 31 December 2020, the Anglo American Platinum approach of reporting Ore Reserves and Mineral Resources will change from an attributable basis to 100% ownership basis. The 2019 estimates have been restated on a 100% basis.

### Property description

It forms part of the Eastern Limb of the Bushveld Complex, with UG2 and Merensky reefs present. The mine extracts UG2 Reef from surface to in excess of 550m below surface.

### Brief history

The discovery of the Merensky Reef on the Eastern Limb of the Bushveld Complex occurred in the mid 1920's on Maandagshoek farm, the area has at various periods since then been the subject of different exploration programmes. A phase of trenching and numerous small adits were excavated on both the Merensky and the UG2 Reef horizons, notably where these occurred in the hills on the eastern side of the area. This was followed in the 1960s by a sequence of diamond drilling programmes undertaken throughout the area to determine the basic characteristics of the orebody. Comparisons with the Western Limb Bushveld Complex PGM orebodies were unfavourable for the Eastern Limb Bushveld Complex and this, as well as market factors, reduced the level of exploration and development.

In the late 1970s to early 1980s, several limited underground operations were established, which included the development of a vertical shaft at the Driekop pipe, and a number of inclined winzes on the Maandagshoek farm. The UG2 was identified as the primary target in the vicinity of the Modikwa Mine lease based on geological continuity, grade consistency and precious metal values.

The Anglo American Platinum and African Rainbow Minerals 50:50 joint partnership culminated the inception of the mine in the early 2000s. Mining operations started as a project in 2001, reaching mining status in 2003. Both the N1 and S1 shafts started simultaneously in 2001 and the S2 shaft was established in 2013.

### Mineral rights

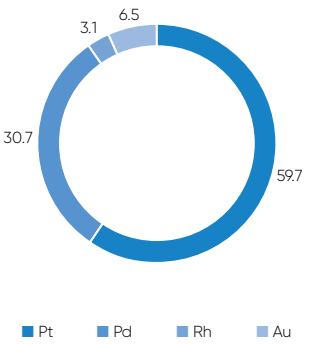
The Mining Right covers an area of 14,092ha and is held in equal shares by Anglo American Platinum and ARM. The converted Mining Right is held under DMRE ref LP129 MR is valid from November 2013 to November 2043.

There are no known impediments to the Right.

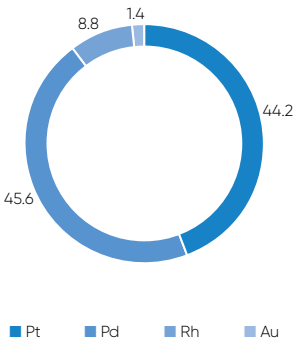
### Mining method

The mine is a hybrid operation using conventional breast stoping with strike pillars, supported by trackless development and ore clearance.

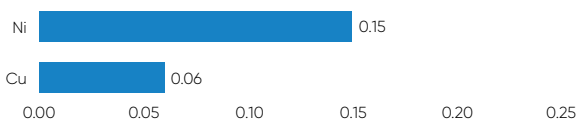
Modikwa Merensky Reef 4E Prill (%)



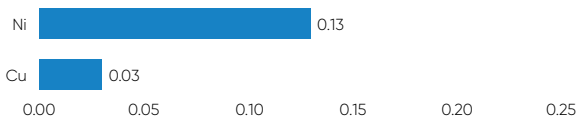

Modikwa UG2 Reef 4E Prill (%)




Modikwa Merensky Reef base metal grades (%)




Modikwa UG2 Reef base metal grades (%)



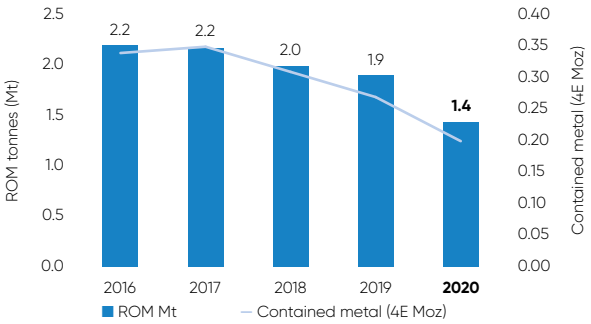
## Operational infrastructure

The current infrastructure comprises three primary decline shafts (North 1, South 1 and South 2), three adits on Onverwacht Hill and a concentrator with mainstream inert grinding (MIG) plant.

| | Units | MR | UG2 |
|---|---|---|---|
| **Mineral Resource assumptions** | | | |
| Average geological loss | % | 21 | 17 |
| Minimum Resource cut width | cm | 180 | 103 |
| Average density | g/cm$^3$ | 3.4 | 3.9 |
| **Ore Reserves modifying factors** | | | |
| Mining loss factor | % | | 1.2 |
| Mining dilution | % | | 36 |
| Planned Stoping width | cm | | 119 |
| 4E concentrator recoveries | % | | 87 |
| Mine call factor | % | | 95 |
| Paylimit grade | g/t | | 3.29 |

### Modikwa UG2 Reef production history

(ROM)




Modikwa Mine's South 2 Decline

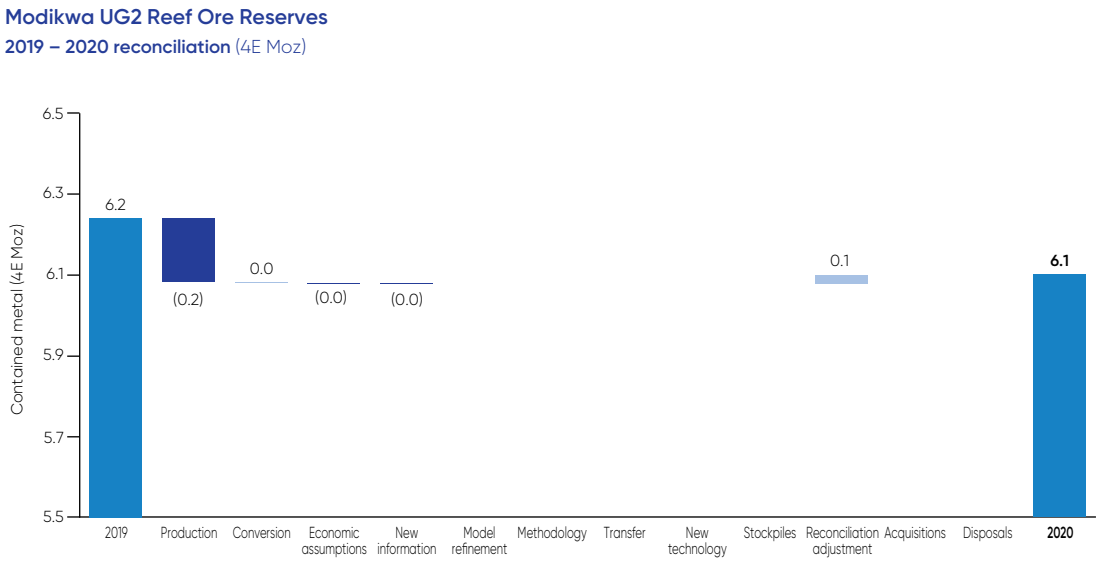
# Modikwa Mine (50%) continued

## Ore Reserves*

| Modikwa Mine (50%) | Reserve life | Classification | Ore Reserves (ROM) Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| UG2 Reef | 23 | Proved | **15.9** | 13.5 | **4.33** | 4.45 | **69** | 60 | **2.2** | 1.9 |
| | | Probable | **29.2** | 32.5 | **4.14** | 4.12 | **121** | 134 | **3.9** | 4.3 |
| | | Total | **45.1** | 46.0 | **4.21** | 4.22 | **190** | 194 | **6.1** | 6.2 |

* *Estimates reported on a 100% ownership basis. The 2019 estimates have been restated on a 100% basis.*

### UG2 Reef Ore Reserves reconciliation




## Exclusive Mineral Resources*

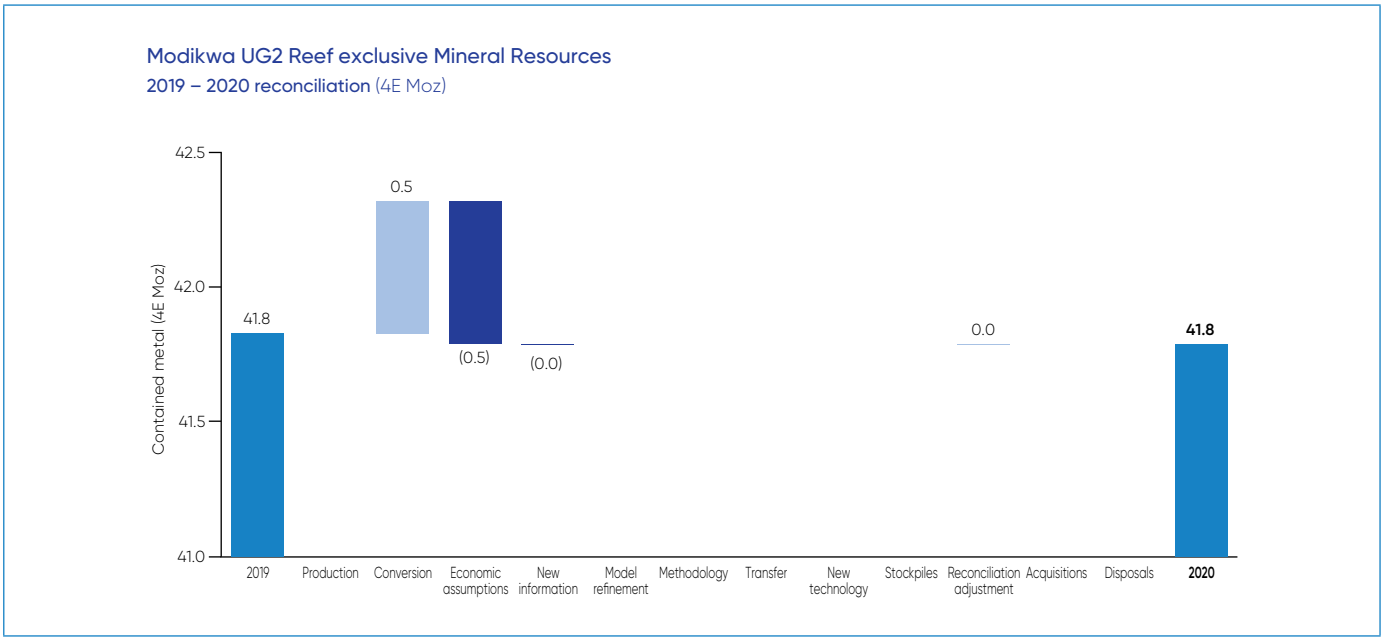
| Modikwa Mine (50%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| Merensky Reef | Measured | **20.7** | 20.7 | **3.15** | 3.15 | **65** | 65 | **2.1** | 2.1 |
| | Indicated | **53.9** | 53.9 | **2.90** | 2.90 | **156** | 156 | **5.0** | 5.0 |
| | Measured and Indicated | **74.6** | 74.6 | **2.97** | 2.97 | **221** | 221 | **7.1** | 7.1 |
| | Inferred | **139.3** | 139.3 | **2.84** | 2.84 | **396** | 396 | **12.7** | 12.7 |
| | Total | **213.9** | 213.9 | **2.89** | 2.89 | **617** | 617 | **19.8** | 19.8 |
| UG2 Reef | Measured | **48.2** | 48.1 | **5.91** | 5.91 | **285** | 284 | **9.2** | 9.1 |
| | Indicated | **90.3** | 90.7 | **5.90** | 5.90 | **533** | 535 | **17.1** | 17.2 |
| | Measured and Indicated | **138.5** | 138.8 | **5.90** | 5.90 | **818** | 819 | **26.3** | 26.3 |
| | Inferred | **77.5** | 77.5 | **6.22** | 6.22 | **482** | 482 | **15.5** | 15.5 |
| | Total | **216.0** | 216.2 | **6.01** | 6.02 | **1,300** | 1,301 | **41.8** | 41.8 |

* *Estimates reported on a 100% ownership basis. The 2019 estimates have been restated on a 100% basis.*

## Merensky Reef exclusive Mineral Resources reconciliation

Estimates are unchanged from previous reporting.

## UG2 Reef exclusive Mineral Resources reconciliation



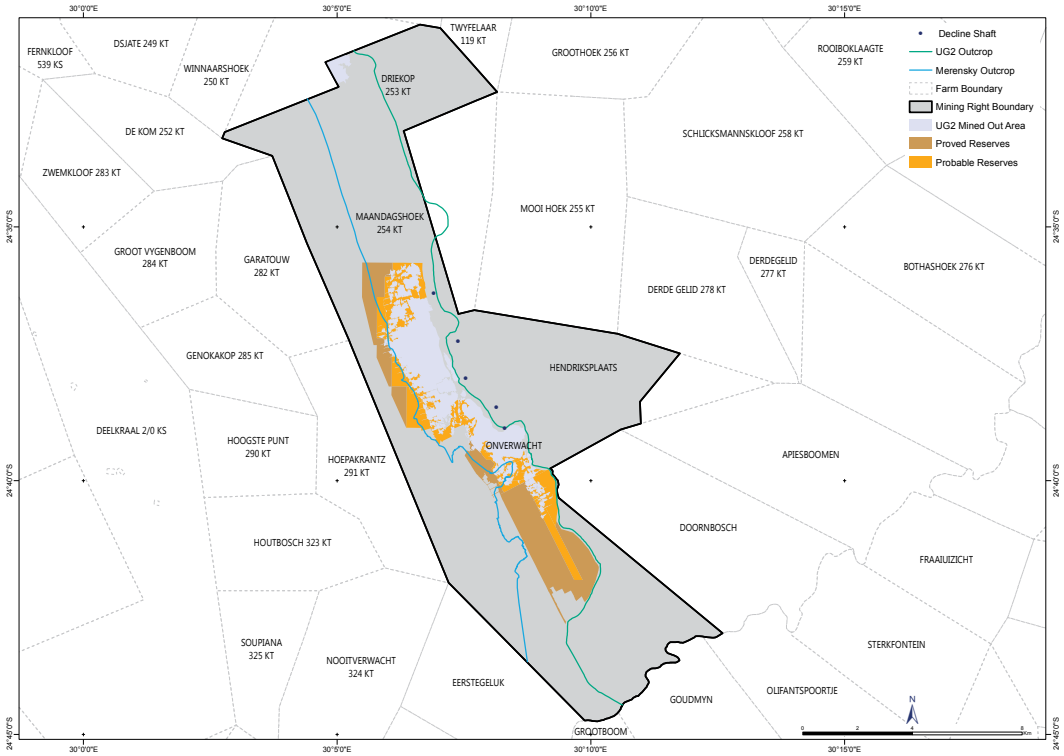

## Inclusive Mineral Resources*

| Modikwa Mine (50%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| Merensky Reef | Measured | 20.7 | 20.7 | 3.15 | 3.15 | 65 | 65 | 2.1 | 2.1 |
| | Indicated | 53.9 | 53.9 | 2.90 | 2.90 | 156 | 156 | 5.0 | 5.0 |
| | Measured and Indicated | 74.6 | 74.6 | 2.97 | 2.97 | 221 | 221 | 7.1 | 7.1 |
| | Inferred | 139.3 | 139.3 | 2.84 | 2.84 | 396 | 396 | 12.7 | 12.7 |
| | Total | 213.9 | 213.9 | 2.89 | 2.89 | 617 | 617 | 19.8 | 19.8 |
| UG2 Reef | Measured | 84.3 | 86.2 | 5.93 | 5.94 | 500 | 512 | 16.1 | 16.5 |
| | Indicated | 102.1 | 102.2 | 5.91 | 5.91 | 603 | 604 | 19.4 | 19.4 |
| | Measured and Indicated | 186.4 | 188.3 | 5.92 | 5.92 | 1,103 | 1,116 | 35.5 | 35.9 |
| | Inferred | 77.5 | 77.5 | 6.22 | 6.22 | 482 | 482 | 15.5 | 15.5 |
| | Total | 263.9 | 265.8 | 6.00 | 6.01 | 1,585 | 1,598 | 51.0 | 51.4 |

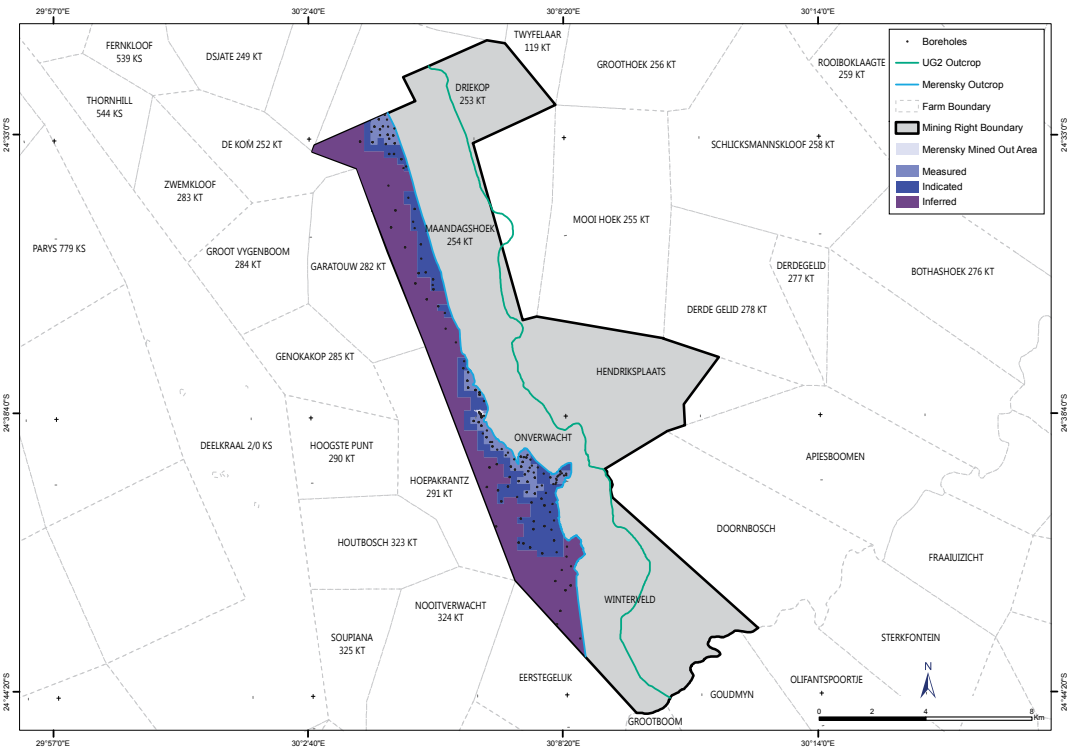
* *Estimates reported on a 100% ownership basis. The 2019 estimates have been restated on a 100% basis.*

# Modikwa Mine (50%) continued

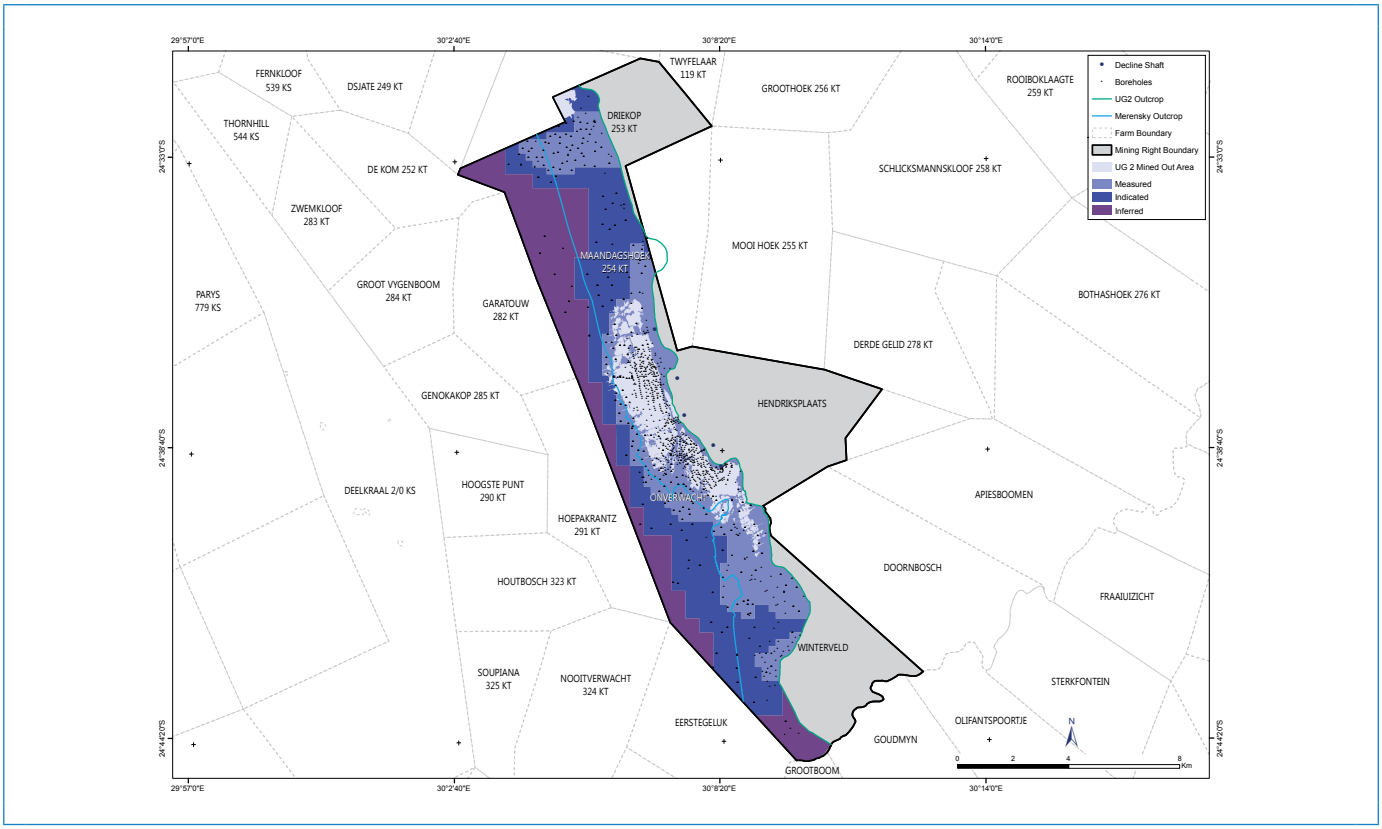
## Modikwa UG2 Reef Ore Reserves classification map




## Modikwa Merensky Reef Mineral Resources classification map



## Modikwa UG2 Reef Mineral Resources classification map




Bulk ore sorter, Mogalakwena Mine

# Sibanye-Stillwater joint operations

The Siphumelele 3 shaft, Kroondal and Marikana mines are in the North West province, 12km outside the town of Rustenburg and some 120km north-west of Johannesburg.

Kroondal and Marikana mines are a 50/50 joint operation with Sibanye-Stillwater. The join-operation agreement is a pooling-and-sharing agreement (PSA), where the Sibanye-Stillwater infrastructure is used to access Ore Reserves and Mineral Resources on the Anglo American Platinum held Mining Right. The joint operations are managed by Sibanye-Stillwater.

The Siphumelele 3 shaft is part of the Kroondal Extension area, an area situated down-dip of the original PSA agreement area. Anglo American Platinum has 100% ownership of the operation but, it is mined on a royalty basis by Sibanye-Stillwater.

**Nicole Wansbury***
Competent Person: Mineral Resources
*Unit manager Mineral Resources*
SACNASP, PrSciNat
15 years

**Brian Smith***
Competent Person: Ore Reserves
*Unit manager survey*
SAGC, Professional Mine Surveyor
34 years

* *Employed by Sibanye-Stillwater.*

Information for non-managed operations is provided by joint-operations partners. For additional details please refer to the applicable annual reports.

As at 31 December 2020, the Anglo American Platinum approach of reporting Ore Reserves and Mineral Resources has changed from an attributable basis to 100% ownership basis. The 2019 estimates have been restated on a 100% basis.

Sibanye-Stillwater provided revised Ore Reserves estimates for Kroondal Mine and Siphumelele 3 Shaft post the finalisation of the 2020 Ore Reserves and Mineral Resources Report. This revision is not considered material and is not reflected in the tables below. For additional details please refer to the Sibanye-Stillwater Annual Report.

## Property description

Siphumelele, Kroondal and Marikana Mines form part of the Western Limb of the Bushveld Complex and extracts UG2 Reef.

Marikana Mine, with infrastructure comprising four decline shafts and a concentrator, was placed on care and maintenance in 2012.

## Brief history

A pre-feasibility study of the Kroondal Platinum Project, in which Aquarius had a 45% stake, was completed in 1996, followed by a bankable feasibility study the next year. Mine developments started in 1998, with development and completion of two decline shafts. In 2000, Aquarius increased its stake to 100%, but entered into a 50/50 joint-operation agreement with Anglo American Platinum the next year. The agreement included an off-take agreement with Anglo American Platinum for the Ore Reserves covered by the agreement and plans to build a concentrator. In 2012, Marikana Mine, was placed on care and maintenance.

In 2013, the extent of the Mineral Resource included in the PSA agreement was extended by including Siphumelele 3 shaft (Kroondal extension area), extending the life of mine. In April 2016, following the acquisition in full of Aquarius, Sibanye-Stillwater acquired a 50% stake in Kroondal Mine. Sibanye-Stillwater is now Anglo American Platinum joint operations partner and manages the operations.

## Mineral Right

The current Mining Right covers an area of 3,212ha. Anglo American Platinum holds a converted Mining Right under DMRE ref NW 80 MR, valid from July 2010 to July 2040. The Mining Right is under the PSA agreements and covers Siphumelele 3#, Kroondal and Marikana mines.

The are no known impediments to the Right.

## Mining Method

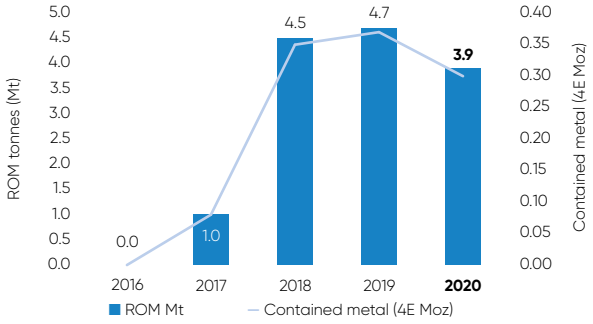
Mechanised bord-and-pillar mining method.

## Operational Infrastructure

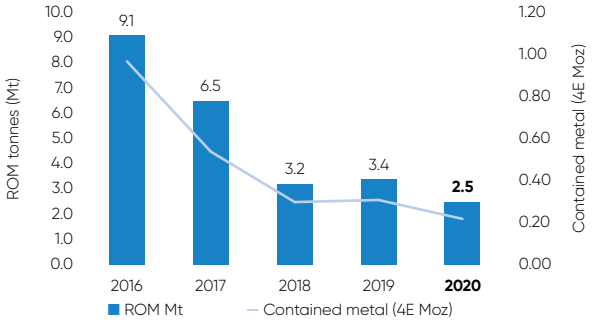
Ore Reserves at Siphumelele 3 Shaft are mined, hoisted and processed using the Kroondal Mine infrastructure. The UG2 Reef is accessed from surface using five decline systems. Mining takes place at depths between 250m and 550m below surface. ROM ore is treated via two concentrator processing plants (K1 and K2) and there is spare processing capacity at a third concentrator plant, which is currently under care and maintenance (Marikana plant). The concentrate is sold to Anglo American Platinum, under an off-take agreement.

| | Units | UG2 |
|---|---|---|
| **Mineral Resource assumptions** | | |
| Geological loss | % | 15 – 32 |
| Minimum Resource cut width | cm | 200 |
| Average density | g/cm$^3$ | 3.5 |
| **Ore Reserves modifying factors** | | |
| Mining loss factor | % | 0.0 – 0.13 |
| Mining dilution | % | 6 – 11 |
| Pillar extraction factor | % | 75 – 81 |
| Average planned stoping width | cm | 230 |
| 4E concentrator recoveries | % | 81 |
| Mine call factor | % | 94 |

### Siphumelele 3 UG2 Reef production history
(ROM)




### Kroondal UG2 Reef production history
(ROM)



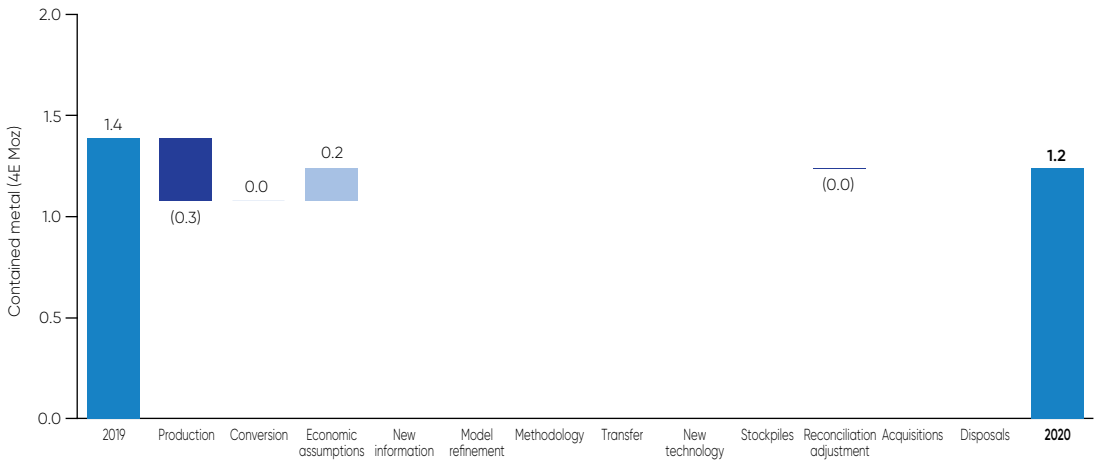

# Siphumelele 3 Shaft (100%)

## Ore Reserves

| Siphumelele 3 Shaft (100%) | Reserve life | Classification | Ore Reserves (ROM) Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| UG2 Reef | 10 | Proved | 14.7 | 17.1 | 2.62 | 2.52 | 38 | 43 | 1.2 | 1.4 |
| | | Probable | – | – | – | – | – | – | – | – |
| | | Total | 14.7 | 17.1 | 2.62 | 2.52 | 38 | 43 | 1.2 | 1.4 |

### UG2 Ore Reserves reconciliation

Siphumelele 3 Shaft UG2 Reef Ore Reserves
2019 – 2020 reconciliation (4E Moz)



# Sibanye-Stillwater joint operations continued

## Siphumelele 3 Shaft (100%) continued

### Exclusive Mineral Resources

| Siphumelele 3 Shaft (100%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| UG2 Reef | Measured | 4.7 | 4.8 | 3.16 | 3.09 | 15 | 15 | 0.5 | 0.5 |
| | Indicated | – | – | – | – | – | – | – | – |
| | Measured and Indicated | 4.7 | 4.8 | 3.16 | 3.09 | 15 | 15 | 0.5 | 0.5 |
| | Inferred | – | – | – | – | – | – | – | – |
| | Total | 4.7 | 4.8 | 3.16 | 3.09 | 15 | 15 | 0.5 | 0.5 |

### UG2 Reef exclusive Mineral Resources reconciliation


### Inclusive Mineral Resources

| Siphumelele 3 Shaft (100%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| UG2 Reef | Measured | 22.1 | 26.2 | 3.16 | 3.07 | 70 | 81 | 2.2 | 2.6 |
| | Indicated | – | – | – | – | – | – | – | – |
| | Measured and Indicated | 22.1 | 26.2 | 3.16 | 3.07 | 70 | 81 | 2.2 | 2.6 |
| | Inferred | – | – | – | – | – | – | – | – |
| | Total | 22.1 | 26.2 | 3.16 | 3.07 | 70 | 81 | 2.2 | 2.6 |

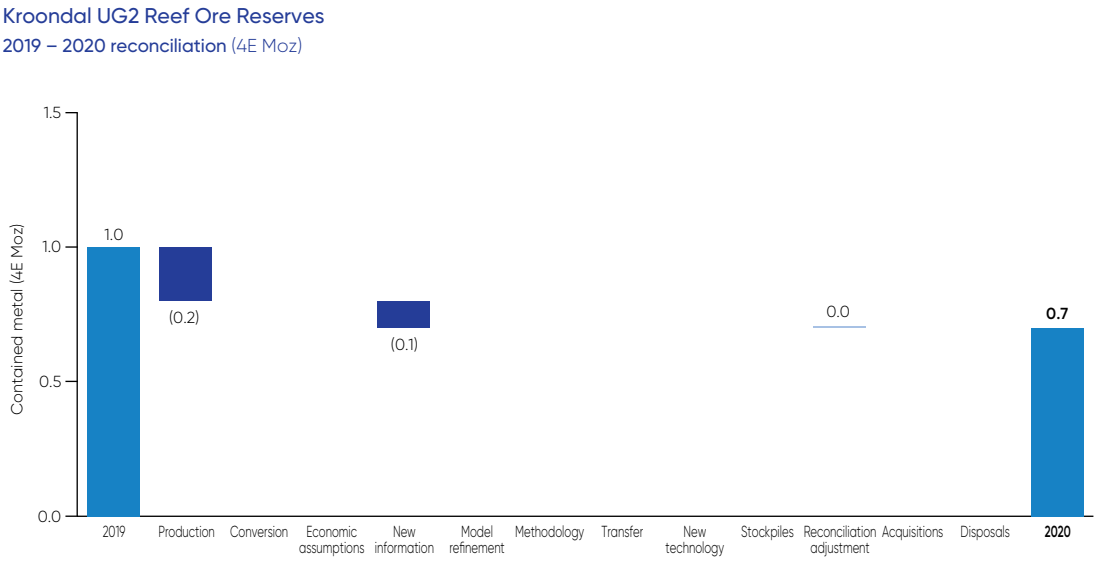
# Kroondal Mine (50%)

## Ore Reserves*

| Kroondal Mine (50%)** | Reserve life | Classification | Ore Reserves (ROM) Million tonnes (Mt) 2020 | 2019 | Grade 4E g/t 2020 | 2019 | Contained metal 4E tonnes 2020 | 2019 | Contained metal 4E Moz 2020 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|
| UG2 Reef | 4 | Proved | 9.3 | 12.1 | 2.50 | 2.62 | 23 | 32 | 0.7 | 1.0 |
| | | Probable | – | – | – | – | – | – | – | – |
| | | Total | 9.3 | 12.1 | 2.50 | 2.62 | 23 | 32 | 0.7 | 1.0 |

* *Estimates reported on a 100% ownership basis. The 2019 estimates have been restated on a 100% basis.*
** *The Proved Ore Reserves include open cast UG2 Reef Reserves of 0.2 4E Moz( 1.7 Mt and 3.27 g/t).*

## UG2 Reef Ore Reserves reconciliation



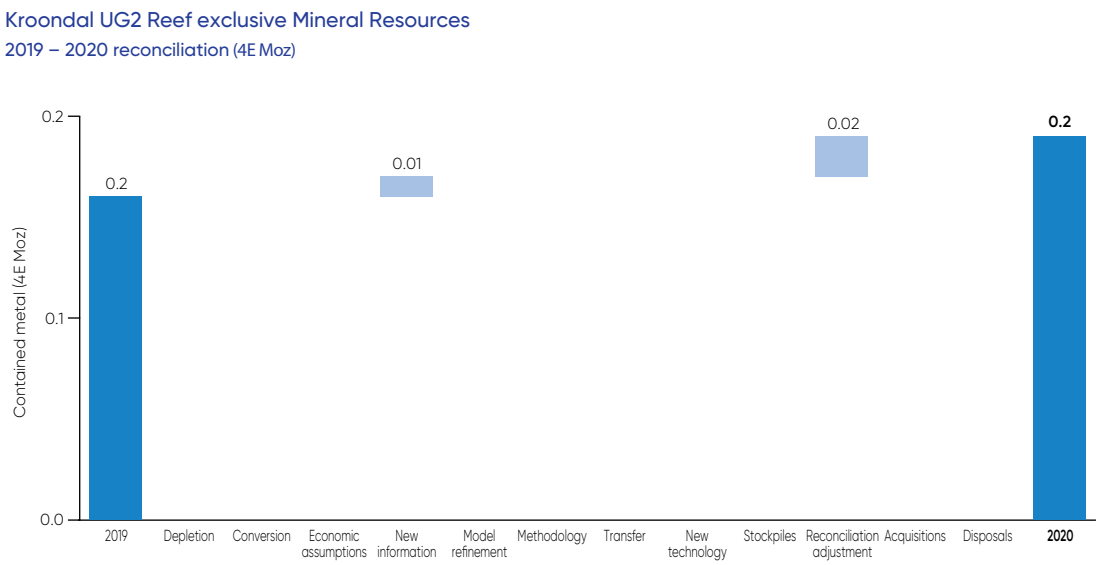

## Exclusive Mineral Resources*

| Kroondal Mine (50%)** | Classification | Mineral Resources Million tonnes (Mt) 2020 | 2019 | Grade 4E g/t 2020 | 2019 | Contained metal 4E tonnes 2020 | 2019 | Contained metal 4E Moz 2020 | 2019 |
|---|---|---|---|---|---|---|---|---|---|
| UG2 Reef | Measured# | 1.5 | 1.0 | 3.22 | 3.08 | 5 | 3 | 0.2 | 0.1 |
| | Indicated | 0.3 | 0.6 | 3.58 | 3.58 | 1 | 2 | 0.0 | 0.1 |
| | Measured and Indicated | 1.8 | 1.5 | 3.28 | 3.26 | 6 | 5 | 0.2 | 0.2 |
| | Inferred | – | – | – | – | – | – | – | – |
| | Total | 1.8 | 1.5 | 3.28 | 3.26 | 6 | 5 | 0.2 | 0.2 |

* *Estimates reported on a 100% ownership basis. The 2019 estimates have been restated on a 100% basis.*
** *Post the finalisation of the 2019 Anglo American Platinum R&R Report, Sibanye-Stillwater restated the Measured Mineral Resource estimates. This is not a material change and restated estimates can be found in the Sibanye-Stillwater Annual Report.*
\# *The exclusive Measured Resources include open cast UG2 Reef Resources of 0.1 4E Moz (0.6 Mt and 3.58 g/t).*

# Sibanye-Stillwater joint operations continued

### UG2 Reef exclusive Mineral Resources reconciliation




### Inclusive Mineral Resources*

| Kroondal Mine (50%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| UG2 Reef | Measured | 12.1 | 14.8 | 3.19 | 3.14 | 39 | 46 | 1.2 | 1.5 |
| | Indicated | 0.6 | 0.6 | 3.58 | 3.58 | 2 | 2 | 0.1 | 0.1 |
| | Measured and Indicated | 12.6 | 15.4 | 3.20 | 3.16 | 41 | 48 | 1.3 | 1.6 |
| | Inferred | – | – | – | – | – | – | – | – |
| | Total | 12.6 | 15.4 | 3.20 | 3.16 | 41 | 48 | 1.3 | 1.6 |

* *Estimates reported on a 100% ownership basis. The 2019 estimates have been restated on a 100% basis.*

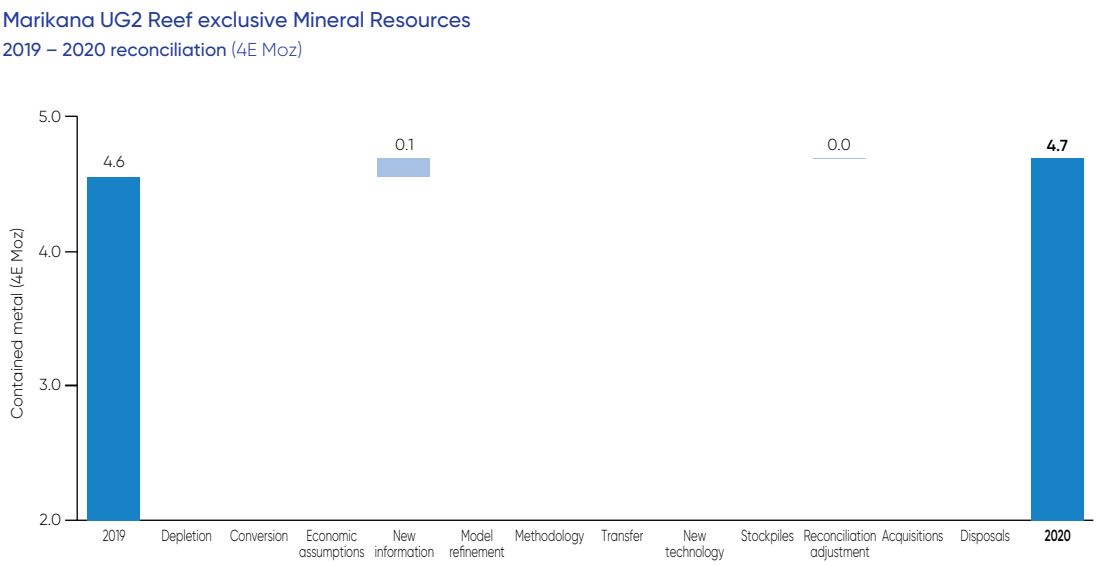
# Marikana Mine (50%)

## Exclusive Mineral Resources*

| Marikana Mine (50%)** | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| UG2 Reef | Measured | 27.3 | 27.3 | 3.48 | 3.35 | 95 | 92 | 3.1 | 2.9 |
| | Indicated | 9.5 | 9.5 | 3.83 | 3.76 | 36 | 36 | 1.2 | 1.1 |
| | Measured and Indicated | 36.8 | 36.8 | 3.57 | 3.46 | 131 | 128 | 4.2 | 4.1 |
| | Inferred | 4.9 | 4.9 | 2.95 | 2.95 | 15 | 15 | 0.5 | 0.5 |
| | Total | 41.7 | 41.7 | 3.50 | 3.40 | 146 | 143 | 4.7 | 4.6 |

* *Estimates reported on a 100% ownership basis. The 2019 estimates have been restated on a 100% basis.*
** *The exclusive Mineral Resources include open cast UG2 Reef Resources of 0.3 4E Moz (2.1 Mt and 3.69 g/t).*

### UG2 Reef exclusive Mineral Resources reconciliation




## Inclusive Mineral Resources*

| Marikana Mine (50%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| UG2 Reef | Measured | 27.3 | 27.3 | 3.48 | 3.35 | 95 | 92 | 3.1 | 2.9 |
| | Indicated | 9.5 | 9.5 | 3.83 | 3.76 | 36 | 36 | 1.2 | 1.1 |
| | Measured and Indicated | 36.8 | 36.8 | 3.57 | 3.46 | 131 | 128 | 4.2 | 4.1 |
| | Inferred | 4.9 | 4.9 | 2.95 | 2.95 | 15 | 15 | 0.5 | 0.5 |
| | Total | 41.7 | 41.7 | 3.50 | 3.40 | 146 | 143 | 4.7 | 4.6 |

* *Estimates reported on a 100% ownership basis. The 2019 estimates have been restated on a 100% basis.*

# Bokoni Mine (49%)

Bokoni is a 51:49 joint-operation partnership between Atlatsa Resources and Anglo American Platinum in Limpopo, 80km south-east of the town of Polokwane.

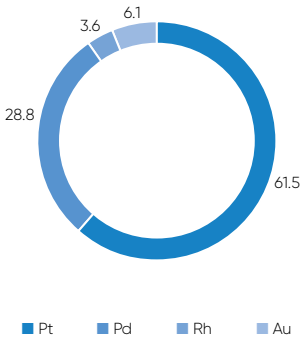
**Raymond Makgato***
Competent Person: Mineral Resources
*Technical assistant: strategy and business development*
SACNASP, PrSciNat
13 years

* *Employed by Anglo American Platinum*

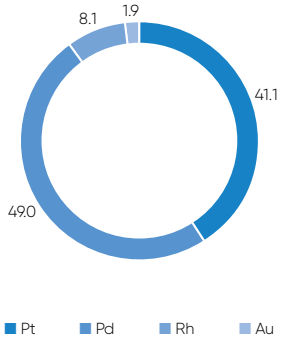
Information for non-managed operations is provided by joint-operation partners. For additional details please refer to the applicable annual reports.

As at 31 December 2020, the Anglo American Platinum approach of reporting Ore Reserves and Mineral Resources has changed from an attributable basis to 100% ownership basis. The 2019 estimates have been restated on a 100% basis.

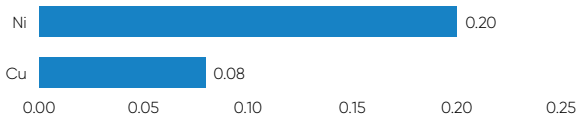
Bokoni Merensky Reef 4E Prill (%)



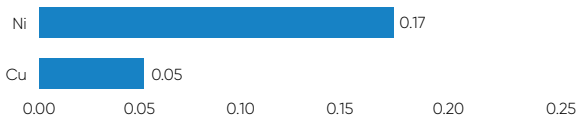

Bokoni UG2 Reef 4E Prill (%)




Bokoni Merensky Reef base metal grades (%)




Bokoni UG2 Reef base metal grades (%)




## Property description

It forms part of the north-eastern Limb of the Bushveld Complex, with both Merensky and UG2 Mineral Resources.

The mining infrastructure of two decline shafts and two concentrators was placed on care and maintenance in October 2017, following the closure of the older Vertical and UM2 shafts in 2015. The opencast operation was terminated in December 2016 and the rehabilitation completed in January 2018.

The process of the disposal of the mine is underway and on track.

## Brief history

Bokoni Mine has undergone several ownership and name changes since 1969 when it was known as Atok Platinum Mine (Pty) Limited and subsequently acquired by Anglo American Platinum in the mid 1990s.

Anooraq Resources (later renamed Atlatsa Resources) and Anglo American Platinum entered into an empowerment transaction agreement in 2008, whereby Anglo American Platinum sold to Atlatsa an effective 51% of Bokoni Mine and an additional 1% interest in each of the other joint projects (including Ga Phasha). As a result, Atlatsa Resources had a controlling interest in the mine.

In July 2017 Atlatsa entered into an agreement with Anglo American Platinum, whereby Atlatsa implemented a full care and maintenance strategy for Bokoni Mine.

## Mineral Rights

Bokoni Mine has two Mining Rights. The first covers an area of 15,139ha, having a converted Mining Right under DMRE ref LP 59 MR, valid from June 2009 to June 2039. The second covers an area of 4,549ha, having a converted Mining Right under the DMRE ref LP 65 MR, valid from June 2009 to June 2039.

There are no known impediments to the Rights.

| | Units | MR | UG2 |
|---|---|---|---|
| **Mineral Resource assumptions** | | | |
| Average geological loss | % | 14 | 14 |
| Minimum Resource cut width | cm | 90 | 90 |
| Average density | g/cm$^3$ | 3.4 | 3.9 |

## Exclusive Mineral Resources*

| Bokoni (49%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| Merensky Reef | Measured | 92.8 | 92.8 | 4.82 | 4.82 | 447 | 447 | 14.4 | 14.4 |
| | Indicated | 47.8 | 47.8 | 4.85 | 4.85 | 232 | 232 | 7.5 | 7.5 |
| | Measured and Indicated | 140.6 | 140.6 | 4.83 | 4.83 | 679 | 679 | 21.8 | 21.8 |
| | Inferred | 205.8 | 205.8 | 5.02 | 5.02 | 1,033 | 1,033 | 33.2 | 33.2 |
| | Total | 346.4 | 346.4 | 4.94 | 4.94 | 1,712 | 1,712 | 55.1 | 55.1 |
| UG2 Reef | Measured | 198.6 | 198.6 | 6.43 | 6.43 | 1,277 | 1,277 | 41.1 | 41.1 |
| | Indicated | 92.3 | 92.3 | 6.57 | 6.57 | 606 | 606 | 19.5 | 19.5 |
| | Measured and Indicated | 290.9 | 290.9 | 6.47 | 6.47 | 1,883 | 1,883 | 60.6 | 60.6 |
| | Inferred | 174.6 | 174.6 | 6.71 | 6.71 | 1,172 | 1,172 | 37.7 | 37.7 |
| | Total | 465.5 | 465.5 | 6.56 | 6.56 | 3,055 | 3,055 | 98.2 | 98.2 |

* *Estimates reported on a 100% ownership basis. The 2019 estimates have been restated on a 100% basis.*

### Merensky Reef exclusive Mineral Resources reconciliation

Bokoni Mine is on care and maintenance. Estimates are unchanged from previous reporting.

### UG2 Reef exclusive Mineral Resources reconciliation

Bokoni Mine is on care and maintenance. Estimates are unchanged from previous reporting.

## Inclusive Mineral Resources*

| Bokoni (49%) | Classification | Mineral Resources Million tonnes (Mt) | | Grade 4E g/t | | Contained metal 4E tonnes | | Contained metal 4E Moz | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 | 2019 |
| Merensky Reef | Measured | 92.8 | 92.8 | 4.82 | 4.82 | 447 | 447 | 14.4 | 14.4 |
| | Indicated | 47.8 | 47.8 | 4.85 | 4.85 | 232 | 232 | 7.5 | 7.5 |
| | Measured and Indicated | 140.6 | 140.6 | 4.83 | 4.83 | 679 | 679 | 21.8 | 21.8 |
| | Inferred | 205.8 | 205.8 | 5.02 | 5.02 | 1,033 | 1,033 | 33.2 | 33.2 |
| | Total | 346.4 | 346.4 | 4.94 | 4.94 | 1,712 | 1,712 | 55.1 | 55.1 |
| UG2 Reef | Measured | 198.6 | 198.6 | 6.43 | 6.43 | 1,277 | 1,277 | 41.1 | 41.1 |
| | Indicated | 92.3 | 92.3 | 6.57 | 6.57 | 606 | 606 | 19.5 | 19.5 |
| | Measured and Indicated | 290.9 | 290.9 | 6.47 | 6.47 | 1,883 | 1,883 | 60.6 | 60.6 |
| | Inferred | 174.6 | 174.6 | 6.71 | 6.71 | 1,172 | 1,172 | 37.7 | 37.7 |
| | Total | 465.5 | 465.5 | 6.56 | 6.56 | 3,055 | 3,055 | 98.2 | 98.2 |

* *Estimates reported on a 100% ownership basis. The 2019 estimates have been restated on a 100% basis.*

# Endowment – Mineralisation

as at 31 December 2020

## Endowment – Statement of Mineralisation

| | |
|---|---|
| **General** | In addition to evaluated and reported Ore Reserves and Mineral Resources, Anglo American Platinum holds various Mineralisations that are not publicly reported.<br><br>Different types of Mineralisation exist, either stockpiled material on surface or still *in situ* underground. This material requires studies to determine the potential economic value (reasonable prospects for eventual economic extraction). |
| **Surface material** | Surface material is divided into tailings storage facilities, stockpiles and low grade material storage facilities.<br><br>**Tailings storage facilities**<br>Tailings Mineral Resources, where evaluated, are already reported in the relevant Mineral Resource statement.<br><br>Tailings Mineralisation: operating (active) tailings facilities for current mining operations are not evaluated and therefore not reported as part of Mineral Resources. They contain residual amounts of PGM, base metals, chrome and are registered internally in Anglo American Platinum' asset books. Currently, significant Mineralisation is available at the following operations:<br>– Amandelbult Complex – Western Limb<br>– Modikwa, Mototolo and Bokoni mines – Eastern Limb<br>– Mogalakwena Mine – Northern Limb<br>– Unki Mine – Great Dyke (Zimbabwe).<br><br>**Stockpiles**<br>Stockpiles are mined ore held for future treatment. Currently, only Mogalakwena reports Ore Reserve and Mineral Resource stockpiles, included in the relevant Ore Reserve and Mineral Resource statement.<br><br>**Low grade material storage facilities**<br>Low grade storage facilities are not evaluated and currently not reported under the Ore Reserve and Mineral Resource statement.<br><br>Evaluation of low-grade surface storage facilities not contracted to external companies is ongoing. They contain various amounts of PGM, base metals and any by-product elements from associated mining activities and are recorded internally. Currently, Mineralisation has been identified at Amandelbult Complex. However, minor low grade surface material also exist on other operations. |
| **Underground *in situ* material** | Note that Mineral Resources are quoted over the entire Mining Right and Prospecting Right areas except for:<br>– Mogalakwena Mine, where Mineral Resources are only quoted down to potential future surface mining depths.<br>– Twickenham, Tumela and Bokoni mines, where a virgin rock temperature of 75°C is currently considered the limit to mining given present technology, metal prices and energy costs. Areas higher than 75°C are currently classified as Mineralisation. |

# Definitions for reconciliation categories

as at 31 December 2020

| | |
|---|---|
| **Opening balance** | As at 31 December 2019. |
| **Production** | The amount of material (expressed in terms of tonnage and content as applicable) removed by mining from the scheduled Ore Reserves, i.e. areas actually mined in the reporting period which are removed from reserve model(s). |
| **Depletion** | Mineral Resources: the amount of material (expressed in terms of tonnage and content as applicable) removed by mining from Mineral Resources, i.e. areas actually mined in the reporting period which are removed from resource model(s). |
| **Conversion** | The effect of applying updated 'Modifying Factors' to Ore Reserves and Mineral Resources which include geotechnical, mining, metallurgical, marketing, legal, environmental, social and governmental considerations including infrastructure. Includes changes to the mining method, mine plan and/or layout changes e.g. changes in pit slope angles or mineable cut due to geotechnical reasons. The change can be positive or negative year-on-year.<br>**Sub-categories:**<br>– Conversion is the process of up-grading Mineral Resources to Ore Reserves based on a change in confidence levels and/or modifying factors.<br>– Re-allocation is the process of down-grading of Ore Reserves to Mineral Resources or Mineral Resources to Mineralised Inventory based on a change in confidence levels and/or modifying factors.<br>– Sterilisation is the process of removing material from Ore Reserves and/or Mineral Resources that no longer has reasonable prospects for eventual economic extraction (RPEEE). |
| **Economic assumptions** | The effect of economic assumptions based on the current or future price of a commodity and associated exchange rate estimates as determined by the corporate centre (Global Assumptions) which has a direct impact on the Mineral Resources or Ore Reserves particularly the cut-off grade (which can be affected by changes in costs). |
| **New information** | The effect of additional resource definition information (with QA/QC information) which initiates an update to the geological models (facies, structural, grade, geotechnical) and results in an updated (re-classified) resource model and subsequent determination of new Ore Reserve estimates. Includes ore bodies (or portions of current orebodies) within the same project/operation not previously reported. |
| **Model refinement** | No additional resource definition drilling has been undertaken but the interpretation (geometry/ore-waste contacts) of the orebody has been refined or internal mine/lease boundaries changed, eg based on mapping information obtained during mining or a different structural model being applied. Changes to *in situ* tonnages as a result of new geological losses being applied or a change to the definition of the boundary of the Mineral Resources due to an updated 'economically mineable cut' being applied. |
| **Methodology** | Changes to Mineral Resources or Ore Reserves in response to the application of new or improved mining and/or processing methods. |
| **Transfer** | Movement of Mineral Resources and/or Ore Reserves from one type of product/ore type facies to another due to internal contact changes/updates or from one mining/project area to another or re-location of in-situ material to stockpiles. |
| **New technology** | Changes to Mineral Resources or Ore Reserves in response to the application of new or improved mining and/or processing methods. |
| **Stockpiles** | Only used the first time a stockpile is declared ('opening balance' of stockpile, thereafter a separate reconciliation for stockpiles is required). |
| **Reconciliation adjustment** | Changes which cannot be allocated to a defined category or an adjustment necessary to mitigate inaccurate production/depletion estimates of the previous year. |
| **Acquisition** | Additional Ore Reserves and Mineral Resources due to acquisitions of assets or increased direct ownership in joint-operations agreements/associate companies. |
| **Disposal** | Reduction in Ore Reserves and Mineral Resources due to disposals of assets or reduced direct ownership in joint-operations agreements/associate companies, refusal/withdrawal/relinquishment of Mining/Prospecting Rights or related permits e.g. due to environmental issues, changes in policy. |
| **Closing balance** | As at 31 December 2020. |

# Administration

## Directors

### Executive directors
N Viljoen (chief executive officer)
CW Miller (finance director)

### Independent non-executive directors
RJ Dixon
T Leoka
NP Mageza
NT Moholi
D Naidoo
JM Vice

### Non-executive directors
M Cutifani (Australian)
N Mbazima (Zambian)
AM O'Neill (Australian)
ST Pearce (Australian)

## Company secretary

Elizna Viljoen
elizna.viljoen@angloamerican.com

Telephone +27 (0) 11 638 3425
Facsimile +27 (0) 11 373 5111

## Financial, administrative, technical advisers

Anglo Corporate Services South Africa Proprietary Limited

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## Auditor

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Waterfall City
2090

## Investor relations

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## Lead competent person

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## Fraud line – yourvoice

Anonymous whistleblower facility 087 232 5426 (South Africa)
www.yourvoice.angloamerican.com

## Human resources-related queries

**Job opportunities:** www.angloamericanplatinum.com/careers/job-opportunities

**Bursaries, email:** bursaries@angloplat.com

**Career information:** www.angloamericanplatinum.com/careers

**Anglo American Platinum Limited**
Incorporated in the Republic of South Africa
Date of incorporation: 13 July 1946
Registration number: 1946/022452/06
JSE code: AMS – ISIN: ZAE000013181

**www.angloamericanplatinum.com**

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