

we are one

# Sibanye Stillwater

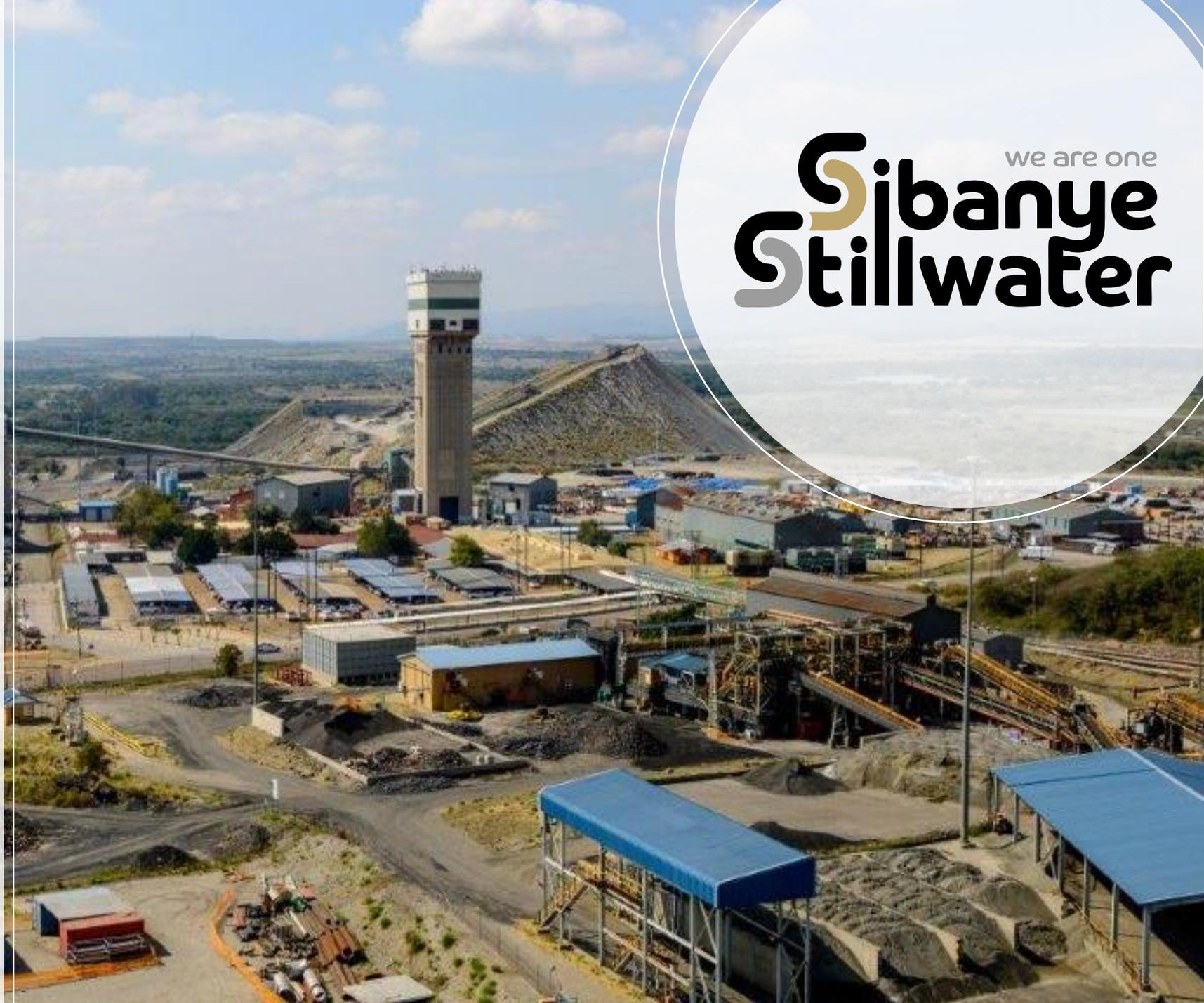
SA PGM operations – Investor day (session 3)

23 September 2021

SA PGM  
operations  
Investor day  
(session 3)

Long life, high  
value assets

23 September 2021



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**Sibanye  
Stillwater**

## Disclaimer

The information in this announcement may contain forward-looking statements within the meaning of the “safe harbour” provisions of the United States Private Securities Litigation Reform Act of 1995. These forward-looking statements, including, among others, those relating to Sibanye Stillwater Limited’s (“Sibanye-Stillwater” or the “Group”) financial positions, business strategies, plans and objectives of management for future operations, are necessarily estimates reflecting the best judgment of the senior management and directors of Sibanye-Stillwater.

All statements other than statements of historical facts included in this announcement may be forward-looking statements. Forward-looking statements also often use words such as “will”, “forecast”, “potential”, “estimate”, “expect” and words of similar meaning. By their nature, forward-looking statements involve risk and uncertainty because they relate to future events and circumstances and should be considered in light of various important factors, including those set forth in this disclaimer. Readers are cautioned not to place undue reliance on such statements.

The important factors that could cause Sibanye-Stillwater’s actual results, performance or achievements to differ materially from those in the forward-looking statements include, among others, our future business prospects; financial positions; debt position and our ability to reduce debt leverage; business, political and social conditions in the United States, South Africa, Zimbabwe and elsewhere; plans and objectives of management for future operations; our ability to obtain the benefits of any streaming arrangements or pipeline financing; our ability to service our bond instruments; changes in assumptions underlying Sibanye-Stillwater’s estimation of their current mineral reserves and resources; the ability to achieve anticipated efficiencies and other cost savings in connection with past, ongoing and future acquisitions, as well as at existing operations; our ability to achieve steady state production at the Blitz project; the success of Sibanye-Stillwater’s business strategy; exploration and development activities; the ability of Sibanye-Stillwater to comply with requirements that they operate in a sustainable manner; changes in the market price of gold, PGMs and/or uranium; the occurrence of hazards associated with underground and surface gold, PGMs and uranium mining; the occurrence of labour disruptions and industrial action; the availability, terms and deployment of capital or credit; changes in relevant government regulations, particularly environmental, tax, health and safety regulations and new legislation affecting water, mining, mineral rights and business ownership, including any interpretations thereof which may be subject to dispute; the outcome and consequence of any potential or pending litigation or regulatory proceedings or other environmental, health and safety issues; power disruptions, constraints and cost increases; supply chain shortages and increases in the price of production inputs; fluctuations in exchange rates, currency devaluations, inflation and other macro-economic monetary policies; the occurrence of temporary stoppages of mines for safety incidents and unplanned maintenance; the ability to hire and retain senior management or sufficient technically skilled employees, as well as their ability to achieve sufficient representation of historically disadvantaged South Africans in management positions; failure of information technology and communications systems; the adequacy of insurance coverage; any social unrest, sickness or natural or man-made disaster at informal settlements in the vicinity of some of Sibanye-Stillwater’s operations; and the impact of HIV, tuberculosis and the spread of other contagious diseases, such as coronavirus (“COVID-19”). Further details of potential risks and uncertainties affecting Sibanye-Stillwater are described in Sibanye-Stillwater’s filings with the Johannesburg Stock Exchange and the United States Securities and Exchange Commission, including the Integrated Annual Report and the Annual Report on Form 20-F.

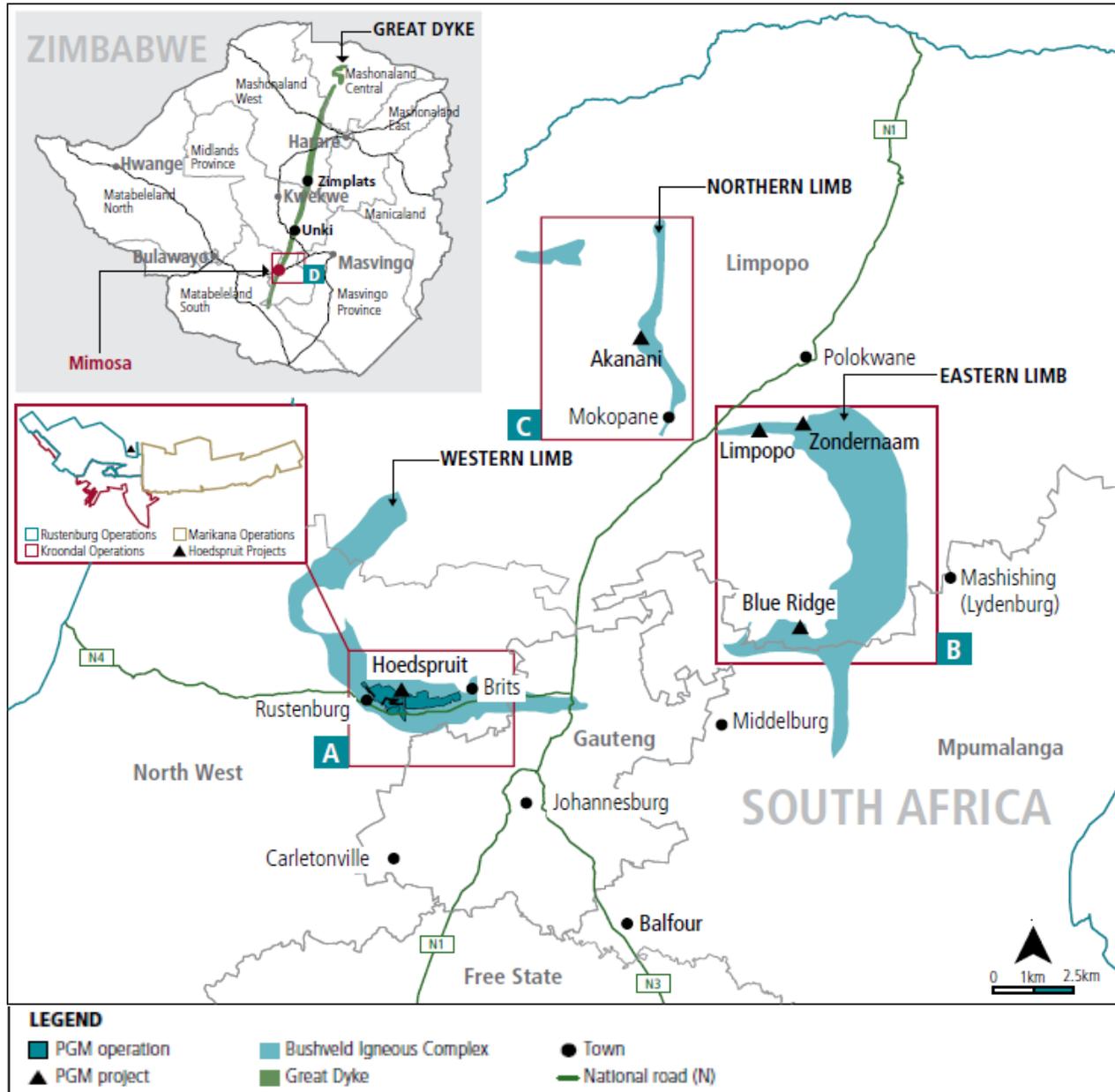
These forward-looking statements speak only as of the date of the content. Sibanye-Stillwater expressly disclaims any obligation or undertaking to update or revise any forward-looking statement (except to the extent legally required).

# Introduction

Richard Stewart, Chief Operating Officer



# Location of SA PGM operations



## Four distinct ore bodies

### A. WESTERN LIMB OPERATIONS

Rustenburg 100% (managed)  
 Kroondal 50% (managed)  
 Marikana 95.3% (managed)  
 Platinum Mile 100% (managed)  
 Hoedspruit 74% (managed)

### B. EASTERN LIMB PROJECTS

Blue Ridge 50% (managed)  
 Zondernaam 74% (managed)  
 Limpopo (attributable portions of Baobab, 95.3%)  
 Dwaalkop JV, 45.3%  
 Doornvlei 95.3% (managed)

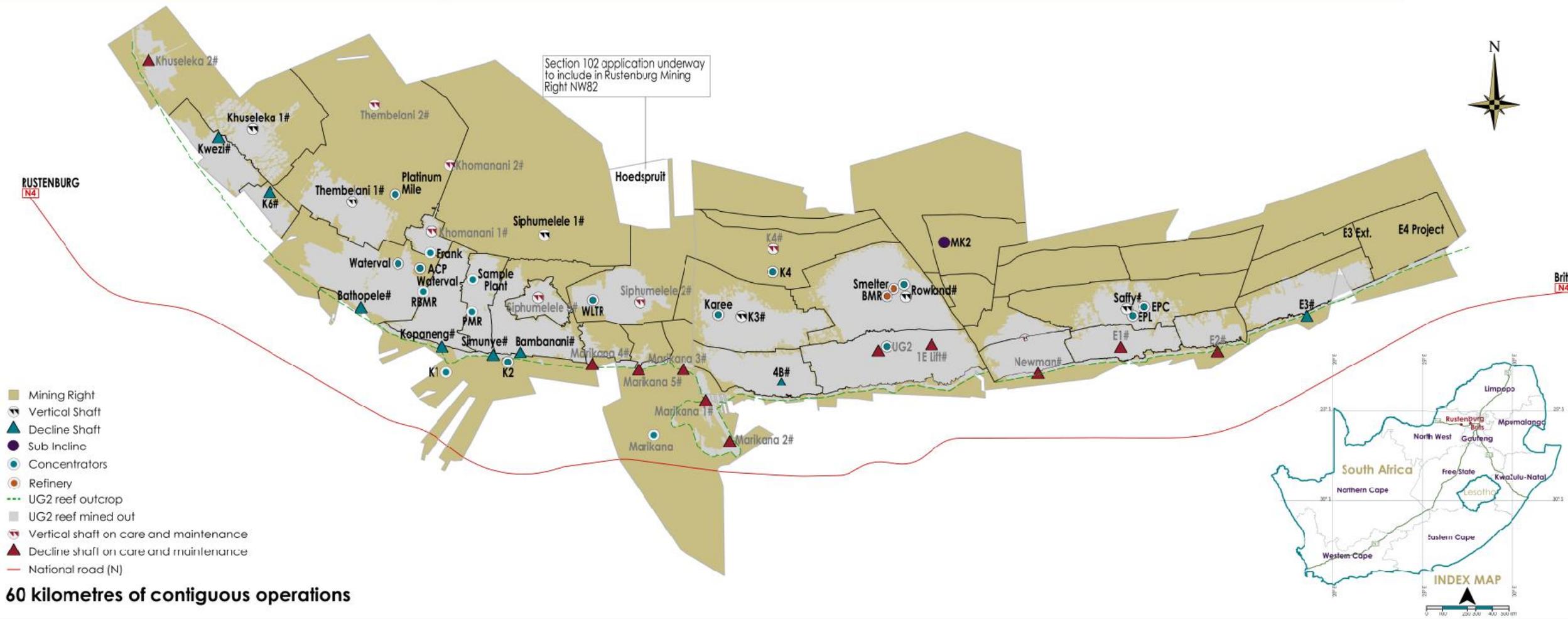
### C. NORTHERN LIMB PROJECTS

Akanani 93.1% (managed)

### D. GREAT DYKE (ZIMBABWE) OPERATION

Mimosa 50% (non-managed)

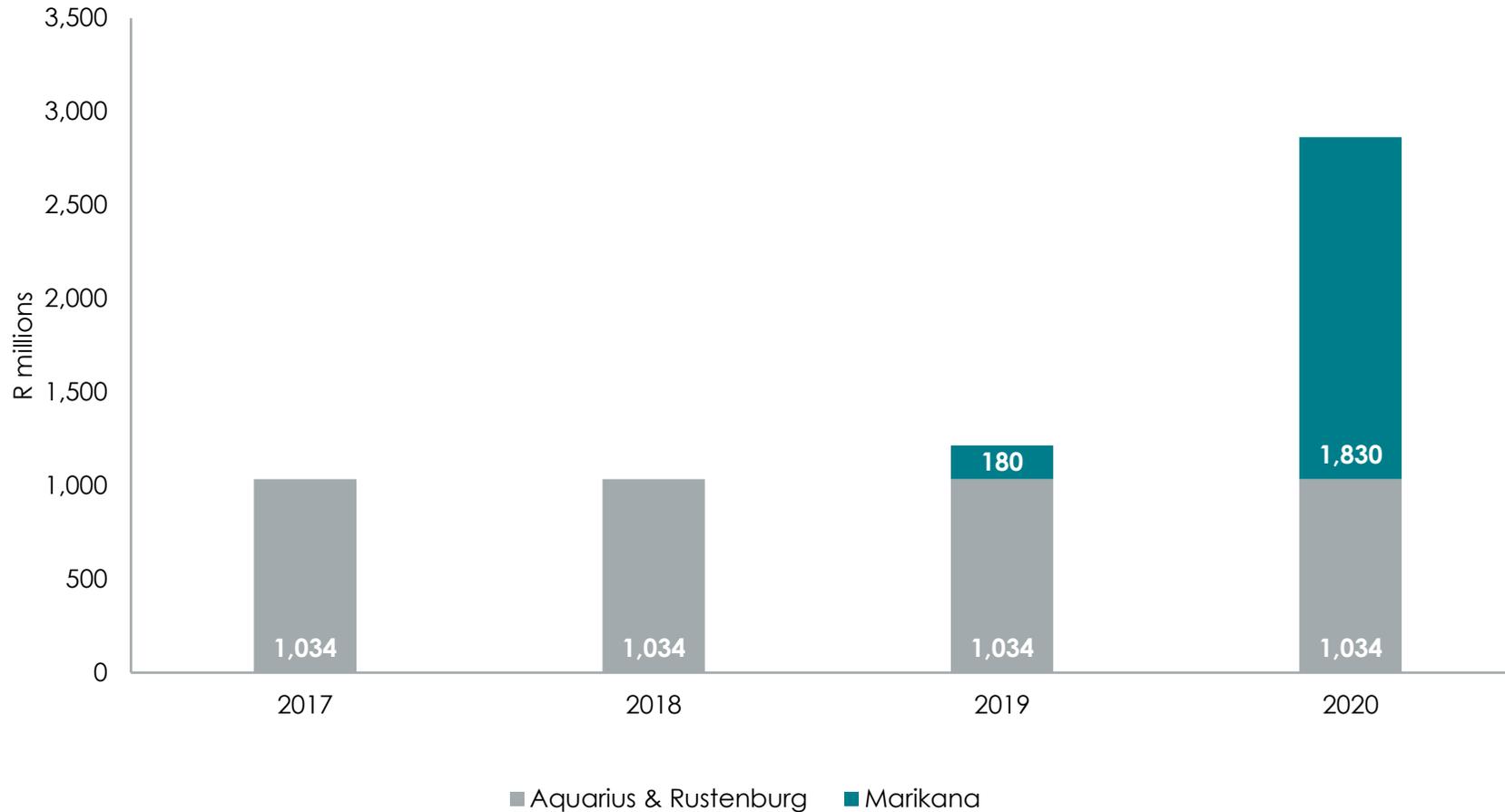
# Overview of Sibanye-Stillwater's SA PGM Western Limb operations



**Extensive mineralised strike length with down dip potential**

# Acquisition synergies realised to date

PGM Integration savings to date

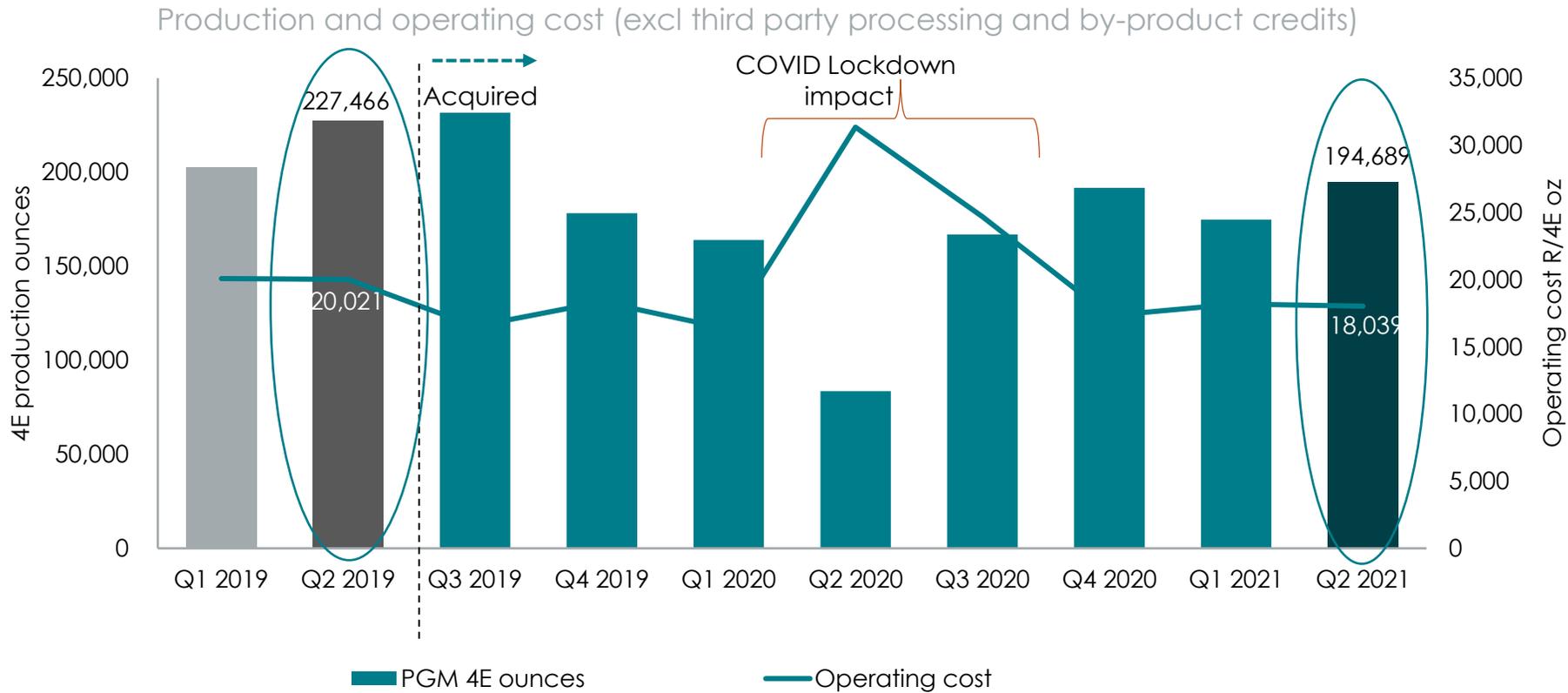


- Shared overhead cost between Group and other operations
- Footprint reduction
- Optimisation of surface infrastructure
- Contract management and procurement synergies
- Closure of Marikana head offices and end of life Generation 1 shafts
- Streamlining processes and procedures
- System alignment and enhancement
- Preserved 12,500 jobs at Rustenburg
- Preserved 2,863\* jobs at Marikana (excluding K4 project)

**R2.9 billion in annual synergies realised from the acquisition of Aquarius (Kroondal and Mimosa), Rustenburg and Marikana**

Include 2,252 jobs saved at 4B Shaft but excluded 4,380 jobs created when the K4 project reaches steady state

# Successful completion of the Marikana integration - synergies delivered



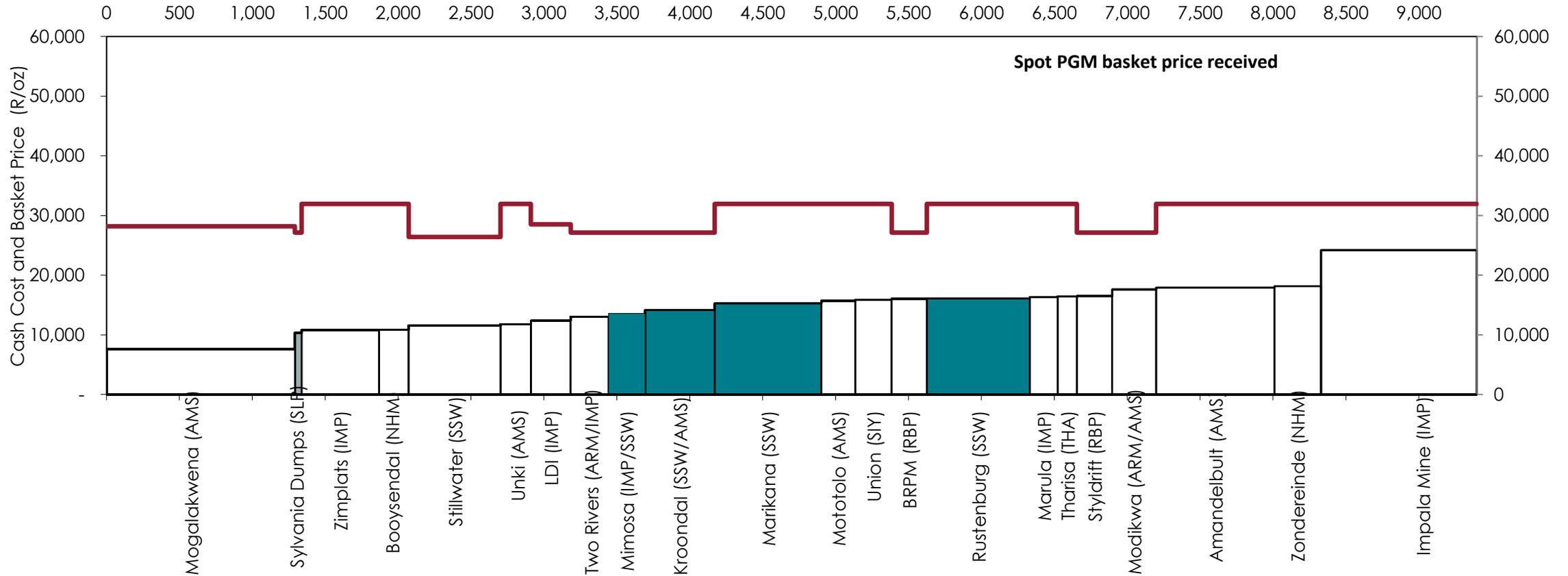
Integration synergy benefits visible in Marikana operating costs

- Q2 2021 vs Q2 2019
  - 12% nominal improvement in operating unit cost despite 14% less ounces produced (post Generation 1 shaft closures in 2019)

Annual synergies of R1.8bn (excluding potential processing synergies)

# SA PGM operations moving down the industry cost curve

Global PGM Cash cost curve (CY21E- At Spot)  
Cumulative Annual Production (4E Koz)



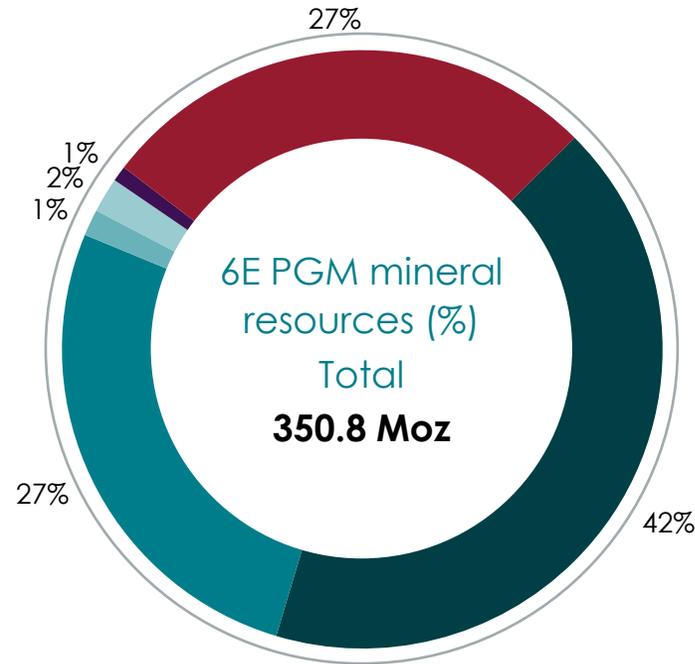
Successful integration and realisation of synergies has moved Rustenburg and Marikana significantly down the cost curve

## Extensive resources and reserves\*

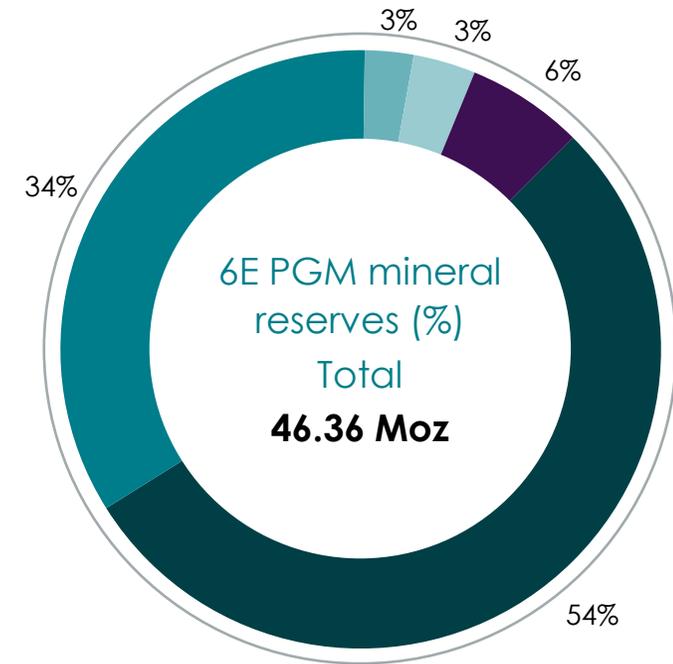
- Reserve estimate are based on a three-year trailing average price assumption

SA PGM OPERATIONS	
Current life of mine (LOM) (at 31 Dec 2020)	
<ul style="list-style-type: none"> <li>• Kroondal 11 years</li> <li>• Mimosa 11 years</li> <li>• Marikana over 40 years</li> <li>• Rustenburg 32 years</li> <li>• Surface sources               <ul style="list-style-type: none"> <li>- Rustenburg 7 years</li> <li>- Marikana (Bulk Tailing Treatment) 5 years</li> </ul> </li> </ul>	
SA PGM operations	% of 6E contribution
Platinum	50%
Palladium	25%
Rhodium	7%
Gold	2%
Ruthenium	13%
Iridium	3%

6E PGM Mineral Resources (%)



6E PGM Mineral Reserves (%)



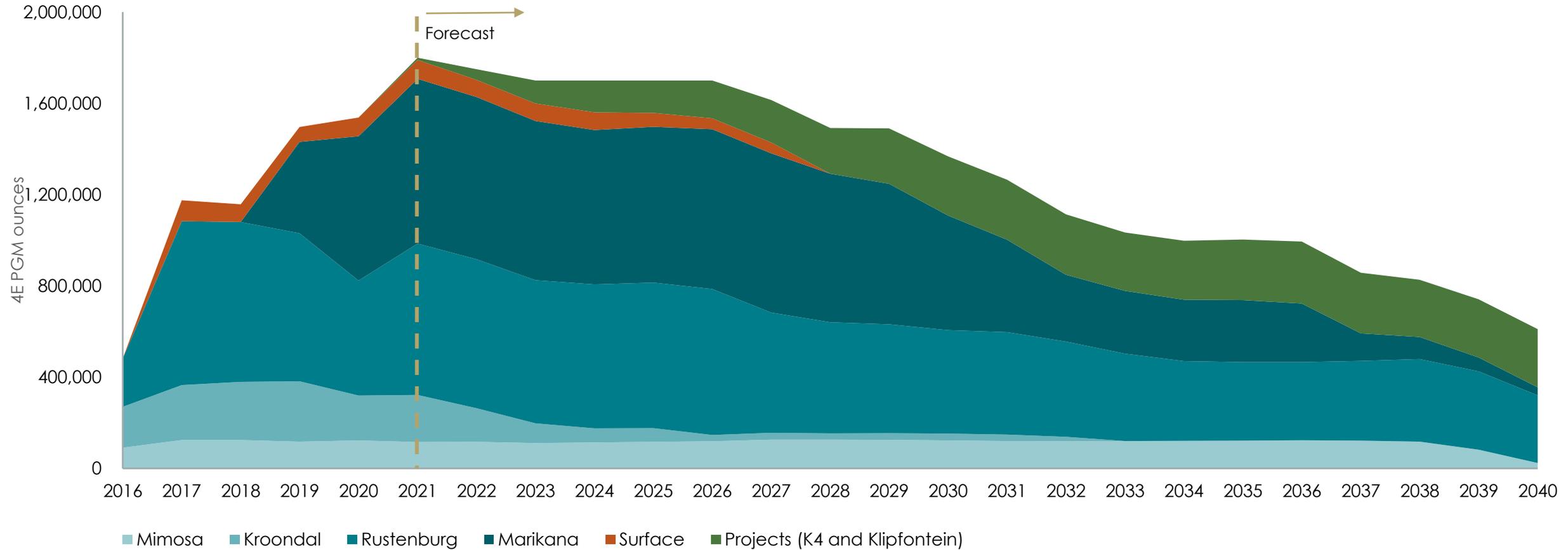
Marikana
  Rustenburg
  Kroondal  
 Mimosa
  Tailings
  Projects

### Reserves support long operational lives with extensive resources providing significant optionality

- PGM resources are inclusive of reserves
- Represents attributable figures from Mimosa and Kroondal

# SA PGM operations production profile

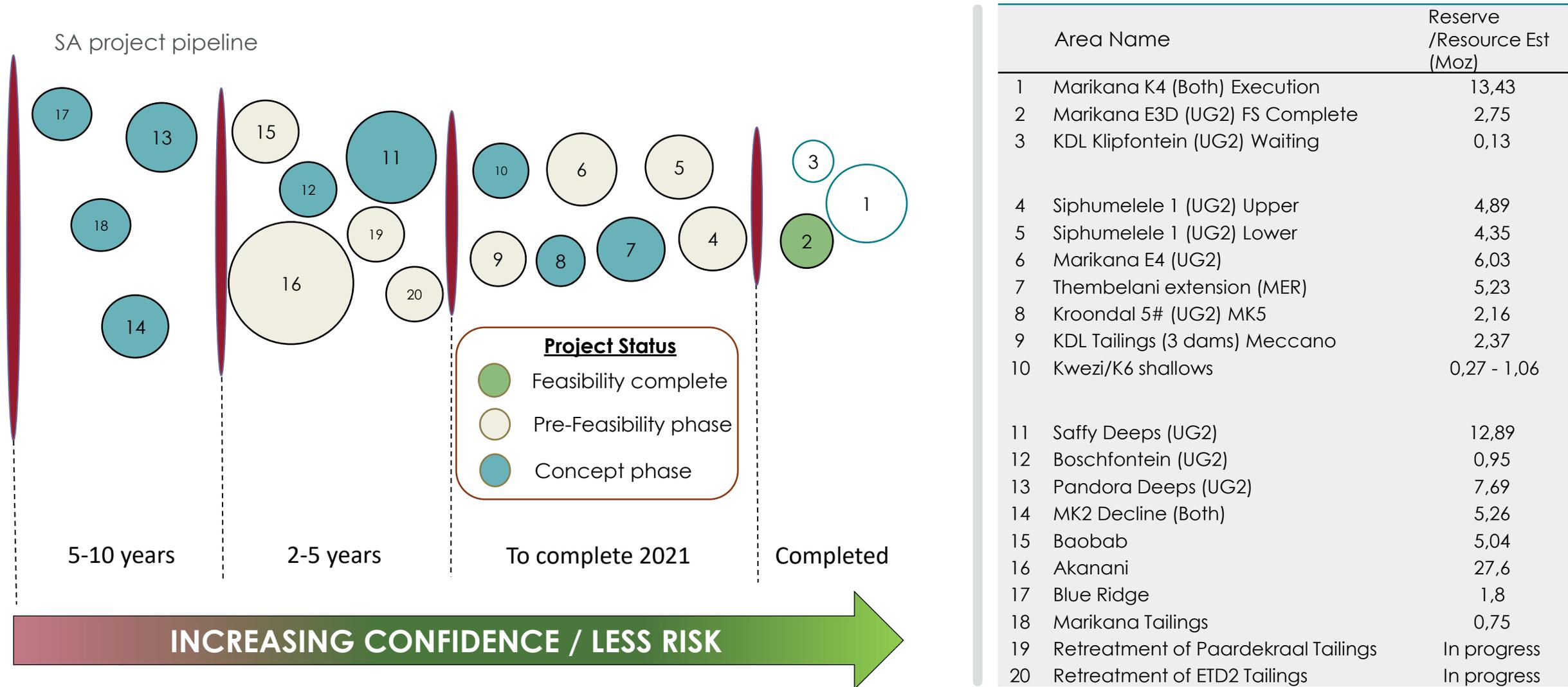
Underground (attributable) and surface production



Long life PGM profile – delivering significant, sustainable benefits for all stakeholders

Note: Graph based on Reserves declared as at 31 December 2020. Current life of mine include K4 and Klipfontein. Price assumptions are available for reference in the appendix

# Significant development potential from extensive PGM Mineral Resources

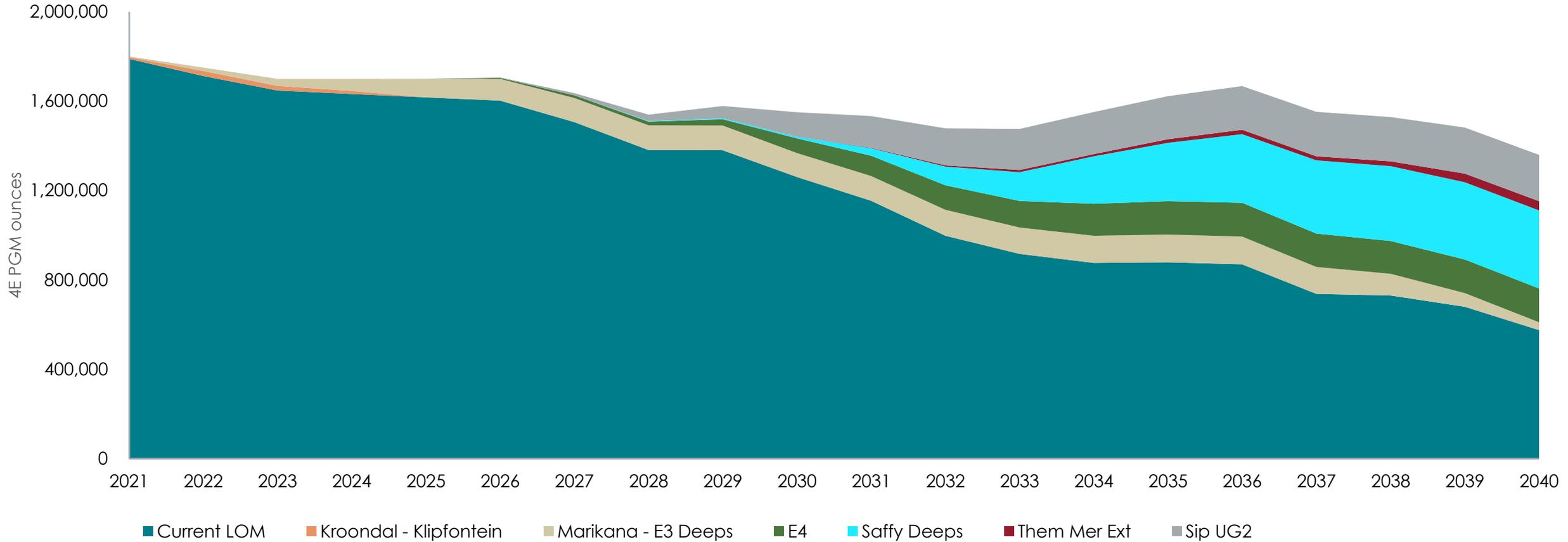


Potential for ongoing metal supply through project development in supportive environment

\* Note: Refer to full project pipeline slide in the appendix

# Potential SA PGM production profile assuming development of key projects

Underground (attributable) and surface production (plus projects)



Long life assets with significant optionality- flexibility to meet future demand requirements in supportive environment

# Overview of the SA PGM operations

Dawie van Aswegen, EVP SA PGM operations

**Sibanye** we are one  
**Stillwater**





EVP SA PGM Operations  
**Dawie van Aswegen**



Act SVP & Head  
of Human  
Resources  
**Norman Nxumalo**



SVP & Head  
of Finance  
**Roderick Mugovhani**



SVP & Head  
of Technical  
& Integration  
**Kevin Robertson**



SVP & Head  
of Mining Rustenburg  
Operations  
**Floyd Masemula**



SVP & Head  
of Mining Kroondal  
Operations  
**Bonginkosi Nqgulunga**



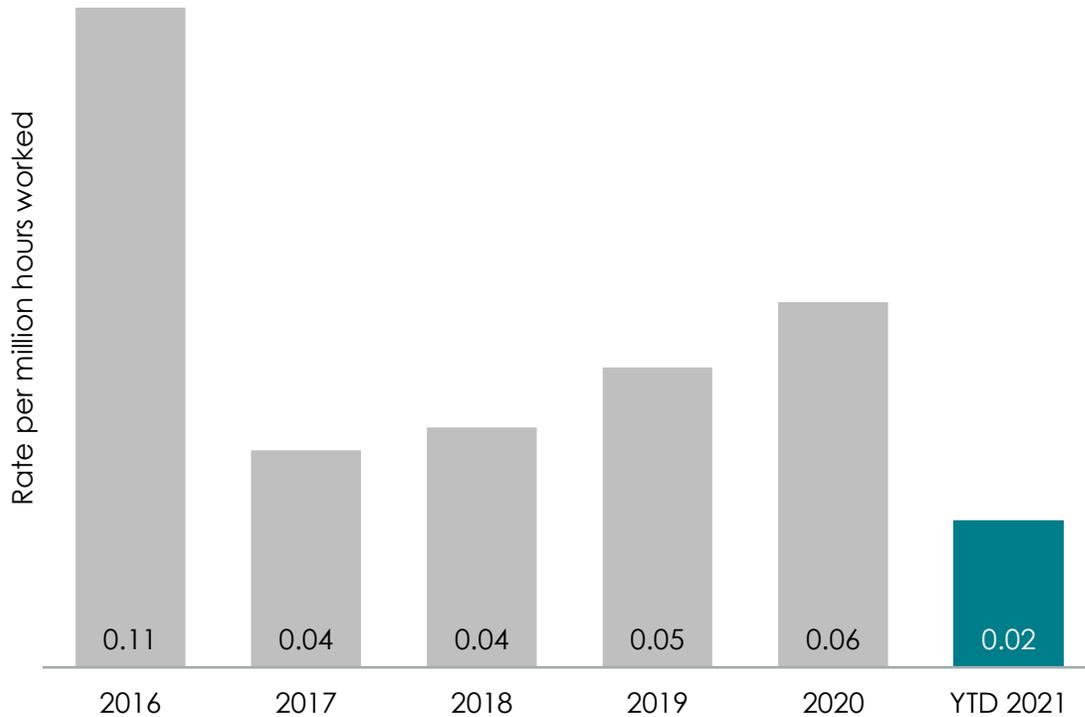
SVP & Head  
of Mining Marikana  
**Johann Kleyn**

Experienced leadership and succession plan ensures continuity and consistency

## Safety performance

- ISO 45001 accreditation to be achieved during 2021 (Marikana already accredited)
- ICMM reporting adopted and added total recordable injury frequency rate (TRIFR) as a new KPI since the start of 2021

Fatal injury frequency rate - SA PGM<sup>1</sup>



### Achievements

- ✓ Kroondal operation • 2,000,000 FFS<sup>2</sup>

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- ✓ Rustenburg operation • 1,000,000 FFS

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- ✓ Marikana operation • 3,000,000 FFS

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- ✓ SA PGM Surface operation • 5,000,000 FFS

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- ✓ SA PGM plants & concentrators • 13,000,000 FFS

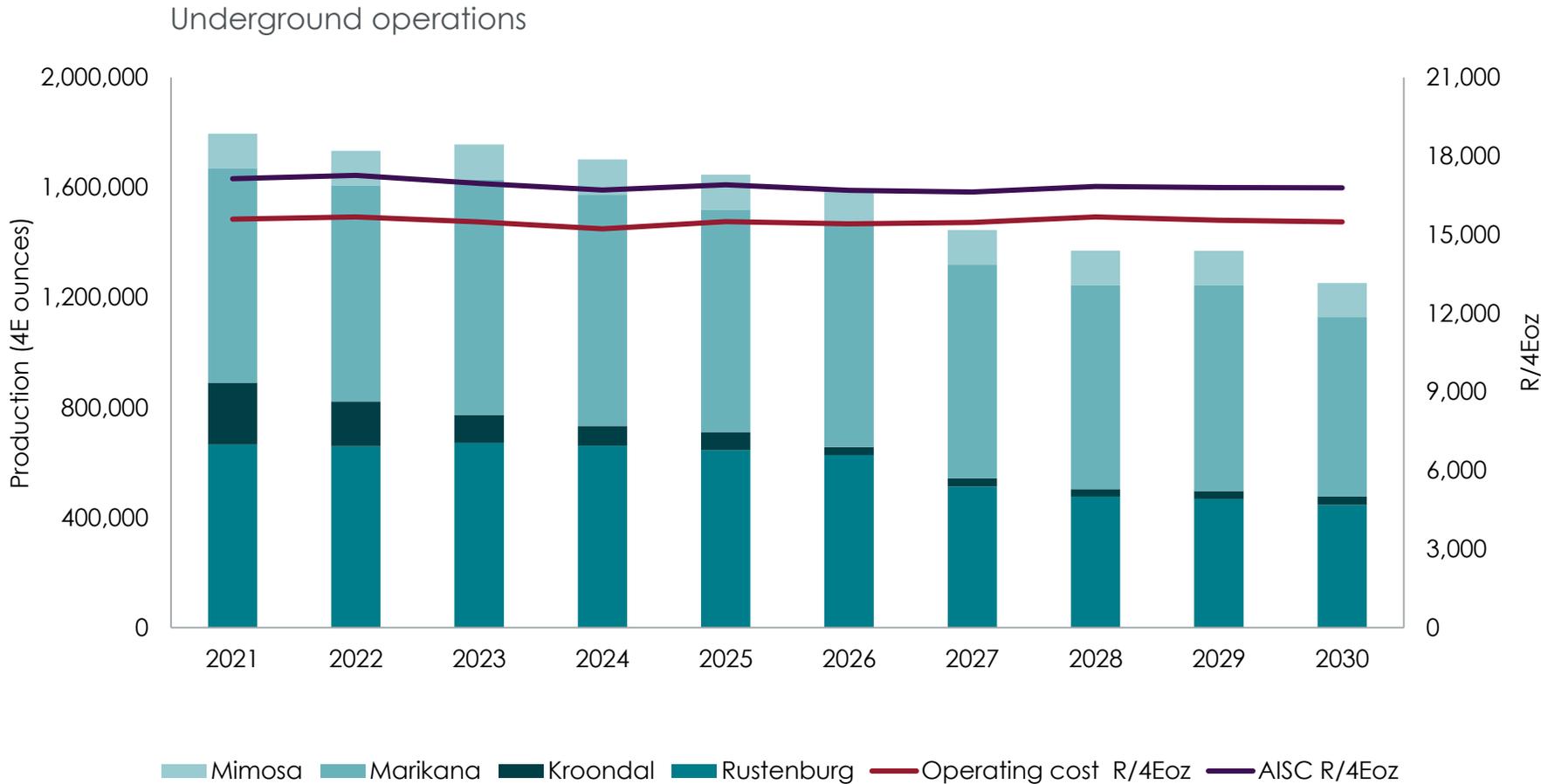
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- ✓ Total SA PGM operations • 4,000,000 FFS

Working towards zero harm with initiatives aligned to Group Zero harm framework

1. SA PGM operations had a workforce of 46,385 (including contractors) people at end Dec 2020  
 2. Fatal free shifts (FFS)

# Planned ounces and costs



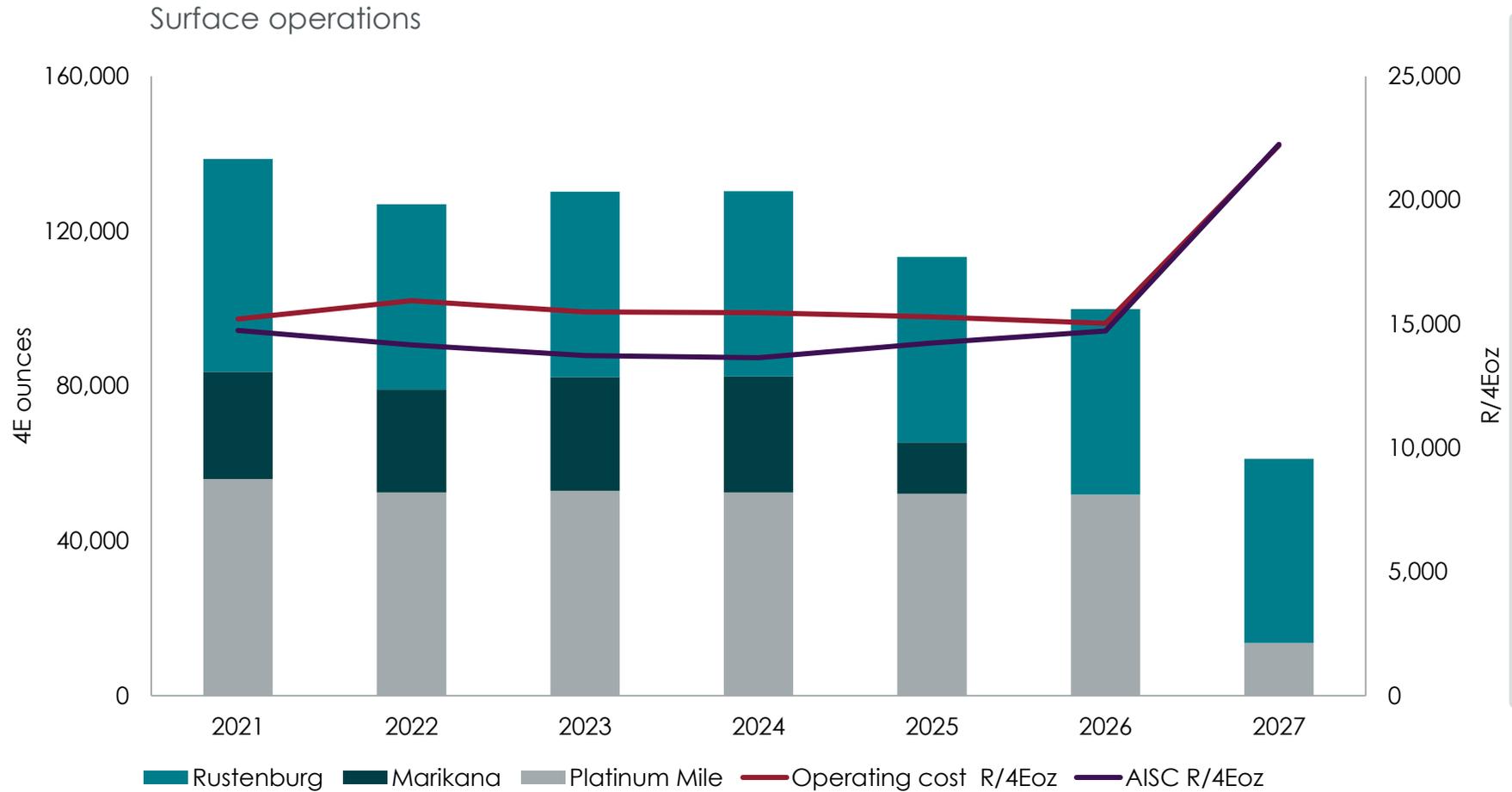
- Lower cost K4 and Klipfontein projects approved in Q1 2021 - maintain consistent profile
- AISC influenced by royalty assumptions and basket price movement
- Marikana integration savings fully embedded
- Fit for growth procurement savings included in contracts and stores. Labour costs are estimated as per 2019 wage agreements
- 3-year trailing metal prices used to estimate the by-product credits and royalties in line with the SARS regulations
- NERSA guidance followed for future electricity tariffs

## AISC and operating cost are consistent

Note:

- Production profiles based on the 2020 LOM reserve and resources plan. Assumes attributable (50%) production from Mimosa and Kroondal
- Costs are represented at 2021 real terms
- Assumed exchange rate for conversion of Mimosa costs: R15.00/US\$

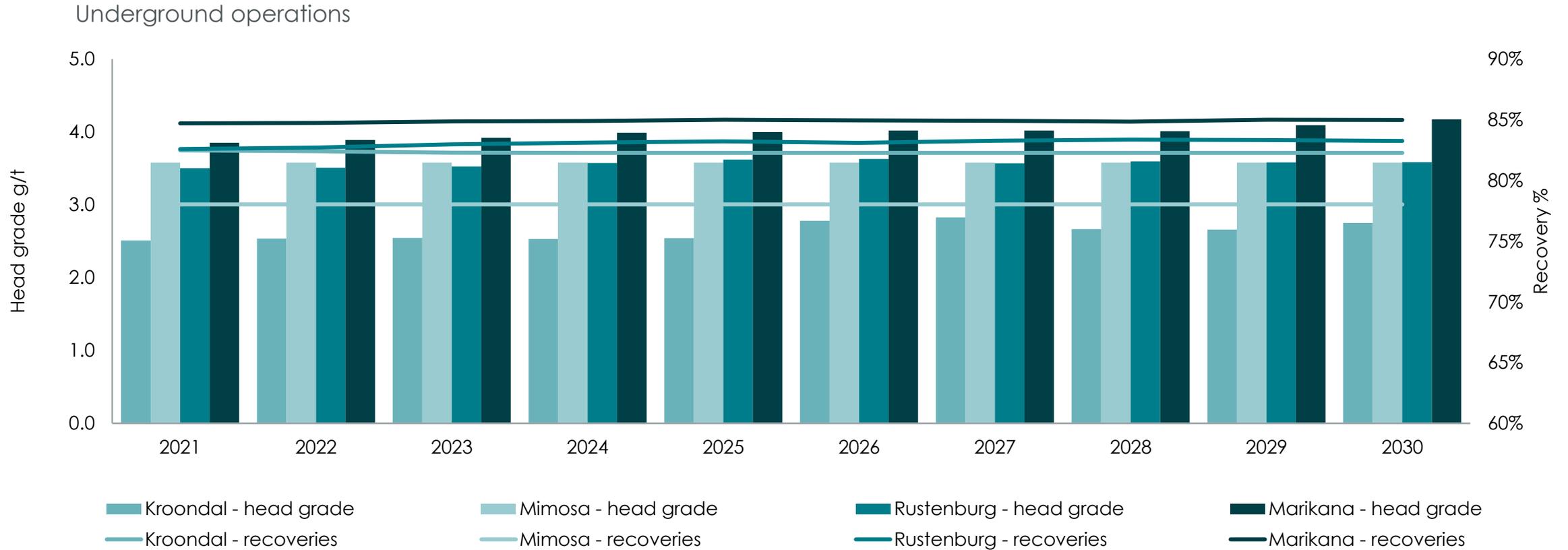
# Surface sources – planned ounces and cost



- Includes Marikana Bulk tailings treatment plant (BTT), Rustenburg Western limb tailings retreatment plant and Platinum Mile
- Platinum Mile holding increased from 91.7% to 100% in H1 2021
- Current surface processing forecast to end in 2027
- Assessment of BTT opportunity and WLTRP treatment of Marikana tailings could extend LOM up to 20 years
- AISC benefit from by-product credits

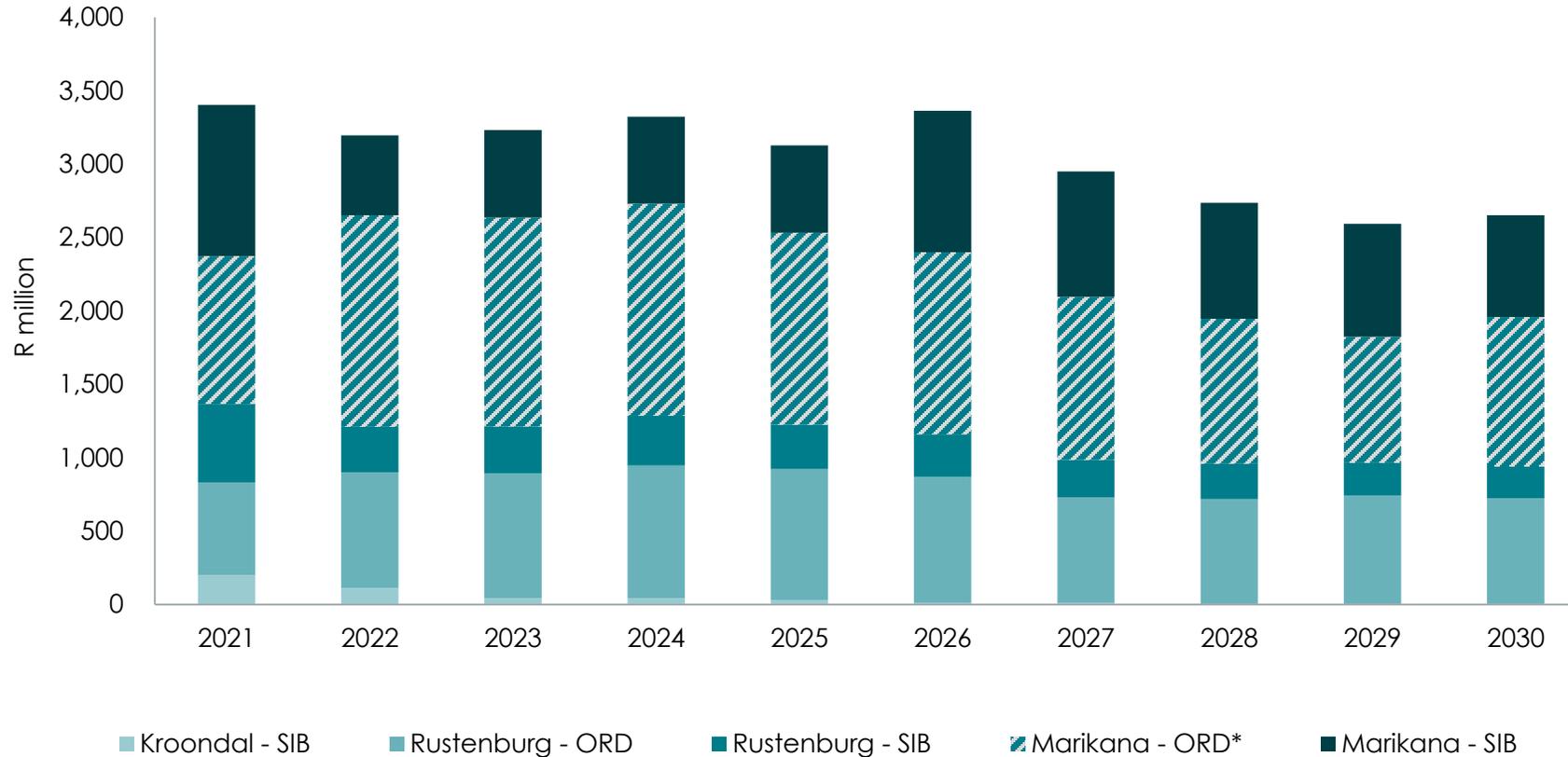
Option to increase LOM by up to 20 years being assessed

# Planned underground average head grade and recoveries



Consistent LOM grade and recoveries ensures stable production

## Planned capital expenditure (base)



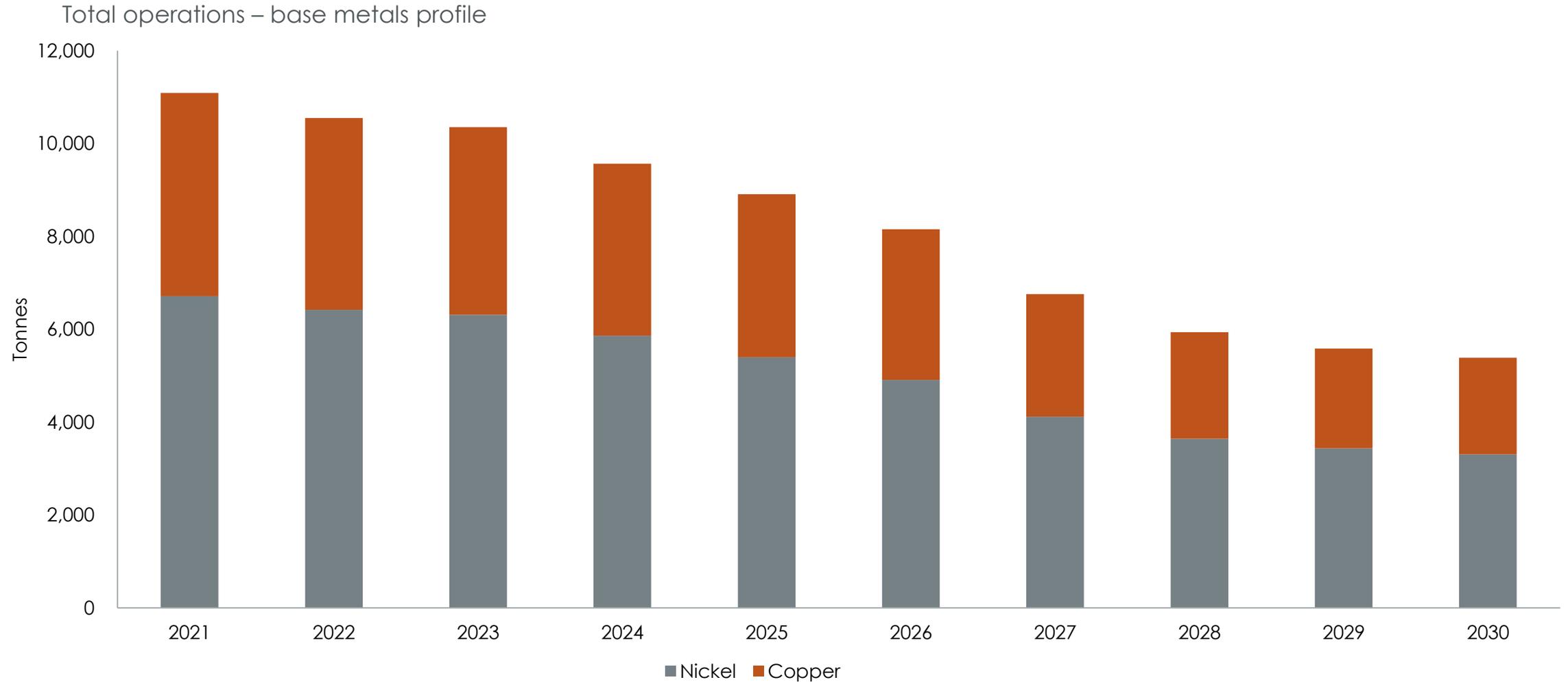
- Sufficient estimation of SIB Capital at 10% to 12% of operating cost, and ending capital spend 4 years prior to closing an assets as to eliminate over capitalising
- Marikana smelting and refining compliance capital
- Continuous Ore Reserve Development (ORD) at the conventional shafts

### Long-life assets with potential to mining through boundaries

Note:

- Capital expenditure in 2021 real terms. SIB: Stay-in-business capital, ORD: Ore reserve development
- Assumed exchange rate for conversion of Mimosa capital expenditure: R15.00/US\$
- Represents attributable capital from Kroondal

## Base metals in concentrate profile



Significant base metal produced as by-product from base metals refinery – existing hydrometallurgical processing expertise and knowledge

# Processing assets – competitive exposure to full value chain, from mine-to-market

## Concentrators

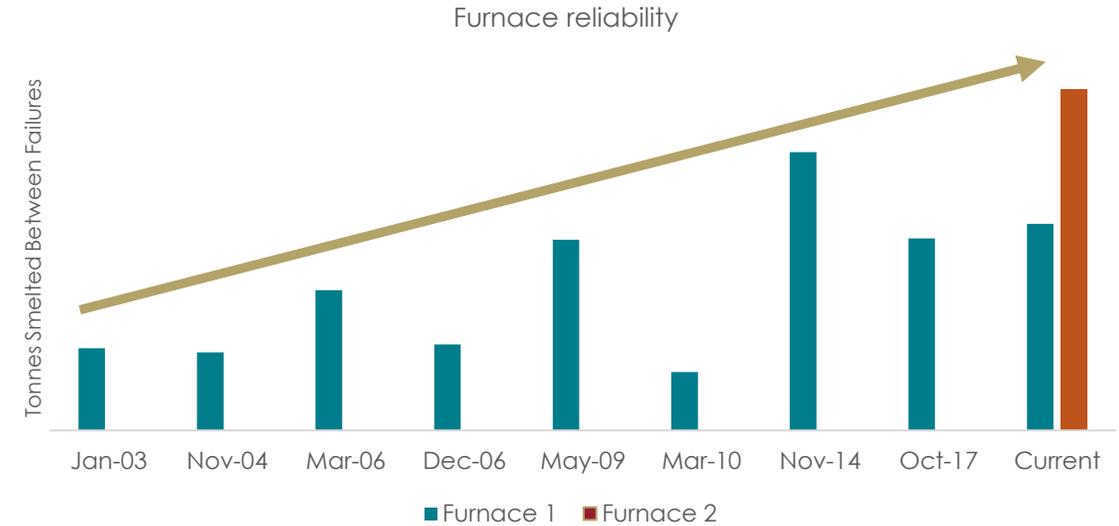
- Adequate capacity and flexibility to treat both underground and surface material

## Smelting and refining

- Continued optimisation of furnaces through innovation and implementation of industry best practice standards ensuring ongoing reliability
  - Multiple design improvements
  - Stricter adherence to operating parameters
  - Improved monitoring of furnaces
- Optimally utilise our smelter capacity taking into account the required ore blend
- Potential creation of additional value through utilization of available Base Metal Refinery (~50%) and Precious Metal Refinery (~50%) capacity
- Aligning processing strategy with future opportunities

## Embedding ESG

- Currently meeting legislative limits. Future ESG projects will focus on reducing SO<sub>2</sub> further



A competitive advantage and strategic differentiator - available capacity throughout processing stream provides significant optionality

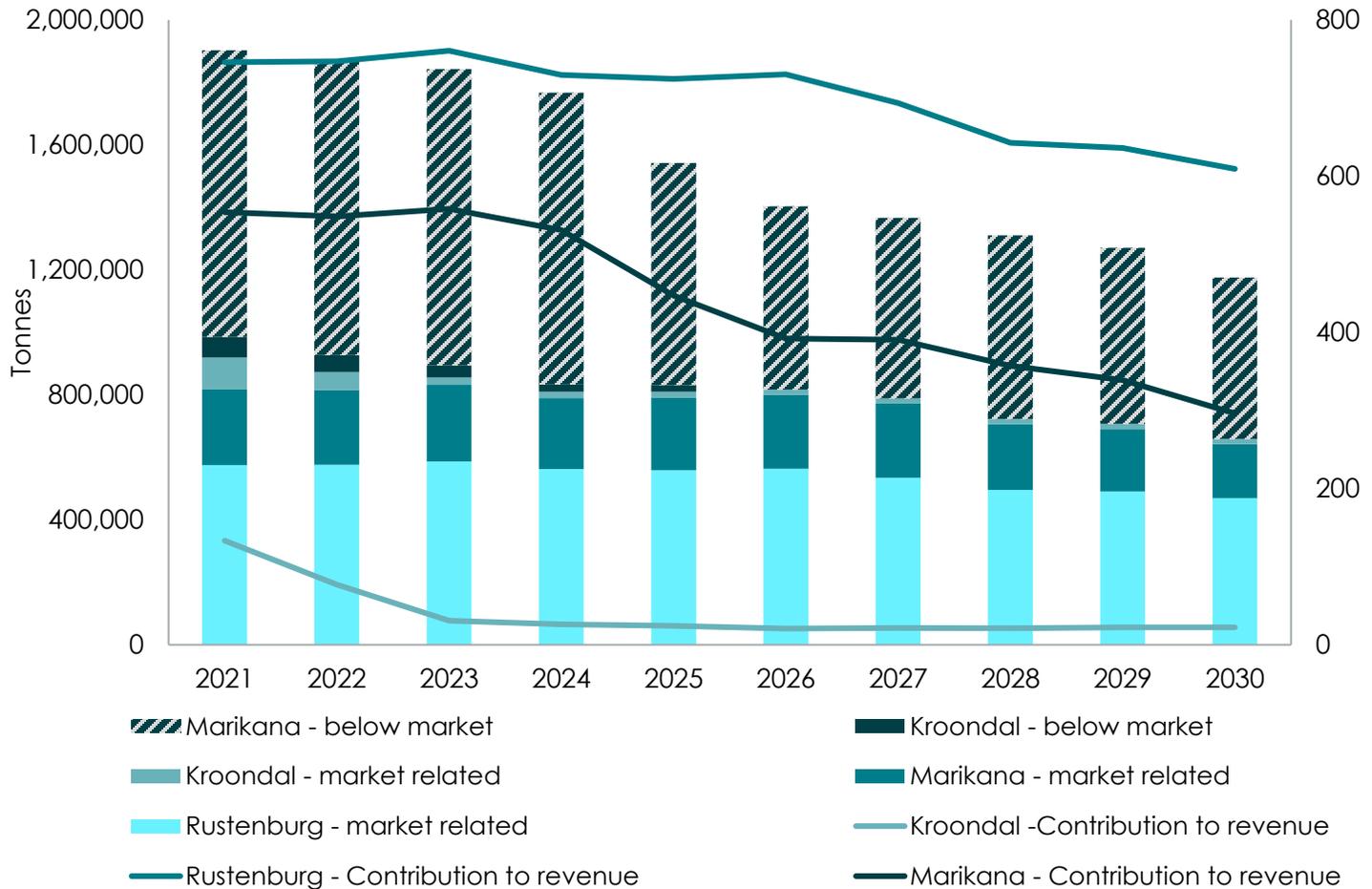
# Chrome

David Kovarsky, SVP Chrome



# Chrome production profile

Underground operations – chrome production profile



- Chrome produced as a by-product of PGM production –
  - Primarily derived from UG2 reef
  - Grade of approximately 40.5% chrome.
  - Produced by standalone chrome recovery plants
  - Included in gross revenue and as a credit to AISC
  - Direct mining costs not allocated to chrome production
- 2021 full economic benefit on ~800,000 tonnes, an increase in 2021 of 90,000 tonnes when the contract to supply Samancor expired in 2020
- Legacy agreements yield varying amounts received for chrome , some below market prices
- Since acquisition, chrome plants achieved production growth
- The South African ferrochrome industry has proposed a chrome export tax. This proposal is being opposed strongly by primary chrome ore and UG2 producers as it could lead to lower sales and job losses

**Chrome is a significant contributor to profitability of SA PGM operations**

Note: Beneficial tonnes are sold at market related prices with little or no value realised from non-beneficial tonnes  
Gross revenue assumes a chrome price of R2,600 per tonne

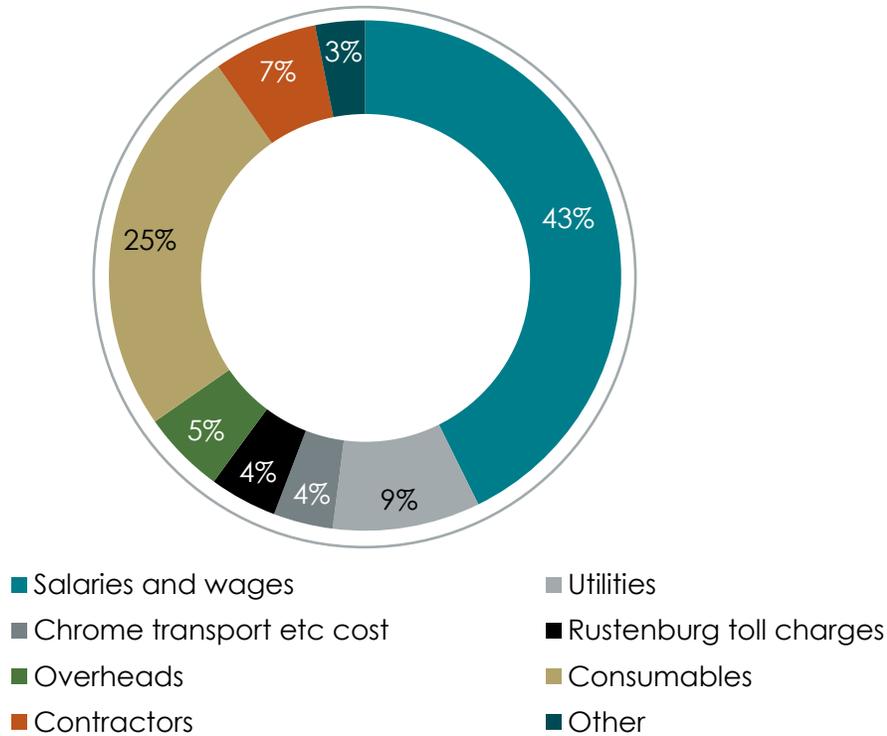
# Financial aspects

Roderick Mugovhani, SVP: Finance



# SA PGM operating cost breakdown

Operating costs classification (%)

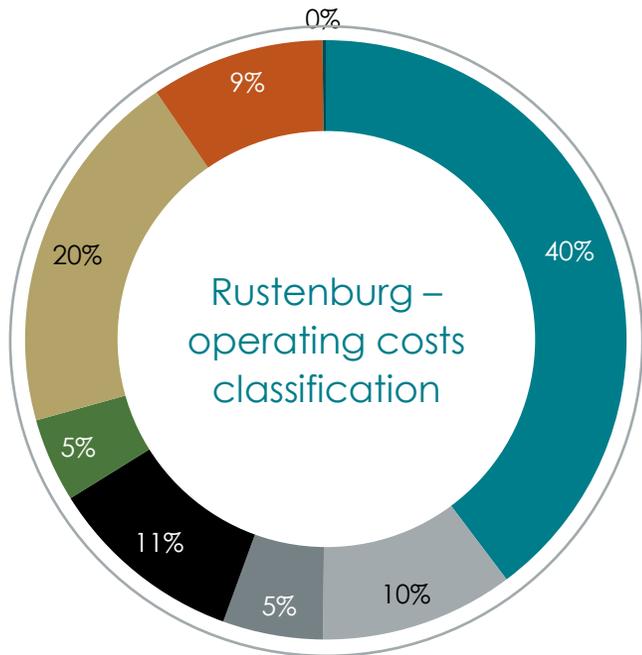


- Labour cost includes salaries, incentives, overtime and company contributions
- Stores and material includes higher than inflation rates of steel, explosives and underground support
- Overheads incorporate Group and services charges
- Fit for growth ( FFG) initiatives focus on the reduction of contract expenditure (c. R800m for the SA Region)
- Some contractor's expenses are driven by exchange rate pressures
- Continuous footprint reduction as a result of further integration initiatives
- Excludes ORD and SIB capital
- Compliance to ESG requirements, in particular to Marikana smelting and refining complex

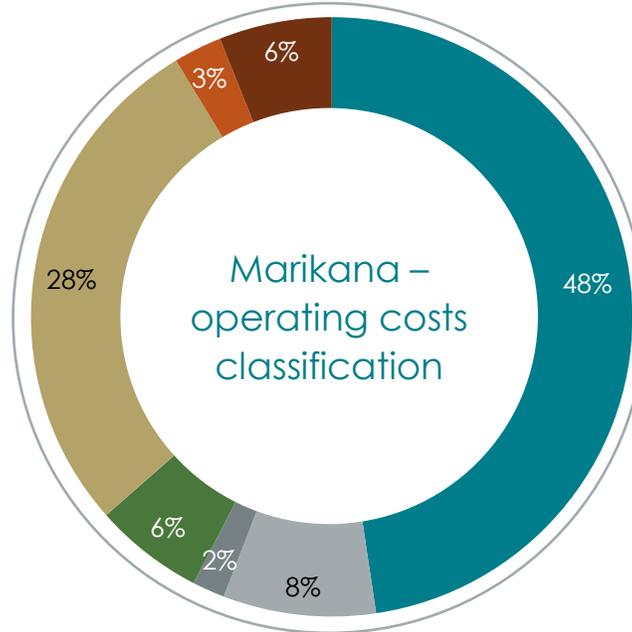
Consolidation of cost from the total segment that is made up of Conventional and Mechanised shafts

Based on HY1-2021 Operating  
 Additional COVID-19 cost included  
 Excludes the 3rd party purchases

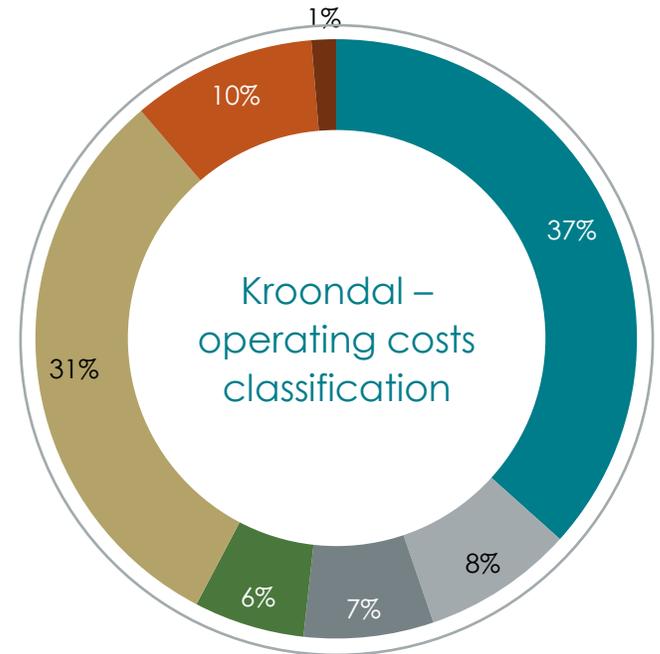
## SA PGM operating cost breakdown by operation



- Salaries and wages
- Utilities
- Chrome transport etc cost
- Rustenburg toll charges
- Overheads
- Consumables
- Contractors
- Other



- Salaries and wages
- Utilities
- Chrome transport etc cost
- Overheads
- Consumables
- Contractors
- Other

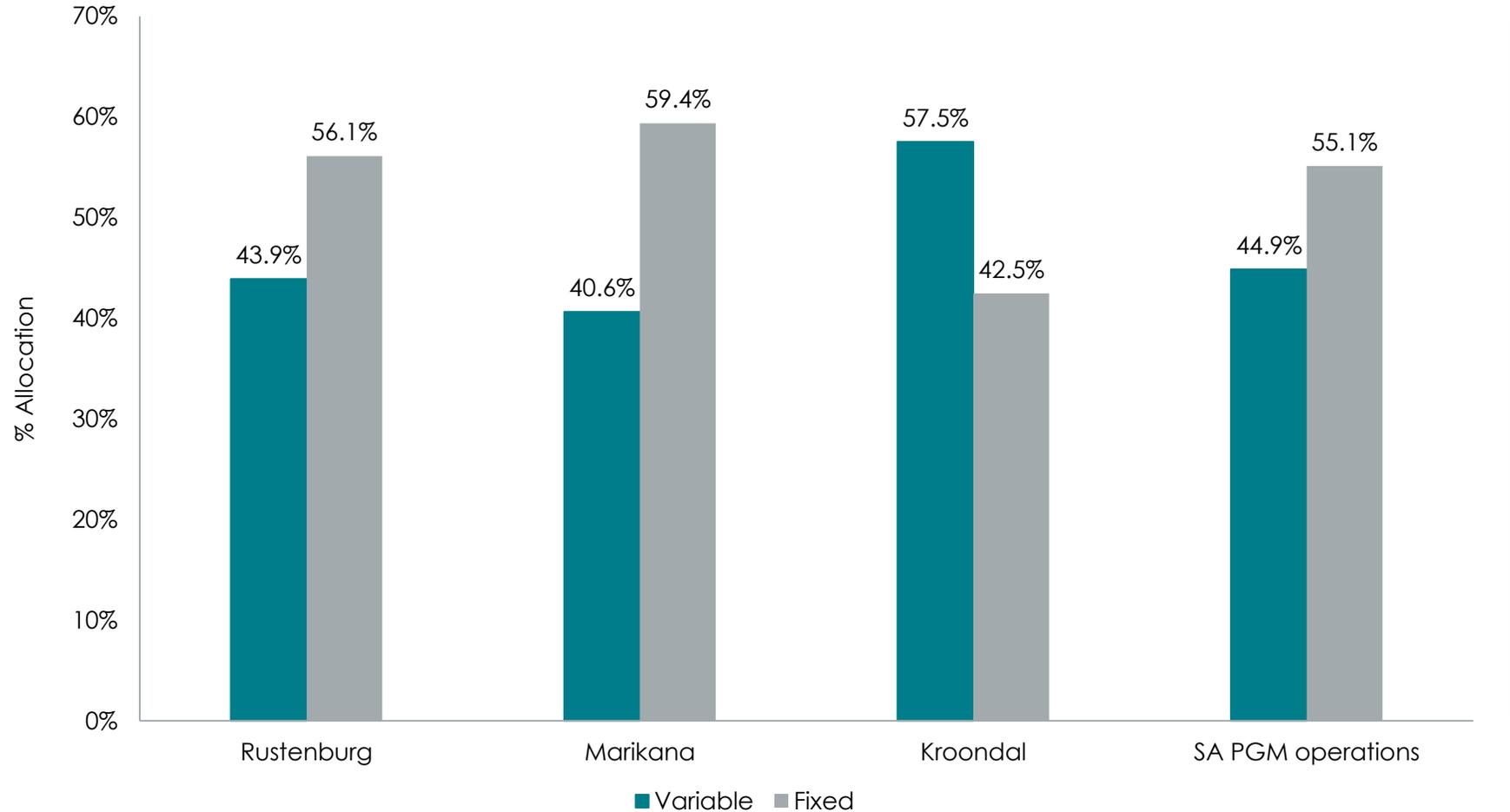


- Salaries and wages
- Utilities
- Chrome transport etc cost
- Overheads
- Consumables
- Contractors
- Other

**Conventional shafts at Rustenburg and Marikana are more labour intensive resulting in higher proportion of salaries and wages**

Marikana includes the Smelting and refining operations  
Rustenburg operations labour cost incorporates the Bathopele Mechanized shaft cost

## SA PGM fixed and variable cost breakdown per operation (operating cost)



- Based on steady state operations, normalised for COVID-19 lockdowns
- Combination of all the operations on a 100% basis
- Fixed costs consist mainly of labour costs, electricity, overheads and contractors
- Mechanised operations have less fixed to variable cost ratio
- Variable costs are linked to production output, i.e. stores, incentives and overtime shifts

Lower proportion of fixed cost at the mechanised operations, i.e. Bathopele Shaft at Rustenburg and Kroondal operations

# H1 2021 reconciliation of AISC (R/4Eoz) – excluding 3<sup>rd</sup> party purchases at Marikana

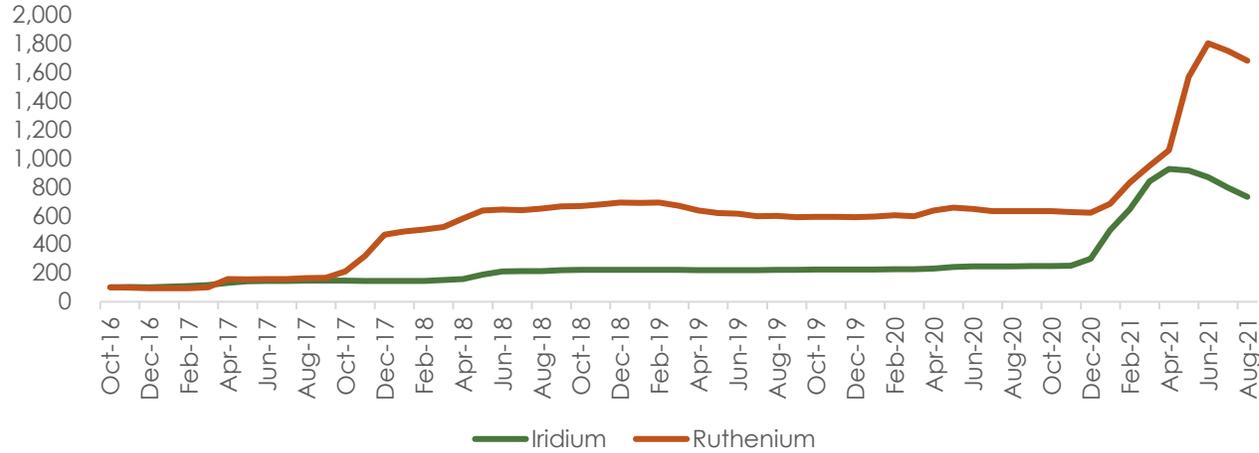


- All-in sustaining cost (AISC) was developed and generally adopted by the global gold industry to ensure consistent and comparable reporting of costs
- Includes by-product revenue that is offset as a credit against costs
- 3rd party purchases of concentrate accounted for additional R1,914/4Eoz AISC for H1 2021
  - Significant revenue benefit from third party processing and improved capacity utilisation

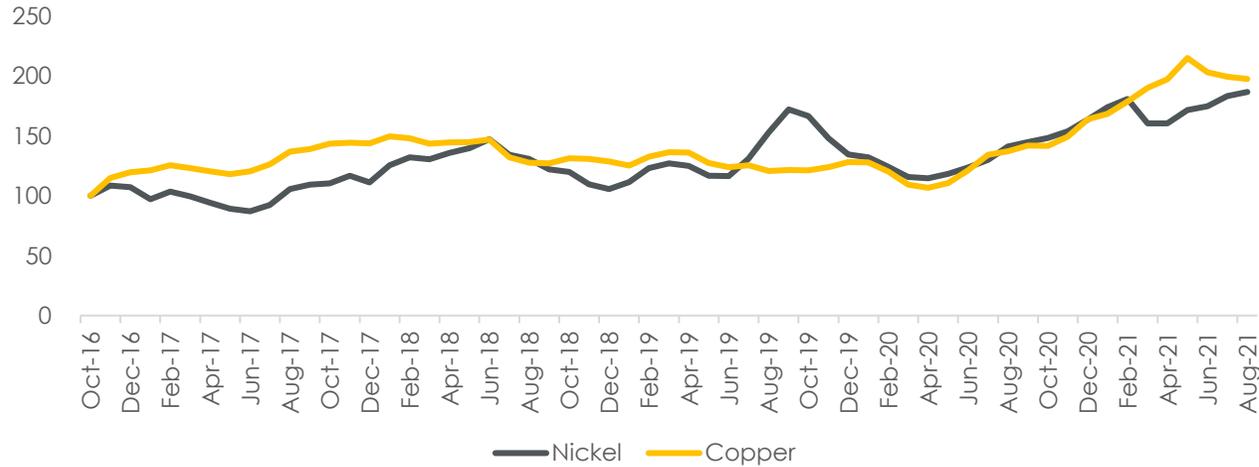
Impact of by-product credits in the AISC influenced by price movement of Ir, Ru, Cr, Cu, Ni and other by-products

# Significant value in "by-product" PGMs

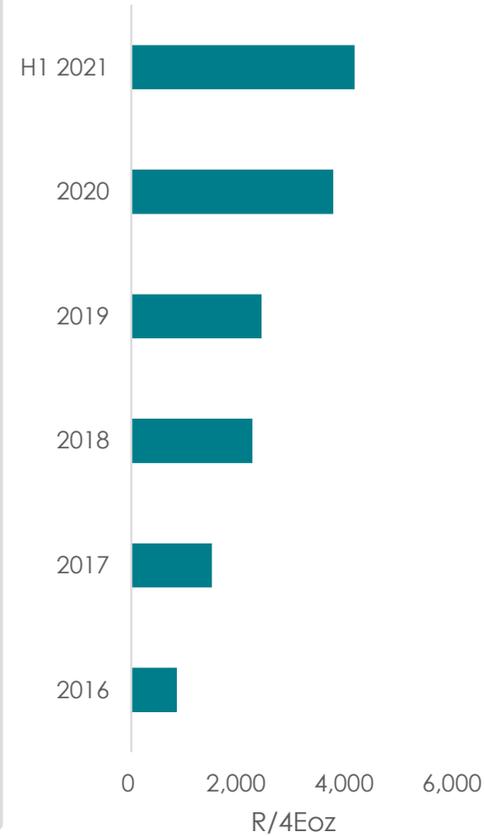
% Price increases of iridium and ruthenium



% Price increases of nickel and copper



Positive impact of by-product credits



- By-product revenues offset cost in the AISC calculation (credit against costs)
- Growth in by-product credits from other PGM metals Iridium – 731%, Ruthenium - 1680%
- Base metal by-product credit growth Copper – 198% and Nickel - 187%
- Increase in by-product credit prices during 2021 contributing to significant increase in operating profit
  - By-products accounted for R4,139/4Eoz reduction in AISC for H1 2021

By-product benefits realised in increased revenue and lower AISC

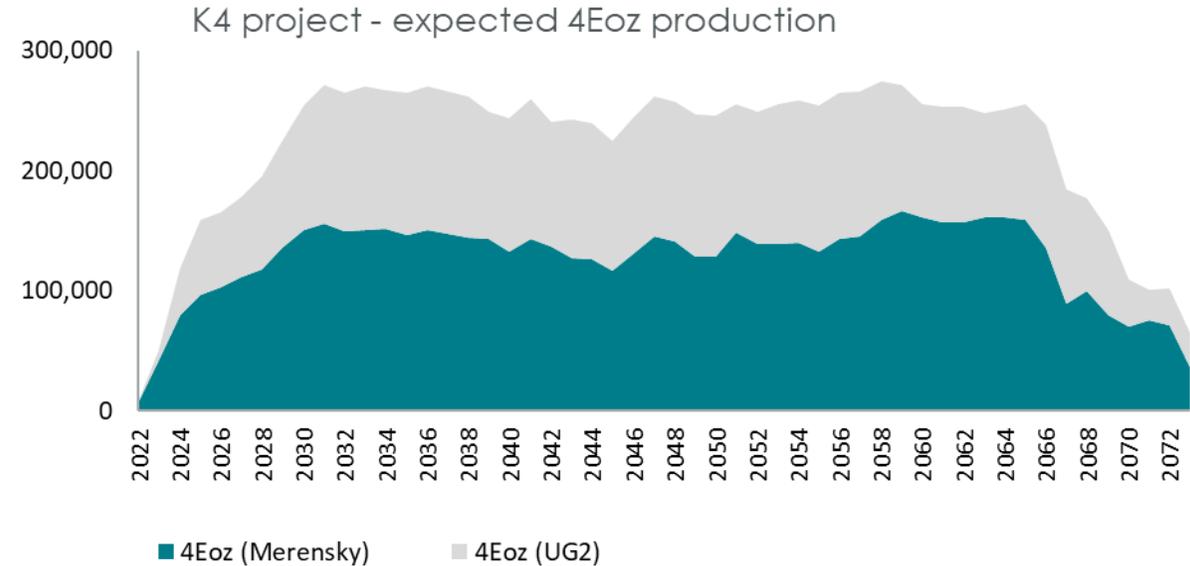
# SA PGM projects

Ralph Lombard, SVP Projects (Group Technical)



## K4 project – unrivalled PGM brownfields project

- Mining both Merensky and UG2 reefs to a depth of 1,287m
- Project significantly predeveloped by Lonmin – most infrastructure already in place:
  - equipped and functional vertical shaft to a depth of 1,332m
  - equipped and functional ventilation shaft to a depth of 1,078m
  - functional 130,000 tpm concentrator
  - existing surface infrastructure such as offices, change houses, refrigeration plants, grout plants, etc.
  - stations and station crosscuts
- Project progress
  - Key project personnel sourced & EPCM contractor in place
  - Infrastructure & mining early works commenced – major focus areas for next 9 months
  - Mining activities on track to commence Q2, 2022
  - Design on track with a focus on ESG friendly solutions



### Regional social and economic benefits

- Ensures sustainability of Marikana operations for over 50 years
- Significant investment in local economy
- Will provide ~4,380 jobs at steady state
- Meaningful opportunities for local procurement, SMME development and skills transfer

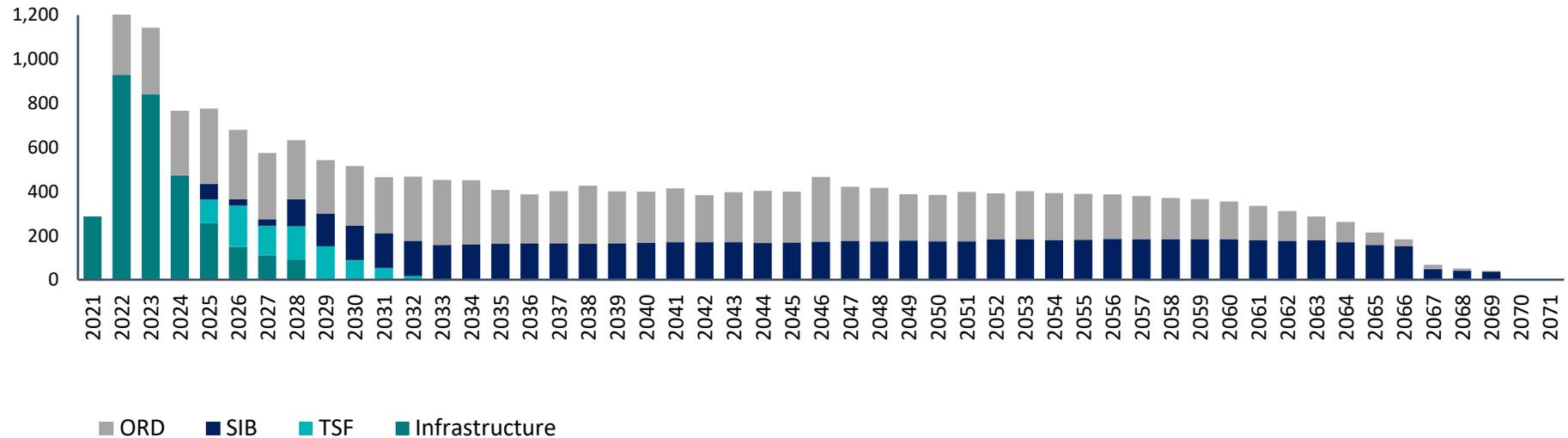


# K4 project – unrivalled tier 1 PGM project

## Key statistics (2021 terms)

- Project capex\* of ~R4.0bn over 8 years - majority during first 3 years
- Steady state (2030-2063) ~250koz per annum
- Average operating cost ~ R16,051/4Eoz (R16,000/oz at steady state)
- Six years payback
- ~11.5m 4Eoz produced over 50 year life of mine
- NPV (15% real discount rate – R3bn at assumed project prices
- IRR 33% at assumed prices

LoM capital expenditure profile (R million)



## Commodity price and exchange rate assumptions

Metal price	Unit	2021	Thereafter
Platinum	US\$/oz	900	880
Palladium	US\$/oz	1,900	1,600
Rhodium	US\$/oz	8,500	5,650
Gold	US\$/oz	1,605	1,500
ZAR/USD	ZAR/US\$	15.50	15.00

Low capital intensity, short lead time, superior return on investment

\* Inclusive of TSF, excluding ORD and SIB capex

## Klipfontein PGM project – shallow, open pit

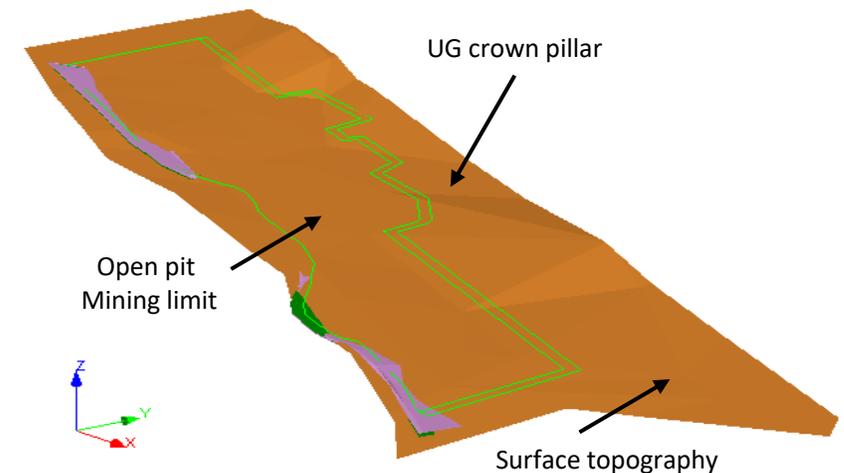
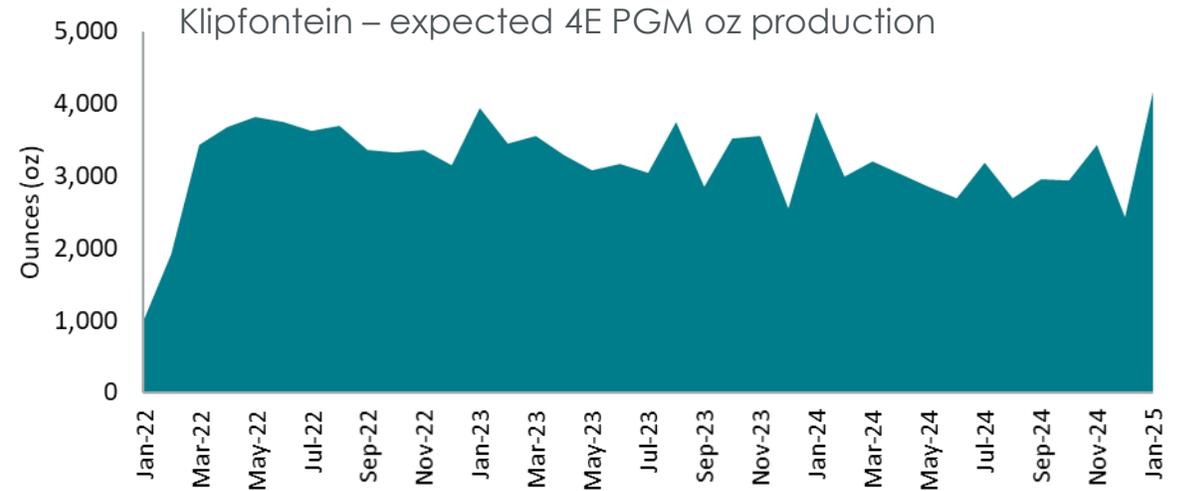
- Open pit operation adjacent to Kroondal East Bambanani shaft
- UG2 reef will be mined to depth of ~45m
- 50/50 JV with Anglo American Platinum (under the current PSA)
- **Key statistics (2021 terms) – 100%#**
  - R66m project capital\*
  - S102 approved by DMRE
  - Ore will be transported and treated at the K2 Concentrator
  - Average steady state production (2022-2024) ~37,000 4Eoz per year
  - Average operating cost of R8,754/4Eoz (R8,622/oz at steady state)
  - 118,250oz produced over 3 year life
  - NPV (15% real) ~ R740m at assumed prices
  - IRR 70% at assumed prices
  - 4-month payback
- Initiated project 'kick off' on 11 August 2021

### Regional social and economic benefits

- Providing 124 jobs - contractor to source local labour
- Creating opportunities for local procurement and SMME development
- Rehabilitation to agricultural farm-land status, at the end of the project

\* Excluding SIB capex

# Numbers quoted as 100% for the project. Sibanye-Stillwater will have 50% attributable



# Value creation through sustainability

Jevon Martin, Head of Energy & Decarbonisation

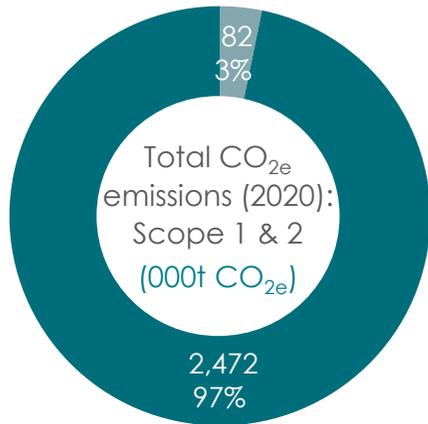
Grant Stuart, SVP Environment

Thabisile Phumo, SVP Stakeholder Relations



# SA PGM operations' role in the Group journey to carbon neutrality

SA PGM operations currently account for 310MW or 39% of Group energy demand



■ Scope 1 ■ Scope 2

97% of current operational emissions from Eskom coal fired power

## Our path to carbon neutral by 2040

- Long-term GHG emissions reduce naturally with declining PGM production profile
- Benefits from National renewable energy plan towards 2040
- Various proactive initiatives underway to further accelerate our decarbonisation plan

## Demand side energy management

- Advance energy management – 60,201 tCO<sub>2e</sub> of GHG emissions reduced in 2020 through:
  - Integrated and dynamic digital twin simulations
  - Compressed air optimization
  - Pumping system improvements
  - Ventilation system enhancement
  - Energy culture and awareness campaigns

## Strategic energy sourcing

- 175MW solar projects (overleaf) at SA PGM operations
- Allocation of wind energy benefits through wheeling
- Investigation of coal input alternatives for the Marikana smelter

## Technology adoption

- Investigation of battery electric vehicle opportunities, including trialing of remotely-operated, battery electric vehicles and Li-ion battery locomotives at K4

## Scope 3 and carbon offsets

- Development of Scope 3 targets and a carbon offset strategy to address remnant hard-to-abate emissions

Remotely-operated battery LHD to be trialed



Electricity will remain the focus as the primary contributor to operational emissions

## SA PGM operations' role in the Group journey to carbon neutrality



- Feasibility study for three on-site Solar PV projects completed:
  - Plant sizing based on comprehensive study, including life of mine analysis, allowing for up 175MWp
  - Available land at RPM and Marikana with scope for future expansion
  - No fatal flaws to process
  - Viable technical solutions for electrical connections into the corresponding substations

- Total capital cost of R2.5-2.8bn to be finance through three separate PPA arrangements
  - Minimal capital outlay with access to renewable electricity at a 30-50% (solar) discount to grid electricity, escalating at CPI
  - Reduction of GHG emissions and future carbon tax liabilities
- Target financial close H1 2023, with commercial operation early 2025
  - Critical lead items include permitting processes and have been initiated

Recent regulatory reforms and less obstructive approach have catalysed progress

# Rehabilitation obligations

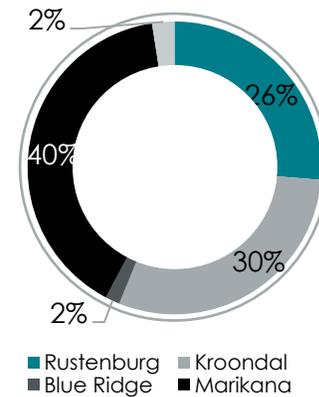
Planning and execution for sustainable post-mining socio-economic closure within local communities

## ACHIEVEMENTS

- Development of regional closure strategy and plans that include fit for purpose post-mining land uses
- Advanced concurrent rehabilitation initiatives in collaboration with local small medium enterprises
- Potentially leverage 50.1% stake in DRDGOLD to exploit surface rehabilitation opportunities
- Footprint reduction initiatives (Klipfontein Concentrator)
  - 100% local and black owned company
  - Skills development and employment from local community
  - Total liability reduction – R40.6m
- Deposition into pits in accordance with environmental authorisations (R1bn)

## CLOSURE LIABILITY

- 2020 liability assessment independently assessed in accordance with closure plans
- Externally assessed and audited closure liabilities in accordance with GN R. 1147
- Closure liabilities funded through funds in trust and guarantee insurance policies



- R4.7bn estimated closure liability – 9% over funded through cash in trust and guarantees

## CONCURRENT REHABILITATION

- Rehabilitation of the Klipfontein Concentrator (before)



- Rehabilitation of the Klipfontein Concentrator (after)



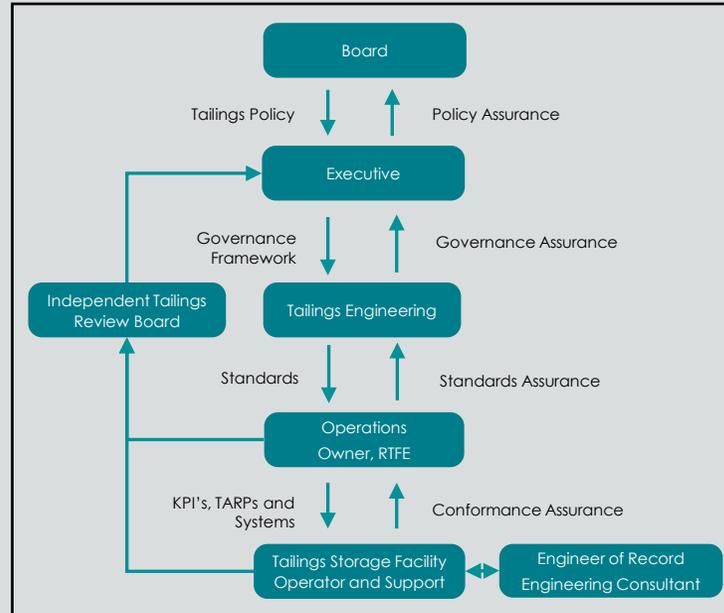
# Tailings management

We commit to zero harm at all stages of tailings lifecycle

## EMPOWERED & ENABLED ACCOUNTABILITY

- Accountable Executive responsible to the CEO
- Appointed VP Tailings Engineer for the Group
- Internationally recognised Independent Tailings Review Board established
- Tailings Working Group established across SA PGM
  - Consolidated risk management
  - Increased awareness and elevation of risk
- Engineering consulting companies and Engineers of Record appointed
- Appointment of Concentrator Managers as the Responsible Tailings Facility Engineer
  - Support provided by VP Tailings and Engineers of Record
- Digital platform developed on PIVOT application for consolidated GISTM conformance audits with action tracking for monthly audits and consolidated reporting of progress
- Group representation on ICMM Tailings Working Group
- Internal competence training to ensure ownership and reduce external reliance

## GOVERNANCE STRUCTURE

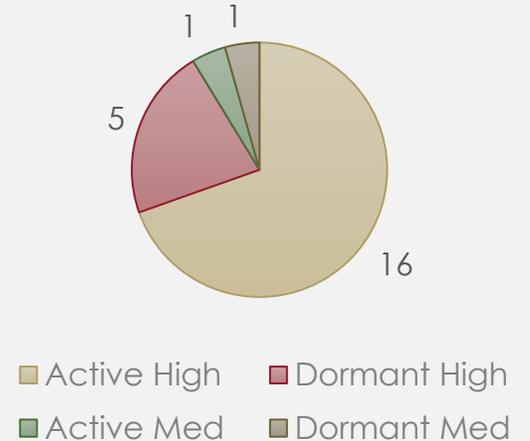


- Group Tailings Management System framework drafted
- Terms of References for internal and external appointees drafted

## IN DEVELOPMENT

- International Council of Mines and Metals (ICMM) commitments:
  - Tailings Management System – Done
  - Compliance for “Very High” or “Extreme” TSFs – August 2023
  - Compliance for TSF balance – Aug 2025
- Re-classification to GISTM consequence matrix
  - 16% complete with 74% end 2022

**Hazard classification as per SANS 10286\***



## Group Tailings Management System (GTMS) aligned to the Global Industry Standard for Tailings Management (GISTM)

\*SANS 10286 (1998) using Empirical Methodology

# Optimising a critical resource- water use management strategy

Water security strategy supporting climate change resilience and sustainable economies

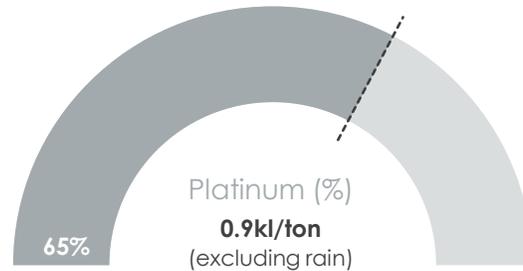
## WATER SECURITY STRATEGY

- Collaborative engagement
- Actively participate in regional catchment management forums
- Marikana integration
- Water harvesting and storage opportunities
- Water conservation and water demand management plans
- Predictive water balance management



## OBJECTIVE AND COMMITMENT

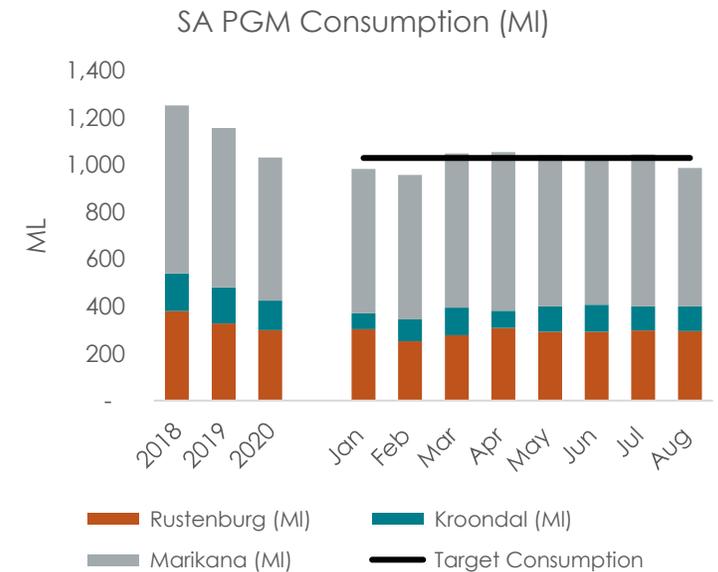
Responsible and collaborative water management by **driving water security** and independence strategies with compliance to regulatory requirements, building a climate resilient business in anticipation of responsible closure



- Stringent monitoring and transparent reporting
  - Smart water management through online monitoring through the Zednet platform
  - Group water CDP disclosure submitted July 2021

## WATER CONSERVATION SUCCESS

- Reduction of more than 1,400 MI (11%) in potable water purchases 2020 compared to 2019
- 18% reduction in potable water purchases since 2018\*



The SA PGM operations are well placed to realise ISO 14001: 2015 accreditation by end 2021 with the accreditation for Kroondal processing (Boabab K1, K2), Kroondal and RPM mining received in September 2021

**Water consumption reduced by 15%, 22% and 21% across Marikana, Kroondal and Rustenburg respectively from 2018 - 2020**

\* Including Marikana operations for 2018 pre-ownership

# Making real changes to transform and create value for all stakeholders

## Restructuring of the Marikana empowerment structure

- Previous structure non-beneficial with substantial debt burden
- New sustainable B-BBEE financing structure with immediate access to distributable cash flow and the ongoing transfer of tangible value
- Securing the licence to operate for these operations

## Social relief via BEE structures & employee profit share schemes

- R145m paid to Rustenburg BEE structures & R64m to employees via profit share scheme (ESOP) since acquisition
- R91m paid to Marikana empowerment structures & R521m paid to Marikana employees trust (ESOP) for 2020 year



## Investing in projects results in job security and opportunities

- K4 and Klipfontein will employ > 4,500 jobs at steady state

## Contributing to the fiscus and social imperatives

- Sibanye-Stillwater royalties and taxes\* of R10.3bn for H1 2021 alone
- Delivering on Social and labour plans for each mining licence
- Employee voluntary contribution scheme
- Sponsorships to universities, bursaries and learnerships



Marikana Renewal Programme – Towards 2022

LETSEMA ENGAGEMENT PROCESS



District Development Model

STAKEHOLDER COLLABORATIVE PROCESS

*Our focus on honour, engage and create is delivered in partnership with stakeholders to ensure:*

- Honor the legacy of Marikana and facilitate healing for families and the injured
- Pursue justice and restitution for the affected and impacted
- Social redress through the delivery of social infrastructure that benefits communities
- Contribute to the District Development Model and promote the development of alternative economic streams in the region

## Our contribution to the community has been through 80# Social and labour plan projects at SA PGM operations

### Health sector

- ✓ We partnered with the North West province Department of Health to improve health services in the region through construction of clinics & forensic mortuary
- ✓ Mobile clinics

### Education sector

- ✓ In partnership with NW Department of Basic Education we have rolled out our Early Childhood Development Programme comprising upgrade of facilities, teacher training and learning infrastructure and material
- ✓ We have constructed new schools and extensions of several schools



## Our mining improves lives

- As per Group Cash flow statement
- # Of which 55 project have been completed and 25 are in progress. Includes projects from Rustenburg, Kroondal and Marikana (various mining licences)

# Conclusion

Richard Stewart, Chief Operating Officer



## Key highlights | SA PGM operations

- ✓ Highest safety standards
  - Aligned to Group zero harm safety framework – notable safety milestones achieved
  - ISO 45001 accreditation to be achieved during 2021 (Marikana already accredited)
- ✓ Integrated, contiguous operations
  - Significant cost and operational synergies realised through consolidation and integration – delivering sustainable value
  - Potential for ongoing synergies – delivering real cost benefits (cross boundary mining, projects)
- ✓ Long life assets with sizeable resources
  - Sizeable reserves and resources to support long operating long life >40 years and provide significant optionality
- ✓ Processing capacity and optionality
  - Competitive advantage from existing processing capability and capacity provides significant optionality
- ✓ Extensive community and ESG programmes
  - Proactive stakeholder engagement with specific programmes to address regional legacy
  - Path to carbon neutral
  - Pragmatic approach to Environmental water management
- ✓ World class, low risk Brownfields projects
  - K4 project best project in industry with most of the upfront capital sunk
  - Klipfontein, low capital intensity with near term production – high return
- ✓ Decisively executed growth strategy
  - Leading position in PGM industry established through rapid execution of M&A
  - Payback on investment within 4 years ensures significant future value for all stakeholders

**A sizeable, long life PGM mining and processing business, well positioned for ongoing creation of superior value for all stakeholders**

## Questions?

## Contacts

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we are one

# Sibanye Stillwater

SA PGM operations Investor day

# Appendix



## Competent persons' declaration | SA PGM operations

Sibanye-Stillwater reports its Mineral Resources and Mineral Reserves in accordance with the SAMREC Code, the updated Section 12 of the JSE Listings Requirements; and in consideration of the SEC Industry Guide 7, which is aligned with the guiding principles of SOX. Recent amendments adopted by the SEC to modernise the property disclosure requirements for mining registrations, which has not come into effect fully yet, aligns closely with the requirements under the JSE and SAMREC, and any non-compliance to SEC Industry Guide 7 is therefore considered immaterial. The Altar, Marathon and Rio Grande Mineral Resources were originally compiled under NI 43-101 guidelines but are deemed to be SAMREC compliant.

This Mineral Reserve and Mineral Resource declaration represents a condensed and consolidated summary of the full Sibanye-Stillwater Mineral Resource and Mineral Reserve declaration available in the Group Mineral Resource and Mineral Reserve Report, which was published on 22 April 2021 and are available at [www.sibanyestillwater.com/news-investors/reports/annual/](http://www.sibanyestillwater.com/news-investors/reports/annual/).

Guided by a commitment to best practice corporate governance, the statement has been reviewed and confirmed by each segment's Technical Services.

The Mineral Resources and Mineral Reserves are estimates at a particular date, and are affected by fluctuations in mineral prices, the ZAR/US\$ exchange rate, operating costs, mining permits, changes in legislation and operating factors. Although all permits may not be finalised and in place at the time of reporting, there is no reason to expect that these will not be granted.

All statement figures are operations managed by Sibanye-Stillwater with the exception of those for Mimosa, the attributable portion for DRDGOLD and the US Projects. Mineral Resources are reported inclusive of Mineral Reserves, and production volumes are reported in metric tonnes (t).

The Southern African(SA) PGM operations statement are reported as 3E PGM + gold, which consists of platinum, palladium, rhodium and gold. The US operations are reported as 2E PGM, which consist of platinum and palladium.

All financial models used to determine Mineral Reserves are based on current tax regulations at 31 December 2020. Rounding of figures may result in minor computational discrepancies. Where this happens, it is not deemed significant.

For the Southern African PGM operations, the lead competent person designated in terms of the SAMREC Code, who takes responsibility for the consolidation and reporting of the SA Platinum Operations Mineral Resources and Mineral Reserves, and for the overall regulatory compliance of these figures, is Andrew Brown, who gave his consent for the disclosure of the 2020 Mineral Resources and Mineral Reserves Statement. Andrew [M.Sc Mining Eng] is registered with SAIMM (705060) and has 37 years' experience relative to the type and style of mineral deposit under consideration. Andrew is a full-time, permanent employee of Sibanye-Stillwater.

## Price assumptions on reserves and resources

The Group complies with both the JSE and the US Securities and Exchange Commission (SEC) guidelines on commodity prices used in the estimation of Mineral Reserves at all managed operations and projects. An average exchange rate of R15.00/US\$ (2019: R14.50/US\$) and the commodity prices illustrated below were used in the estimation process:

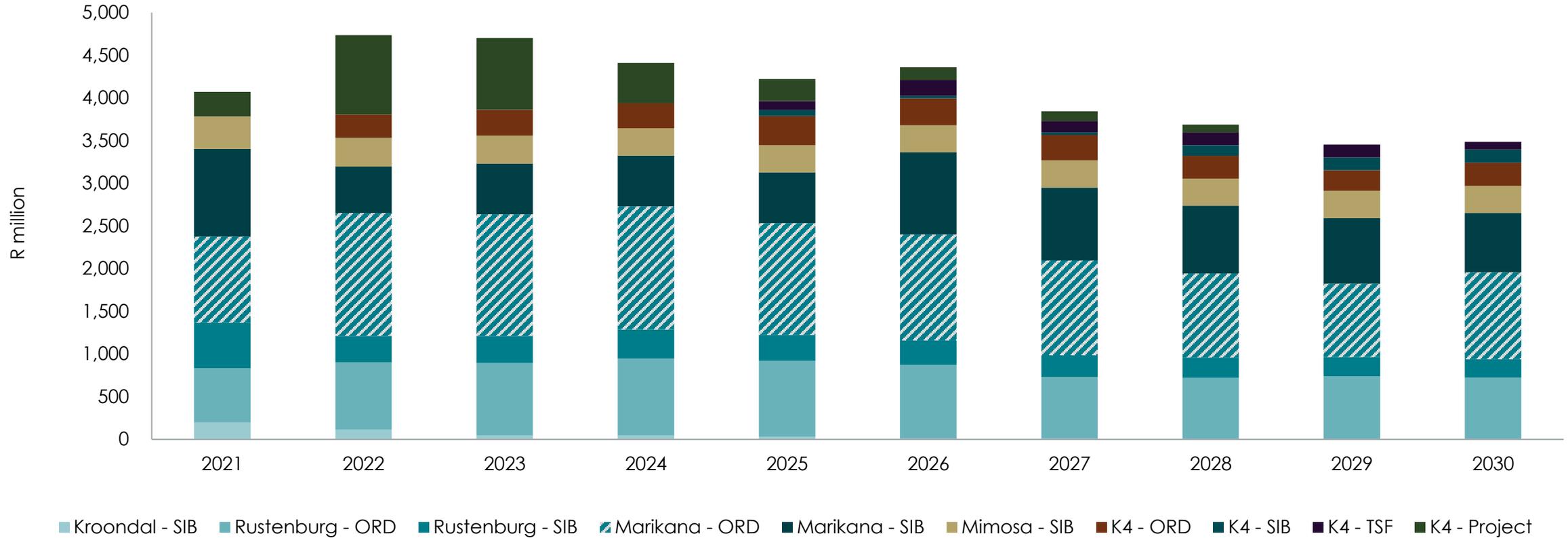
**31 December 2020**

<b>Precious metals</b>	US\$/oz	R/oz	R/kg
Gold	1,500	22,500	720,000
Platinum	880	13,200	424,389
Palladium	1,600	24,000	771,617
Rhodium	5,650	84,750	2,724,772
Iridium	1,450	21,750	699,278
Ruthenium	260	3,900	125,388
<b>Base metals</b>	US\$/lb	US\$/tonne	R/tonne
Nickel	5.90	13,000	195,000
Copper	2.72	6,000	90,000
Cobalt	15.00	33,069	496,040
Uranium oxide (U <sub>3</sub> O <sub>8</sub> ) <sup>1</sup>	32.00	70,548	960,000
Chromium oxide (Cr <sub>2</sub> O <sub>3</sub> ) <sup>2 3</sup>	0.07	160	2,400

1,2. Long term contract price

3. 42% concentrate

## Planned capital expenditure (including K4 and Mimosa)

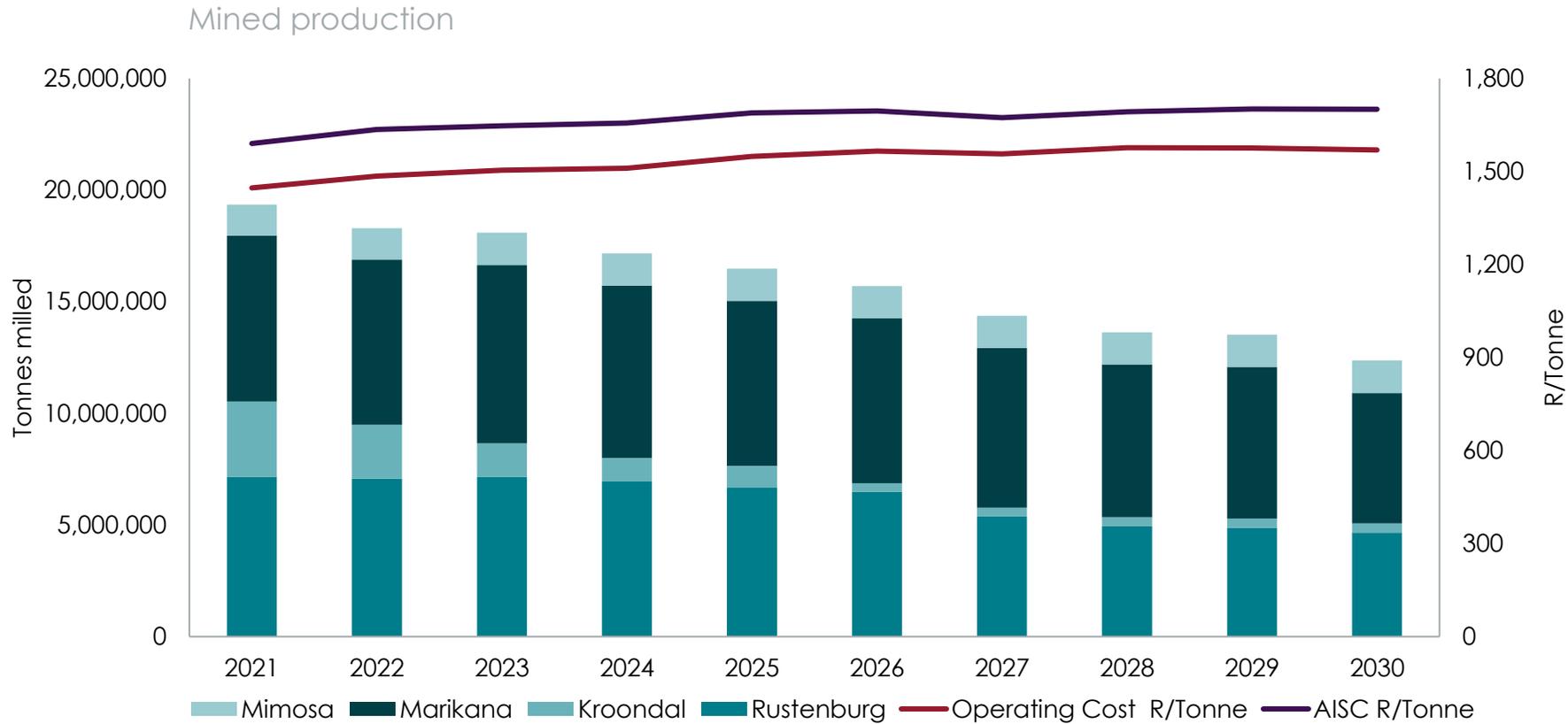


### Long-life assets with potential to mining through boundaries

Note:

- Capital expenditure in 2021 real terms. SIB: Stay-in-business capital, ORD: Ore reserve development
- Assumed exchange rate for conversion of Mimosa capital expenditure: R15.00/US\$
- Represents attributable capital from Mimosa and Kroondal
- Capital exclude unapproved projects under studies

# Planned mining tonnes and costs



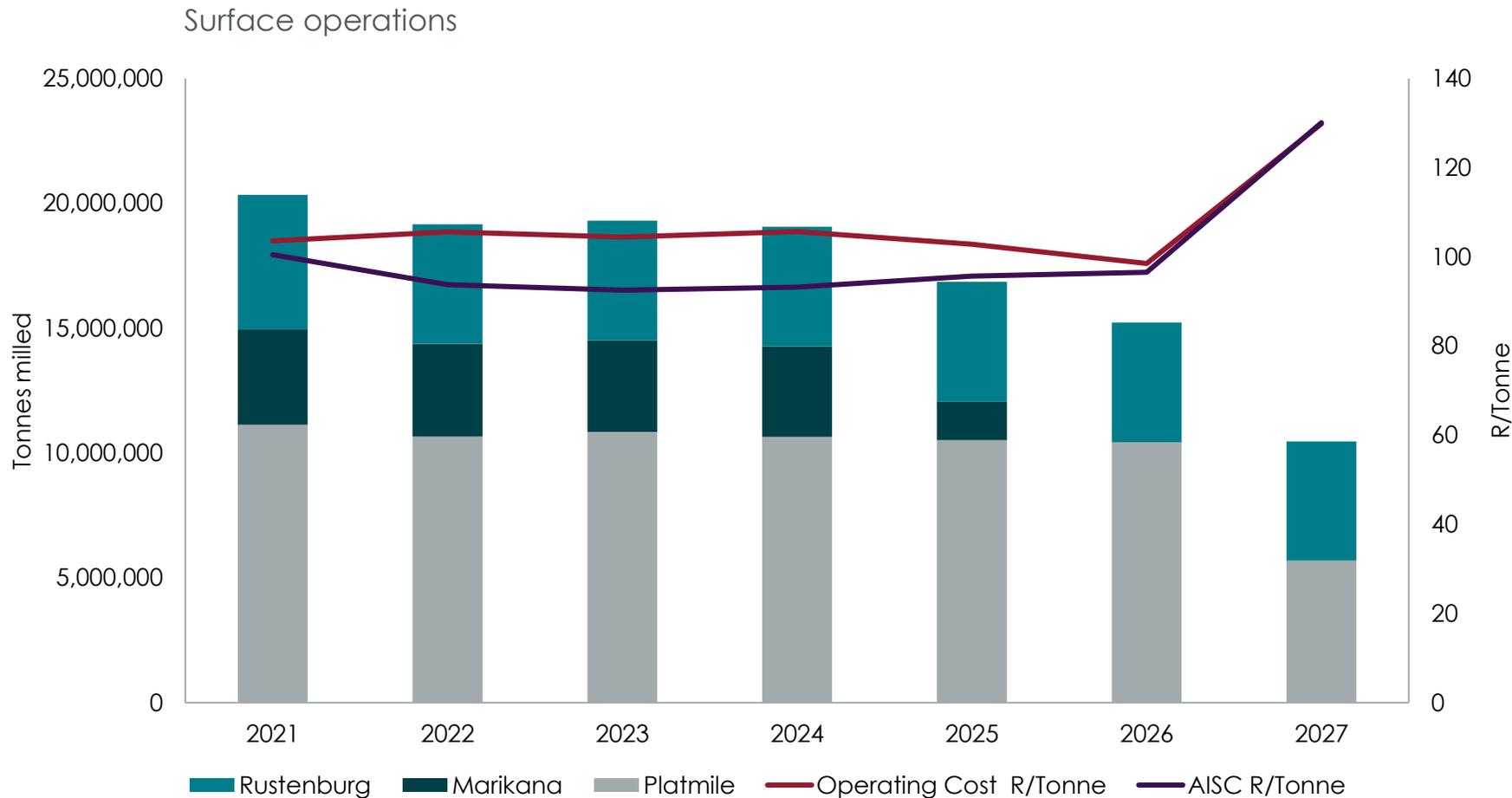
## Assumptions

- Production profiles are based on the 2020 LOM reserve and resources strategic plan
- K4 and Klipfontein projects inclusion maintains lower cost profile
- Labour cost estimated as per wage agreement
- 3-year trailing prices are used to estimate the by-product credits as well as the royalty tax estimation
- Above inflation NERSA guidance are included for electricity
- Marikana integration savings fully embedded
- Fit for growth procurement savings included in contracts and stores

Note:

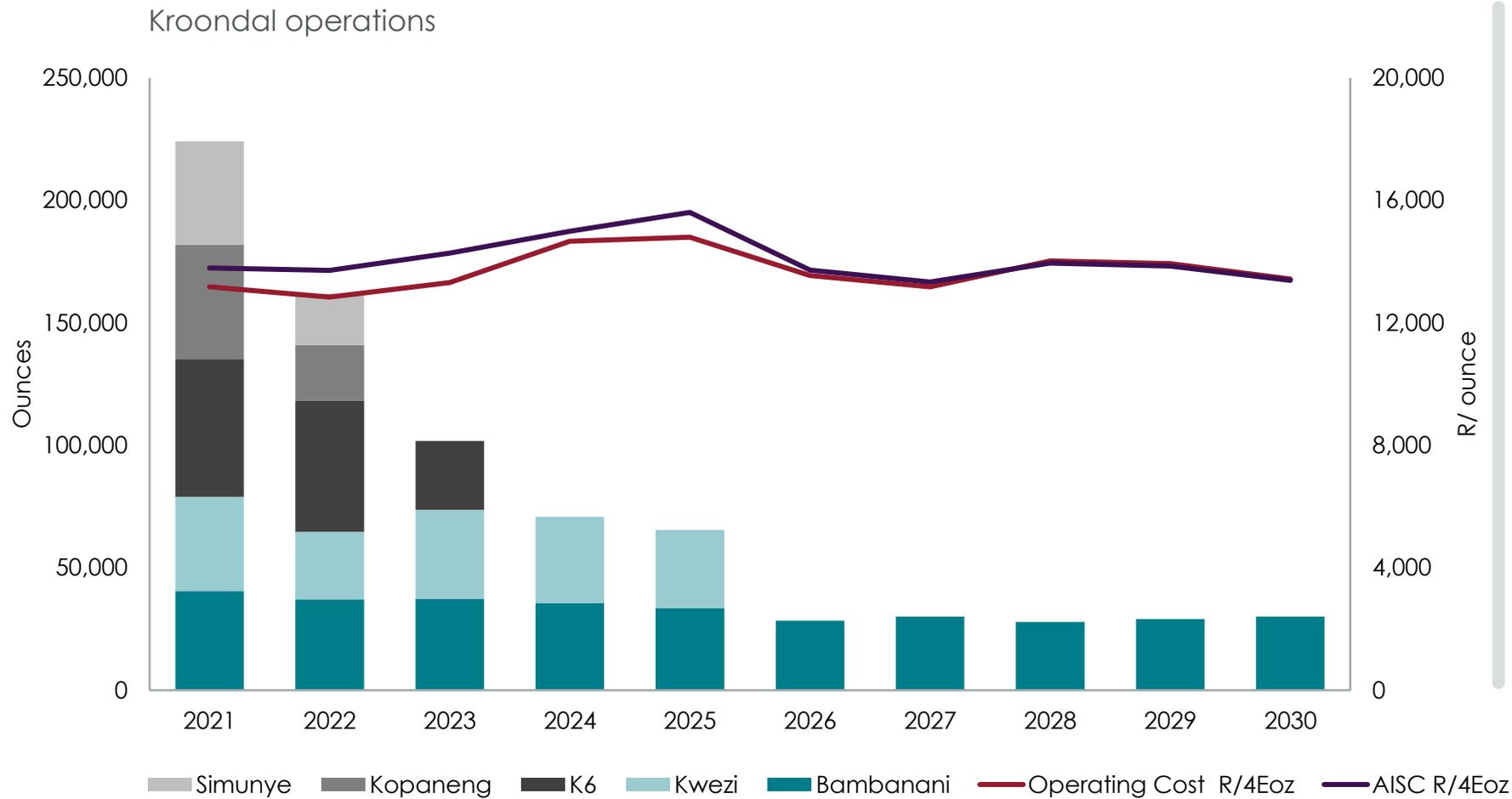
- Assumes 50% of Mimosa and Kroondal tonnes milled
- Costs are represented at 2021 real terms
- Assumed exchange rate for conversion of Mimosa capital expenditure: R15.00/US\$

# Surface sources – planned tonnes and cost



- Including Marikana BTT, Rustenburg WLTR and Platinum Mile
- Surface Tailings retreatment reserves running out in 2027
- Platinum Mile (holding increased from 97.1% to 100% in H1 2021) fully integrated into Sibanye Group
- Assessment of BTT opportunity and WLTRP treatment of Marikana tailings could extend LOM up to 20 years
- Average operating cost of about R110/tonne milled

# Kroondal – planned ounces and cost

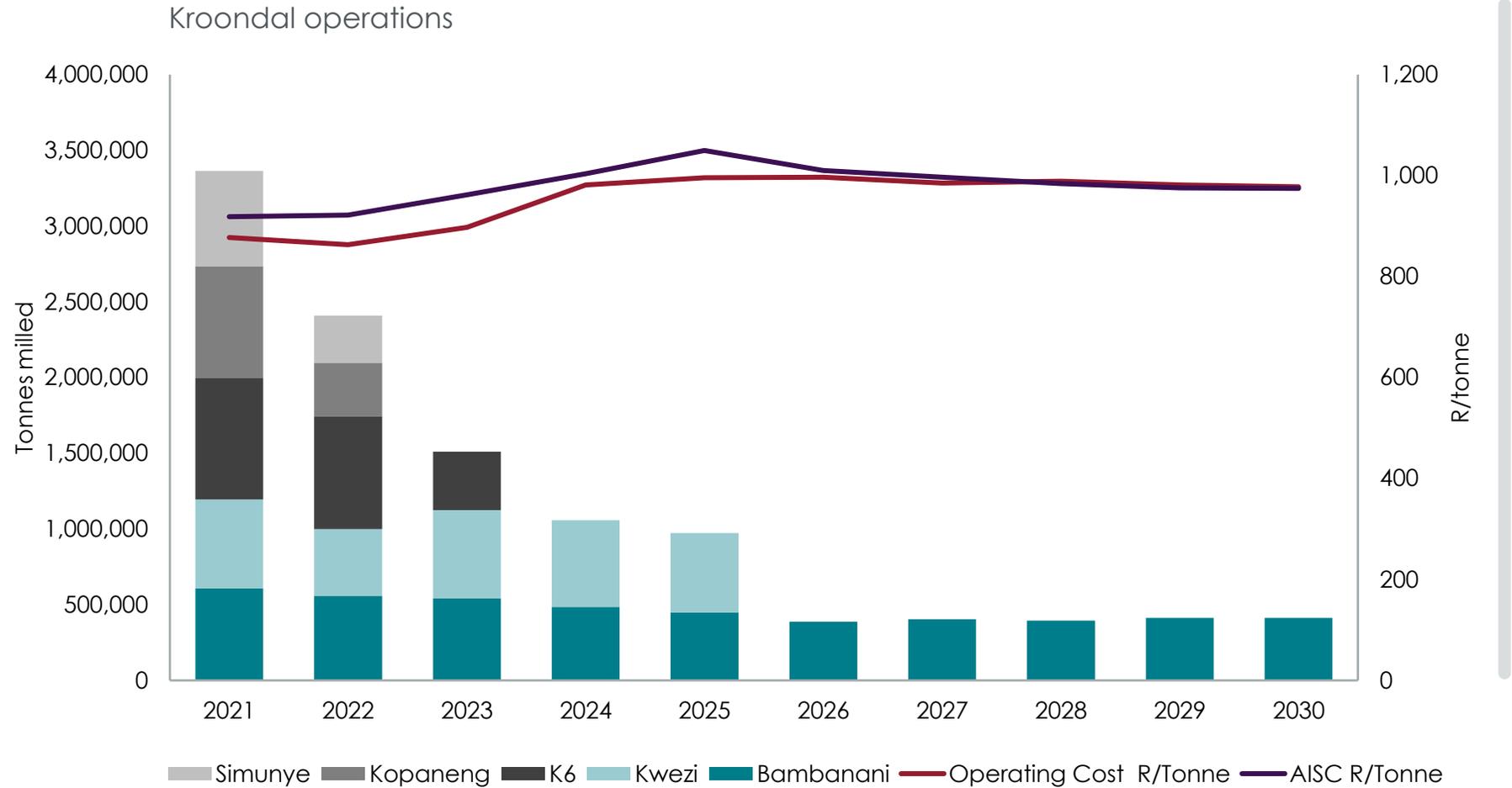


- Opportunity to extend life beyond current plan by mining a cross boundary into Rustenburg Resource
- Kroondal low-cost mechanised operation and would significantly bring forward value of Rustenburg resources

Efficient low cost operations, with consolidation upside

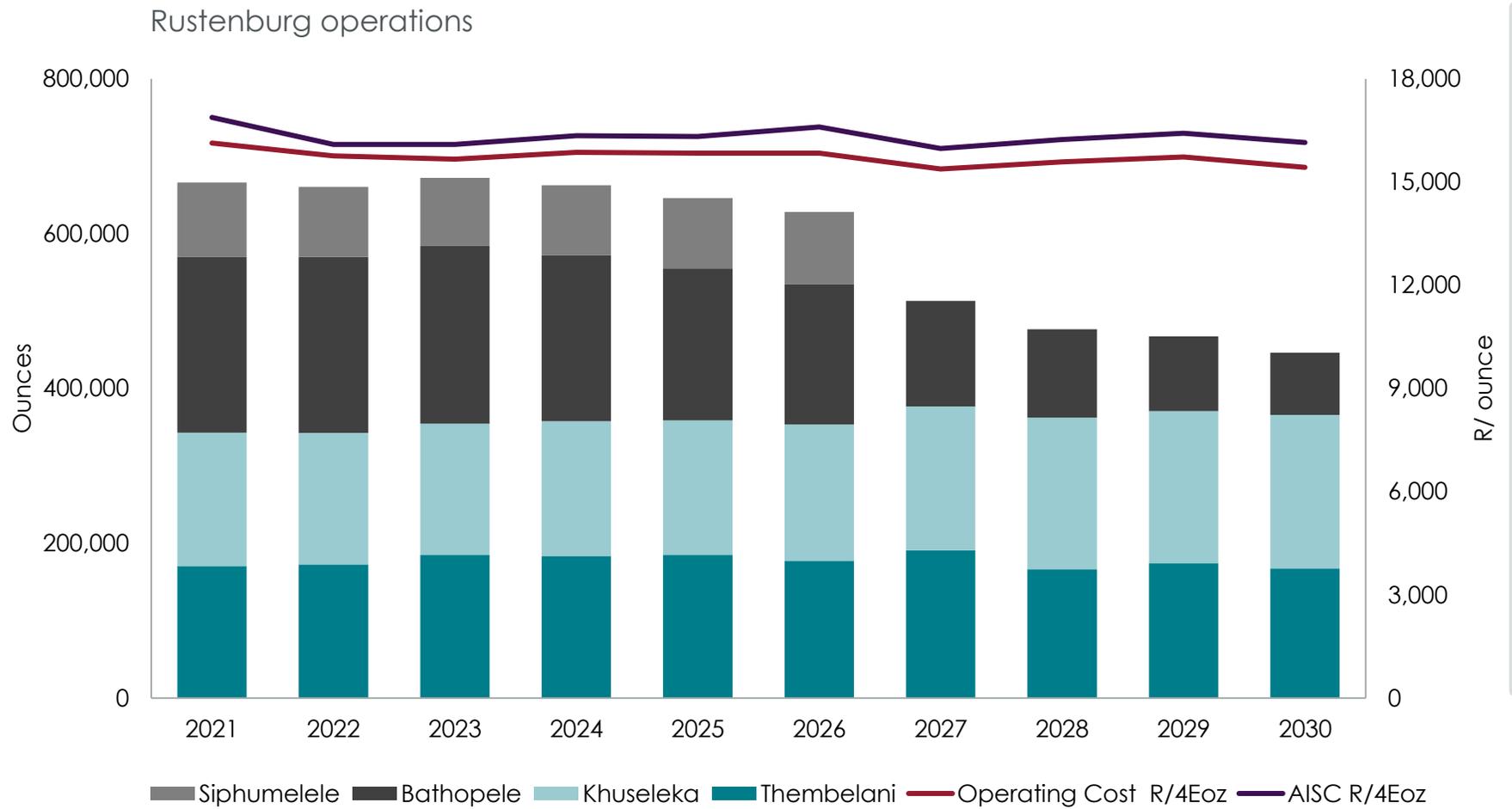
Note: Represent attributable ounces (50%). Costs are represented at 2021 real terms

## Kroondal – planned tonnes and cost



**Efficient low cost operations, with consolidation upside**

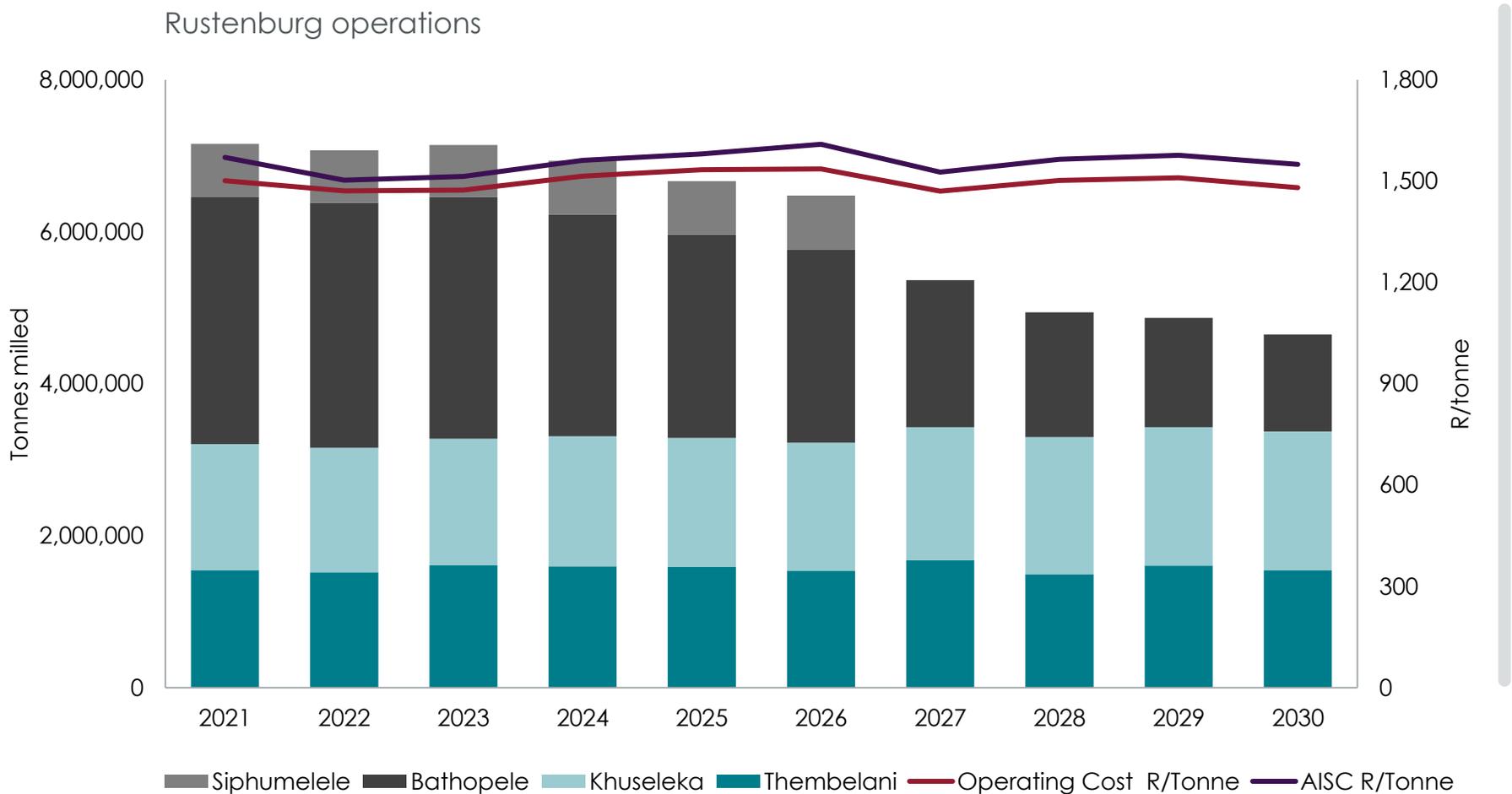
# Rustenburg – planned ounces and cost



- Long life operation- stable production to 2026

## Long-life assets

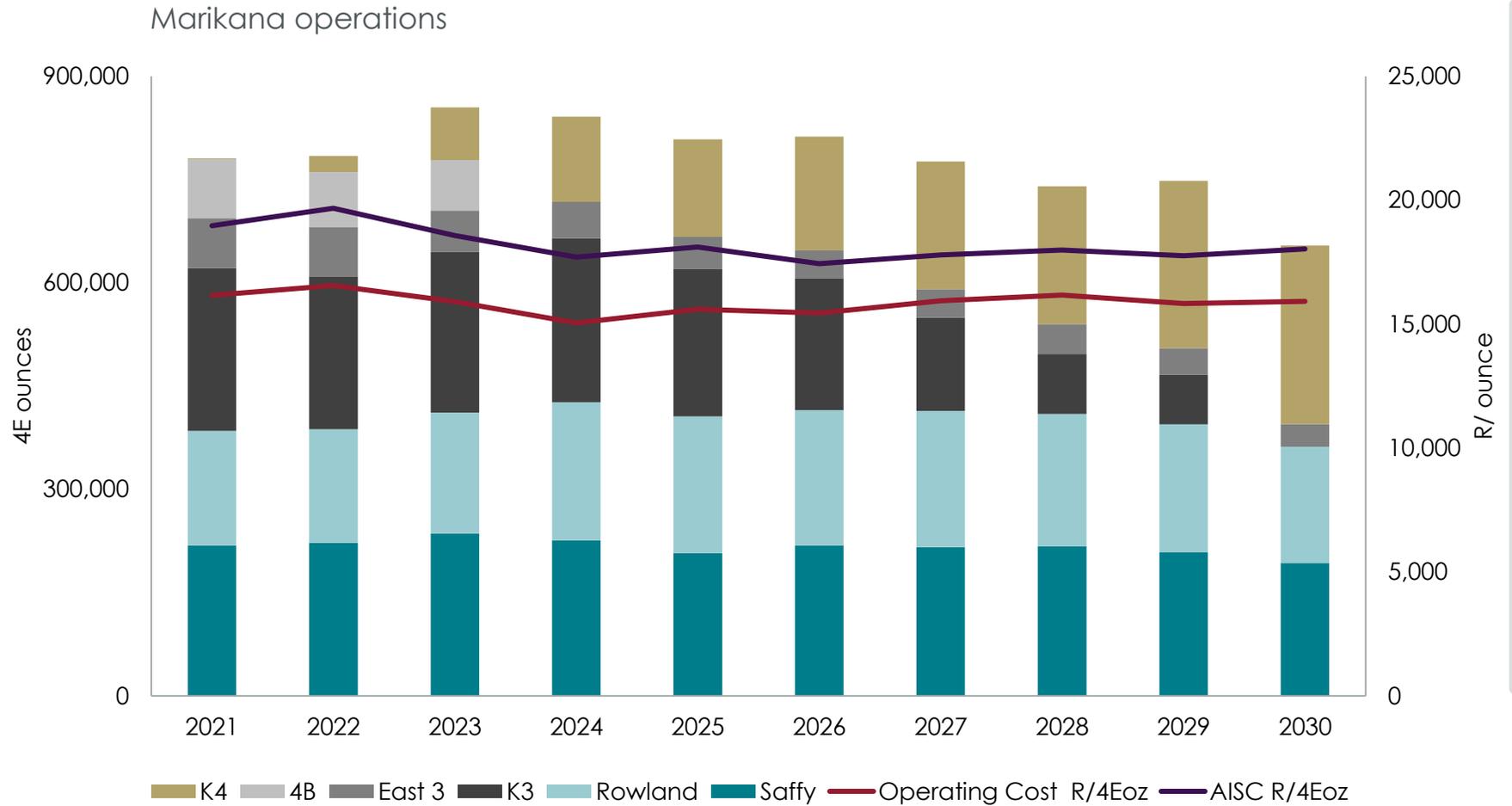
# Rustenburg – planned tonnes and cost



## Long-life assets

Note: Costs are represented at 2021 real terms

# Marikana – planned ounces and cost

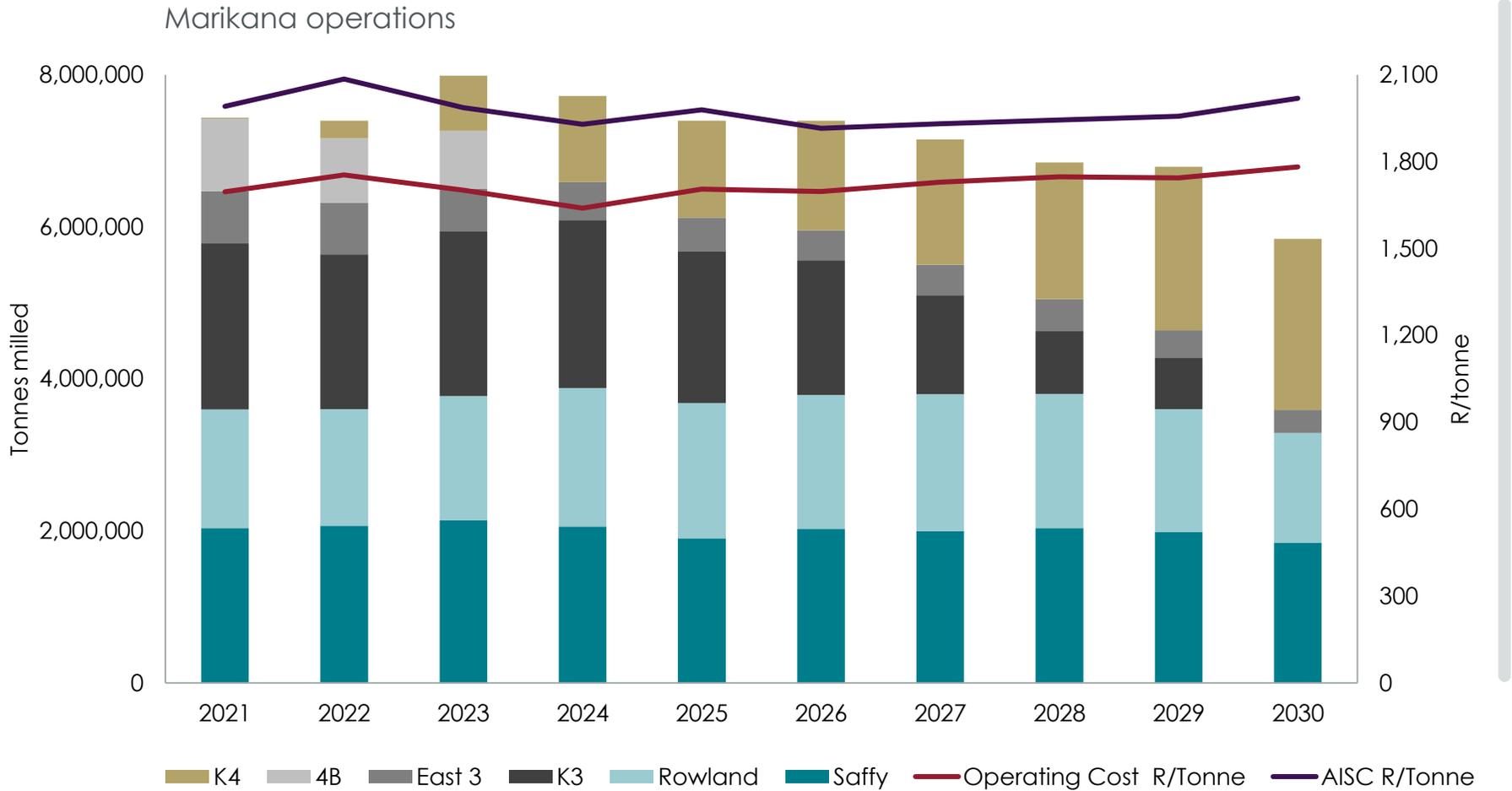


- High quality operations with significant optionality
- K4 adding to production profile until 2026
- Lower cost K4 to benefit operating cost and AISC

## High quality mine-to-market operation

Note: Costs are represented at 2021 real terms

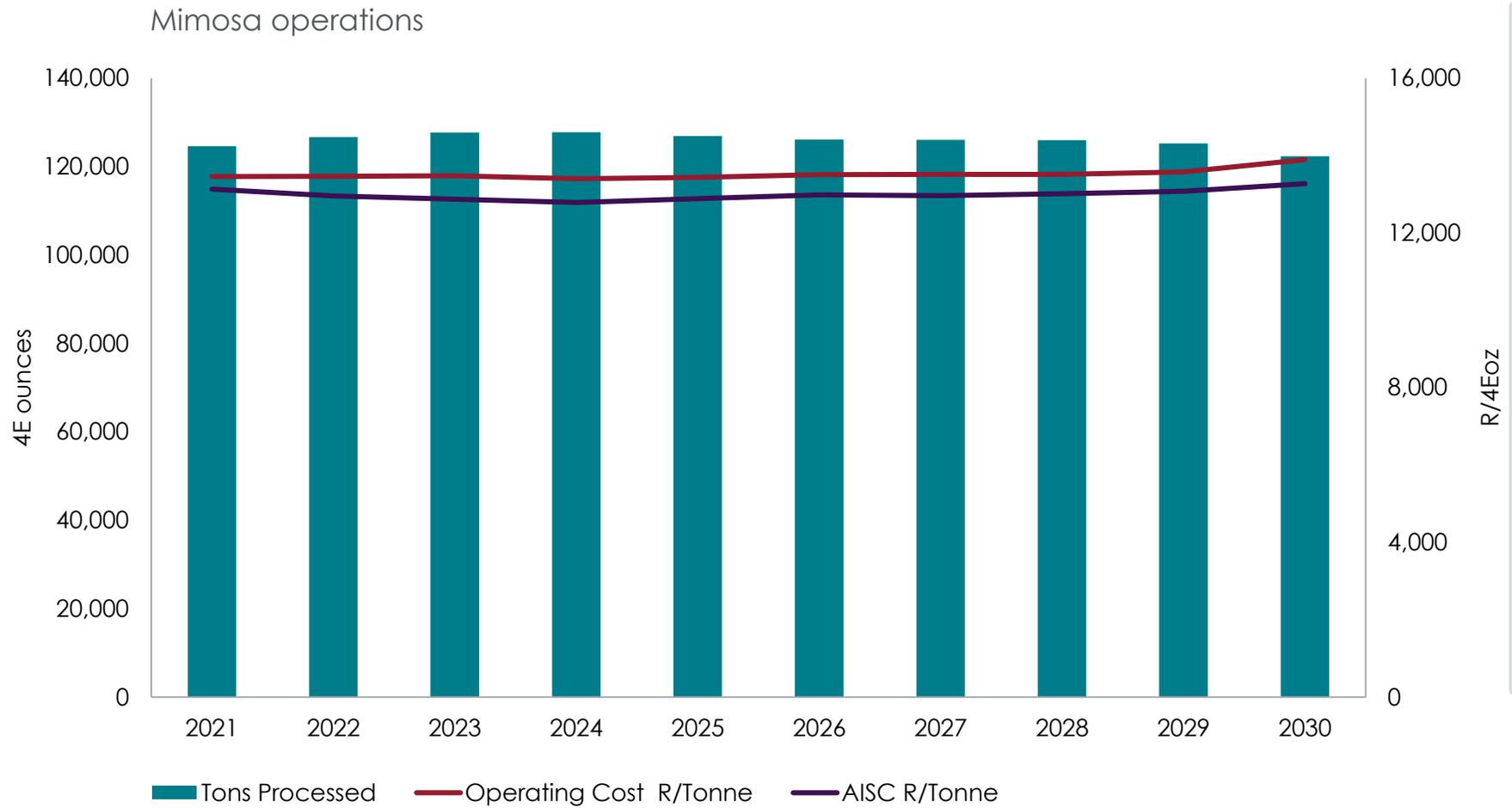
# Marikana – planned tonnes and cost



High quality mine-to-market operation

Note: Costs are represented at 2021 real terms

# Mimosa – planned ounces and cost

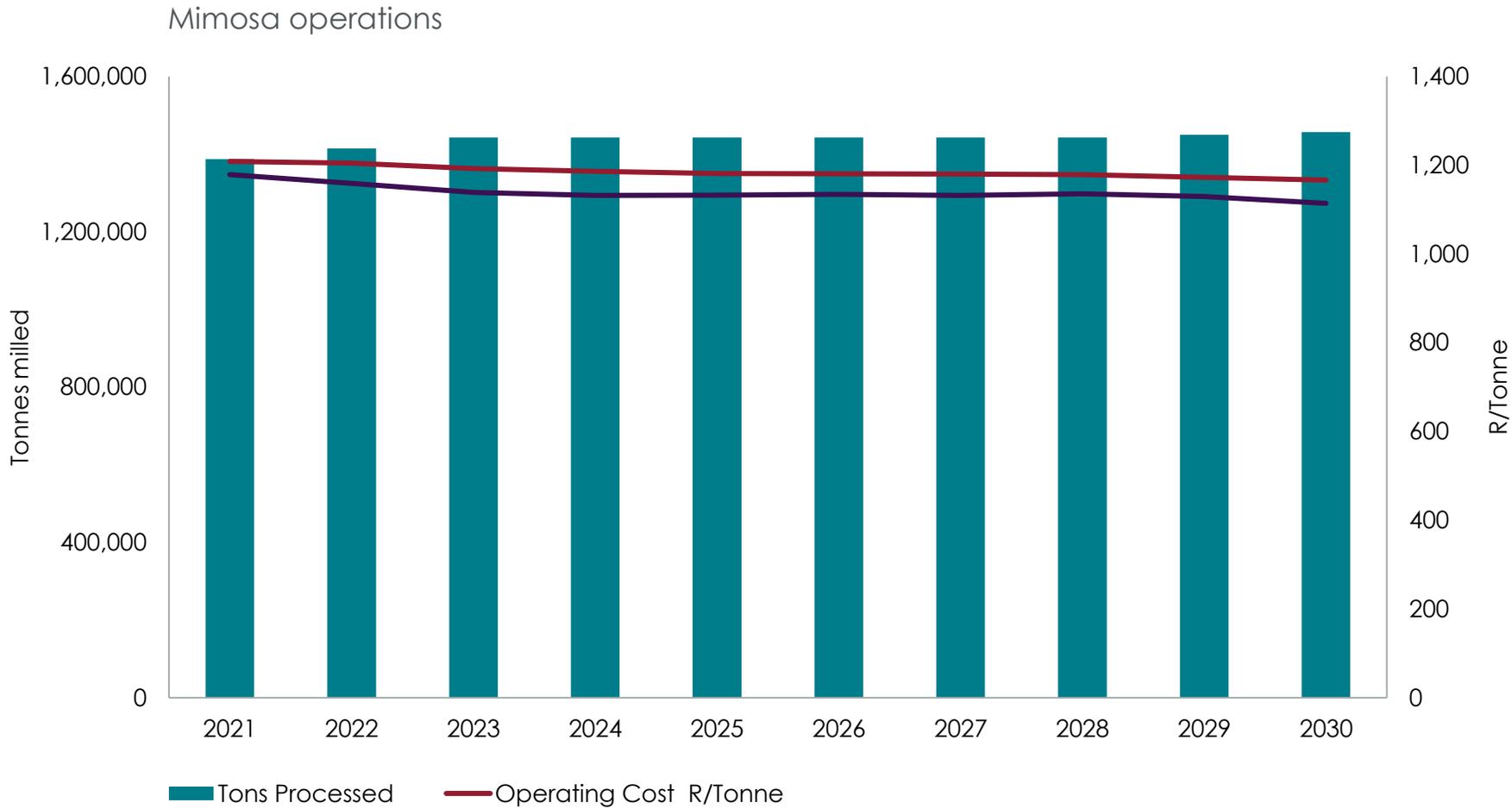


Steady, consistent production and cost forecast

## Consistent delivery

Note: Costs are represented at 2021 real terms

## Mimosa – planned tonnes and cost



**Consistent delivery**

Note: Costs are represented at 2021 real terms

# Surface operations – from mine-to-market

- **Enhance and optimise surface operations**

- Augment future life of surface operations (WLTR / PlatMile / BTT / ETP, etc.)<sup>1</sup>, beyond 2025
- Innovate and implement new technologies where required
- Testing flotation technology to recover the ultrafine chrome in current tailings horizons and dormant tailings dams.

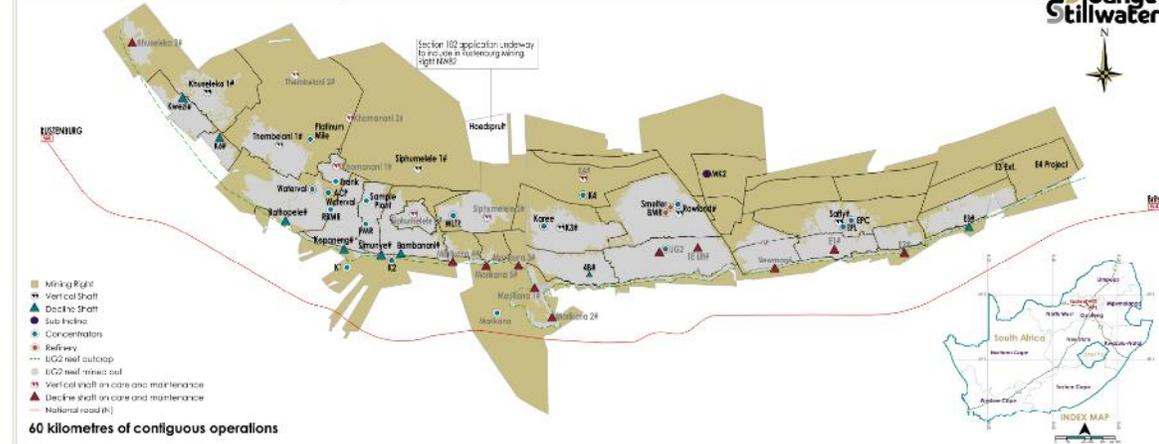
- **Tailings deposition**

- Strategic review of the tailing deposition across SA PGM segment, incorporating K4 and surface retreatment opportunities has been completed,
- Marikana tailings deposition constraints have been eradicated

- **Embed ESG excellence**

- Footprint reduction by depositing current tailings into a mega in-pit tailings facility
- Land available for agriculture / business usage / housing post rehabilitation
- Reducing future environmental liabilities

## Overview of Western Limb Operations



- 12 active tailings dams and 8 dormant tailings dams



**A competitive advantage and strategic differentiator - provides significant optionality**

1. WLTR: Western Limb Tailings Retreatment; Platinum Mile; Bulk Tailings Treatment, Eastern Tailings Treatment Plant

## Other by-products we mine | SA PGM operations

	Mine	Copper % per tonne	Nickel % per tonne	Iridium % of 6E g/t	Ruthenium % of 6E g/t	Cobalt % per tonne	Cr <sub>2</sub> O <sub>3</sub> % per tonne
UG2	Bathopele	0.008	0.089	3.773	19.041	0.062	19.851
	Khuseleka	0.008	0.112	4.054	14.525	0.059	24.420
	Thembelani	0.009	0.114	3.336	15.609	0.072	23.472
	Kwezi	0.014	0.109	4.317	14.695	0.064	15.100
	K6	0.014	0.083	3.212	14.638	0.061	14.265
	Kopaneng	0.012	0.071	3.311	14.664	0.040	14.943
	Simunye	0.004	0.093	3.837	13.644	0.054	15.314
	Bambanani	0.006	0.070	3.463	10.957	0.042	15.002
	4B	0.008	0.030	3.640	15.410		18.239
	K3	0.009	0.033	3.366	14.426		16.828
	K4	0.011	0.039	3.553	14.863		19.302
	Rowland	0.009	0.028	3.628	15.675		20.069
	Saffy	0.008	0.031	3.627	16.069		21.367
E3	0.007	0.031	3.752	15.670		21.025	

## Other by-products we mine | SA PGM operations

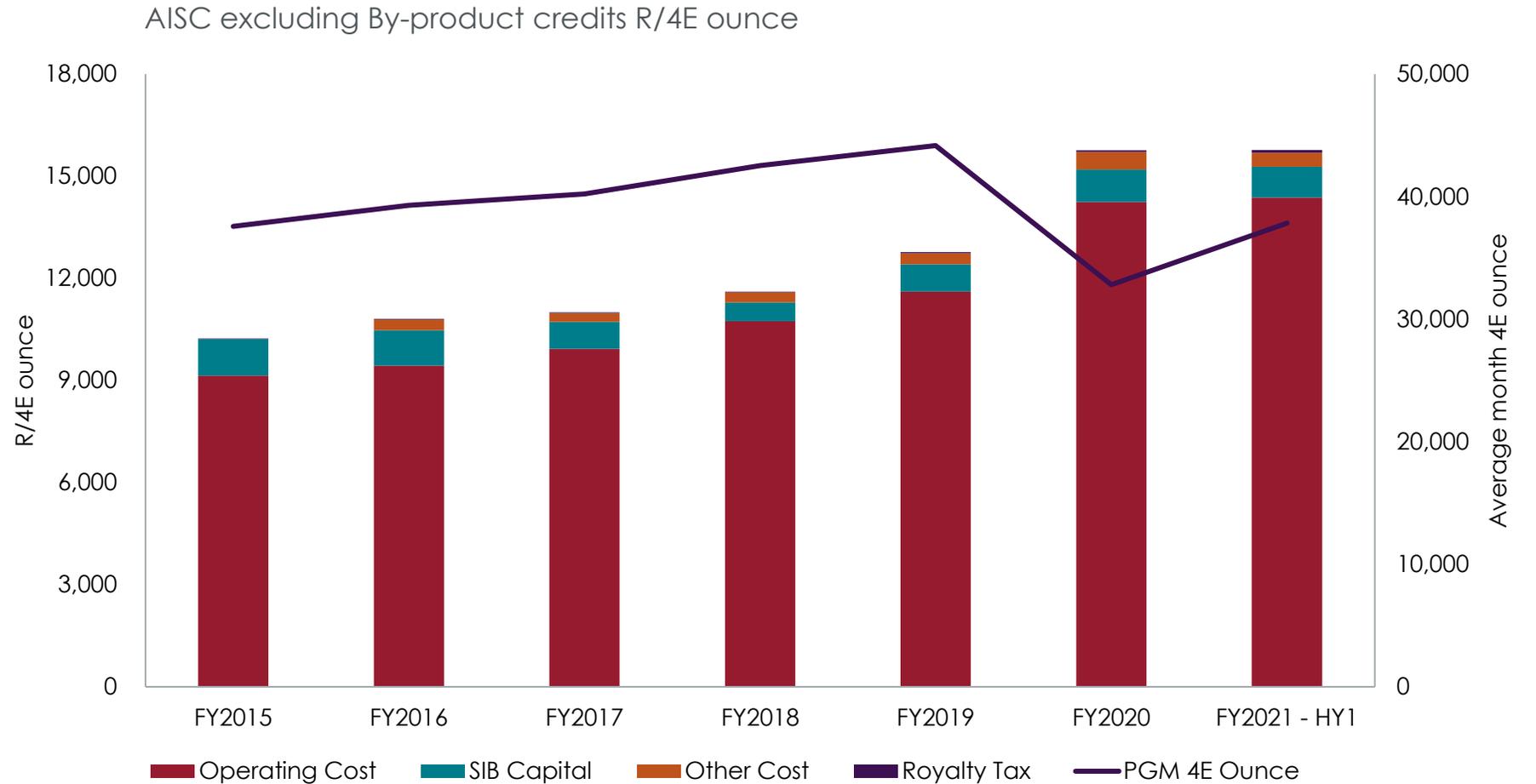
	Mine	Copper % per tonne	Nickel % per tonne	Iridium % of 6E g/t	Ruthenium % of 6E g/t	Cobalt % per tonne	Cr <sub>2</sub> O <sub>3</sub> % per tonne
Merensky	Khuseleka	0.089	0.194	1.529	7.902		0.686
	Thembelani	0.089	0.219	1.620	7.772		0.261
	Siphumelele	0.101	0.218	1.950	7.689		0.421
	4B	0.076	0.140	1.048	6.034		0.364
	K3	0.089	0.175	1.240	6.899		0.502
	K4	0.086	0.157	1.358	7.305		0.551
	Rowland	0.076	0.135	1.034	5.774		0.381

## Prill splits by reef type

	Marikana		Rustenburg		Kroondal	Mimosa
	Merensky reef	UG2 reef	Merensky reef	UG2 reef	UG2 reef	Main sulphide zone
4E g/t	4,16	4,02	4,83	3,68	2,57	3,45
Pt %	61,85	59,38	63,80	54,53	54,94	49,35
Pd %	27,81	28,87	27,30	34,31	33,95	38,47
Rh %	3,31	11,18	3,99	10,43	10,38	4,20
Au %	7,02	0,57	4,92	0,72	0,72	7,97
Chrome %	–	19,45	-	21,88	13,95	-
Basket prices spot (R/4E oz)*	30,895	51,440	32,360	50,761	50,541	35,934

**MR grades higher but UG2 currently benefitting from high Pd and Rh prices and Cr credits**

## Kroondal costs are well controlled



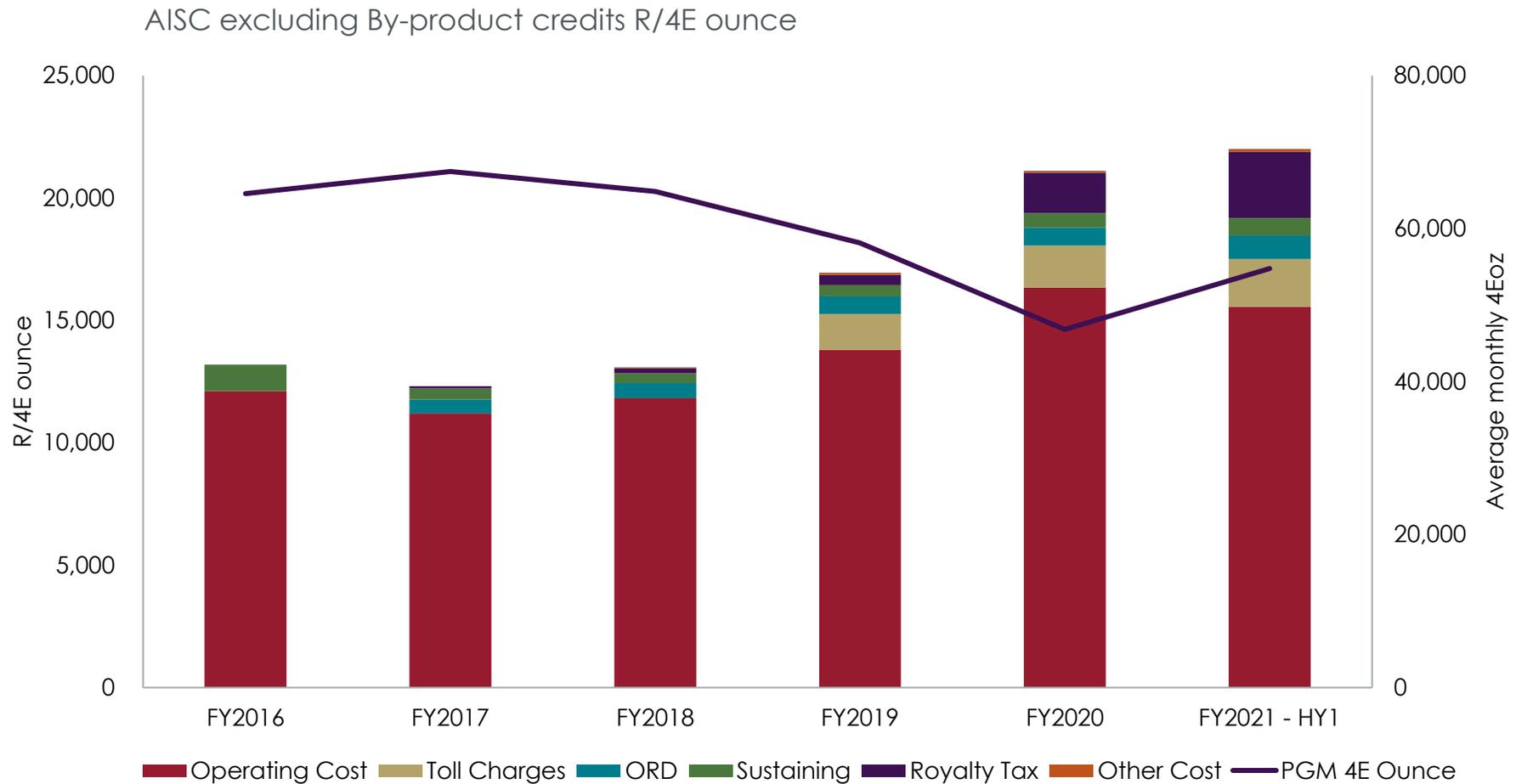
- Trackless mining – on reef development expensed
- Three-year wage contract in place until June 2020

### Cost awareness culture entrenched

\* 50% pool and share agreement with Anglo American Platinum

\*\* All-in sustaining cost (AISC) is calculated by including cost of sales before amortisation and depreciation, royalties, community costs, share-based payments, rehabilitation interest and amortisation, ore reserve development, sustaining capital expenditure and less by-product credits

## Rustenburg benefits from integration synergies

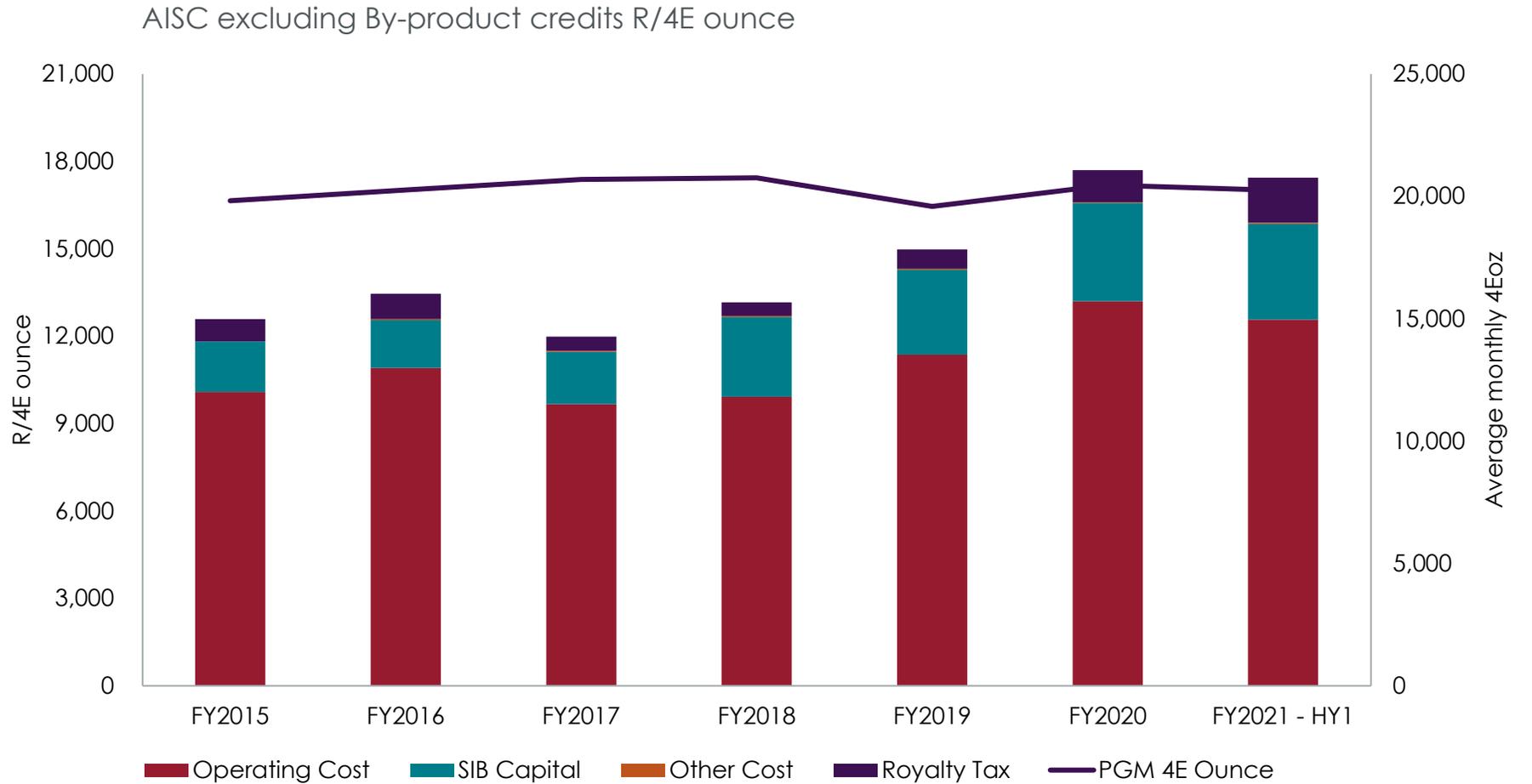


- Integration synergies and savings have made Rustenburg operations sustainable
- Ore reserve development capital aimed at maintaining the current level of production at the conventional shafts
- Change from POC To toll processing in 2019 resulted in increase in costs, but delivered significant profitability gains

### Profitable long life operations

\* All-in sustaining cost (AISC) is calculated by including cost of sales before amortisation and depreciation, royalties, community costs, share-based payments, rehabilitation interest and amortisation, ore reserve development, sustaining capital expenditure and less by-product credits

# Mimosa is a consistent cost performer



- Stay-in-business capital is inclusive of on-reef development

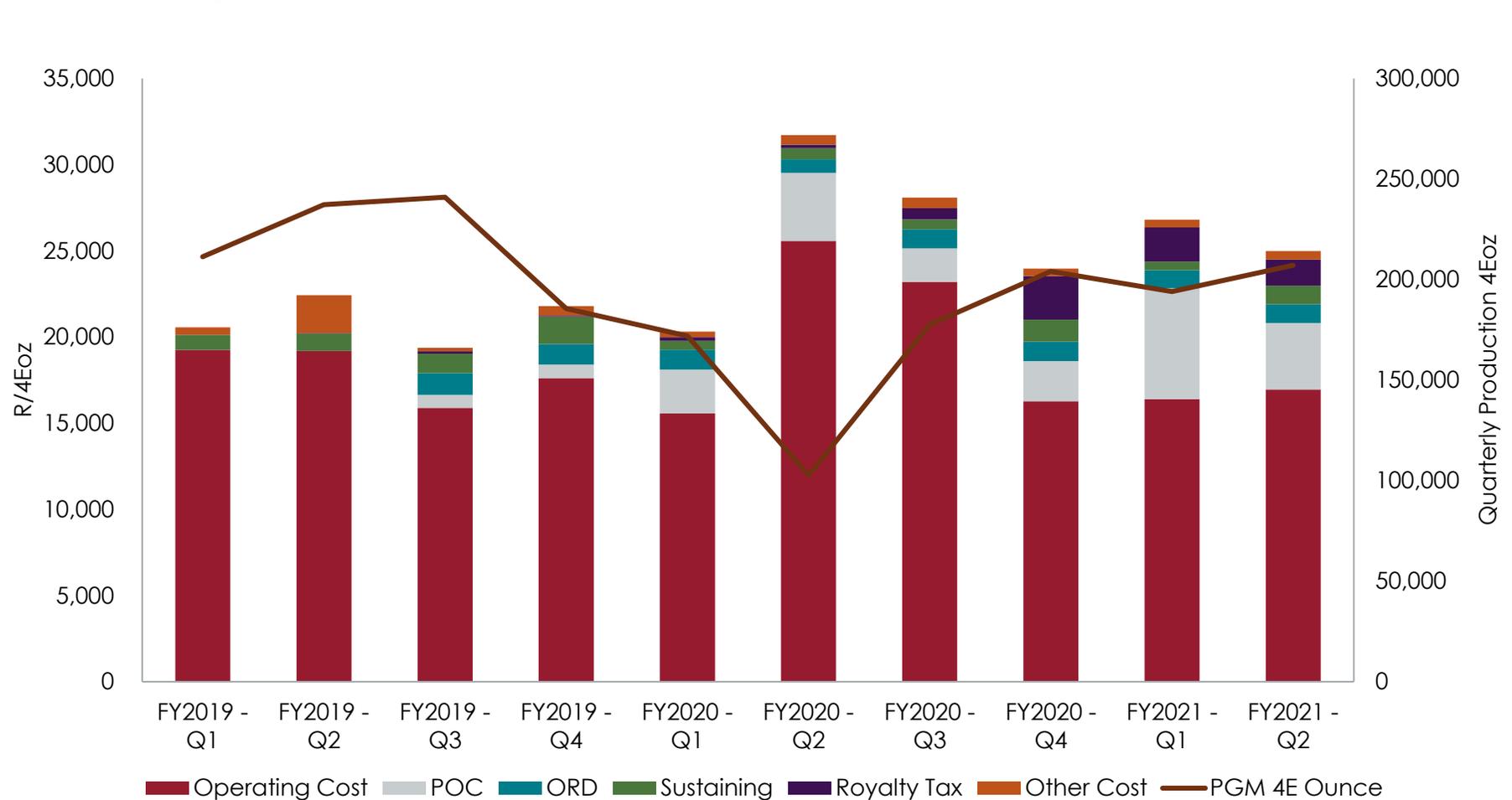
## Regularly contributing dividends

Note: Mimosa is a 50:50 joint venture with Implats

\* All-in sustaining cost (AISC) is calculated by including cost of sales before amortisation and depreciation, royalties, community costs, share-based payments, rehabilitation interest and amortisation, ore reserve development, sustaining capital expenditure and less by-product credits

# Marikana – Quality long life operations with significant optionality

AISC excluding By-product credits R/4E ounce



Annual synergies of R1.8bn and continued value from processing of treating third party material

## Annual Marikana operational synergies more than double

Category	Summary of key initiatives	Initial benefits identified	Realised benefits since acquisition
Closure of London offices	<ul style="list-style-type: none"> <li>Corporate rationalisation (closing London office and delisting)</li> </ul>	138	96
Operating (mine) and regional shared services synergies (Labour savings)	<ul style="list-style-type: none"> <li>Employees and management configured to reflect the Sibanye-Stillwater operating model</li> <li>Consolidation of duplicated production and support functions</li> </ul>	374	928
Optimal use of surface infrastructure	<ul style="list-style-type: none"> <li>Footprint reduction</li> <li>Concentrator consolidation/optimisation</li> </ul>	125	348
Sourcing and stores management	<ul style="list-style-type: none"> <li>Improved procurement and supply chain management</li> </ul>	30	8
ICT	<ul style="list-style-type: none"> <li>Payroll system aligned to Sibanye-Stillwater</li> <li>SAP system consolidation for South Africa</li> <li>Infrastructure consolidation</li> </ul>	63	26
Other	<ul style="list-style-type: none"> <li>Functional optimisation</li> <li>Contractors optimisation</li> </ul>	0 0	75 347
<b>Total</b>	<b>Savings</b>	<b>R730m p.a. (over 3-4 years)</b>	<b>R1.83bn (over 18 months)</b>
Additional possible savings	<ul style="list-style-type: none"> <li>Processing synergies#</li> </ul>	780	0
Financing cost savings	<ul style="list-style-type: none"> <li>Refinancing of the US\$1.69 billion Lonmin PIM Prepay</li> </ul>	0	<b>210</b>

## Operational excellence

### SAFE OPERATIONS

- Safety, cost, volume, quality
  - Delivery on plan
  - Continuous improvement
  - Industry benchmarking

### SUSTAINABILITY

- Sustainable life of mine profiles
  - SIB and ORD Capital
- ESG Implementation
- Operationalisation of projects
- Integration of acquisitions

### BUSINESS EXCELLENCE

- Optimal utilisation of assets
- Working capital management
- Value adding strategic partnerships and customer relationships

## Overview of operations - Mining

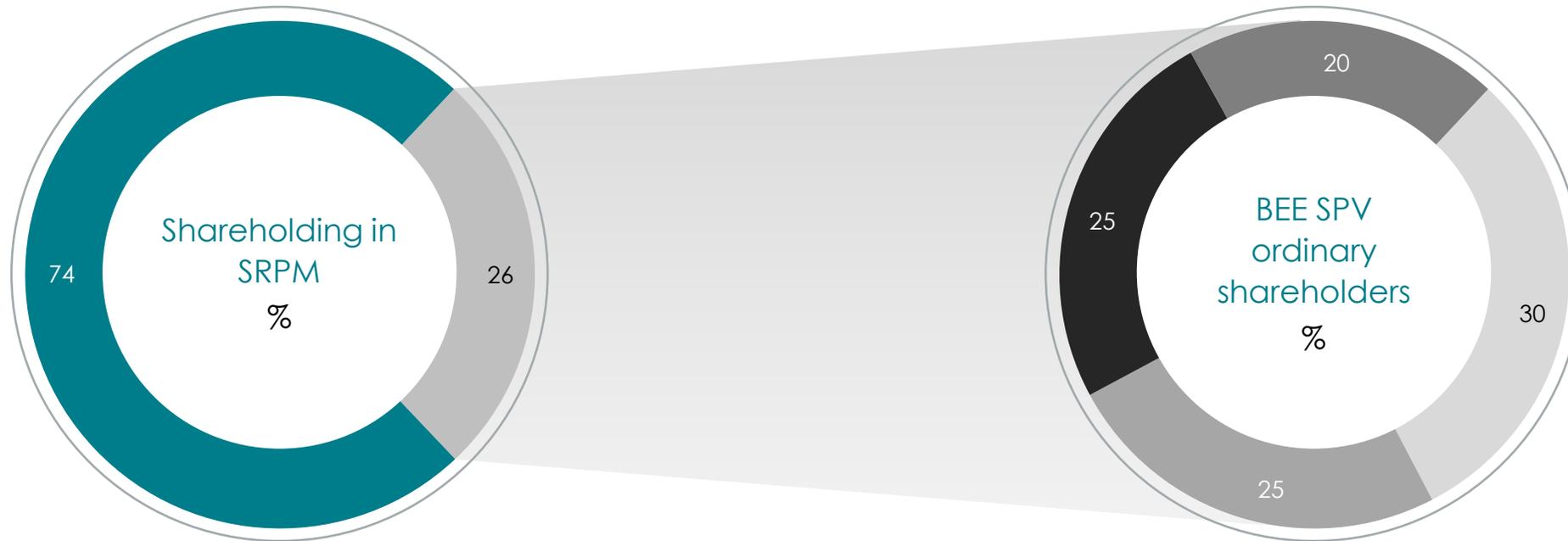
		Mining method	Operating hoisting capacity (ktpm)	5 year planned production (ktpm)
Kroondal (LOM 11 years) (50/50 Joint venture)	Kopaneng (2 Year life)	Bord and pillar	186	91
	Simunye (2 Year Life)	Bord and pillar	160	79
	Bambanani	Bord and pillar	130	88
	Kwezi	Bord and pillar	150	90
	K6 Shaft (3 Years life)	Bord and pillar	140	107
Rustenburg (LOM 32 years) (Own operation)	Bathopele	Bord and pillar	280	260
	Khuseleka	Conventional	225	140
	Thembelani	Conventional	220	140
	Siphumelele	Conventional	195	65
Marikana (LOM 16 years) (Own operation)	K3	Conventional	290	181
	4B (3 Year life)	Conventional	168	73
	Rowland	Conventional	260	141
	Saffy	Conventional	220	164
	E3	Conventional	110	49
Mimosa (LOM 11 years) (50/50 Joint owned)	Wedza and Mtshingwe	Bord and pillar	249	249
Projects	Marikana: K4	Conventional	191	191
	Kroondal: Klipfontein opencast	Opencast	50	50

Planned production is five-year hoisted average from 2021 onwards

## Overview of operations - Processing

		Concentrators				Chrome			
		PGM offtake	Design capacity (ktpm)	Current operational capacity (ktpm)	Average Recovery %	Material treated	Material treated	Average recovery %	Type of contract
Kroondal	K1	Anglo	290	290	82	UG2 U/G	UG2 Tailings	8	Combined beneficial and non beneficial
	K2	Anglo	300	300	80	UG2 U/G			
Rustenburg	Waterval UG2	Anglo	450	420	83	Mer + UG2 U/G	UG2 Tailings	11	Beneficial
	Waterval Retrofit	Anglo	650	120	84	Mer + UG2 U/G			
	WLTR	Anglo	450	410	28	Historic tailings			
Platinum Mile	Platinum Mile	Anglo	1 000	900	12	Fresh + Historic Tailings			
Marikana	Karee A	In-house	140	148	87	Mer U/G	UG2 Tailings	18	Beneficial
	Karee B	In-house	120	125	87	UG2 U/G			
	K4	In-house	125	135	85	Mer + UG2 U/G			
	EPL	In-house	180	225	80	UG2 U/G			
	BTT	In-house	300	300	25	Historic tailings			
	ETTP	In-house	274	223	24	Tailings			
Mimosa	Mimosa	IRS	185	230	78	UG2 MSZ U/G			

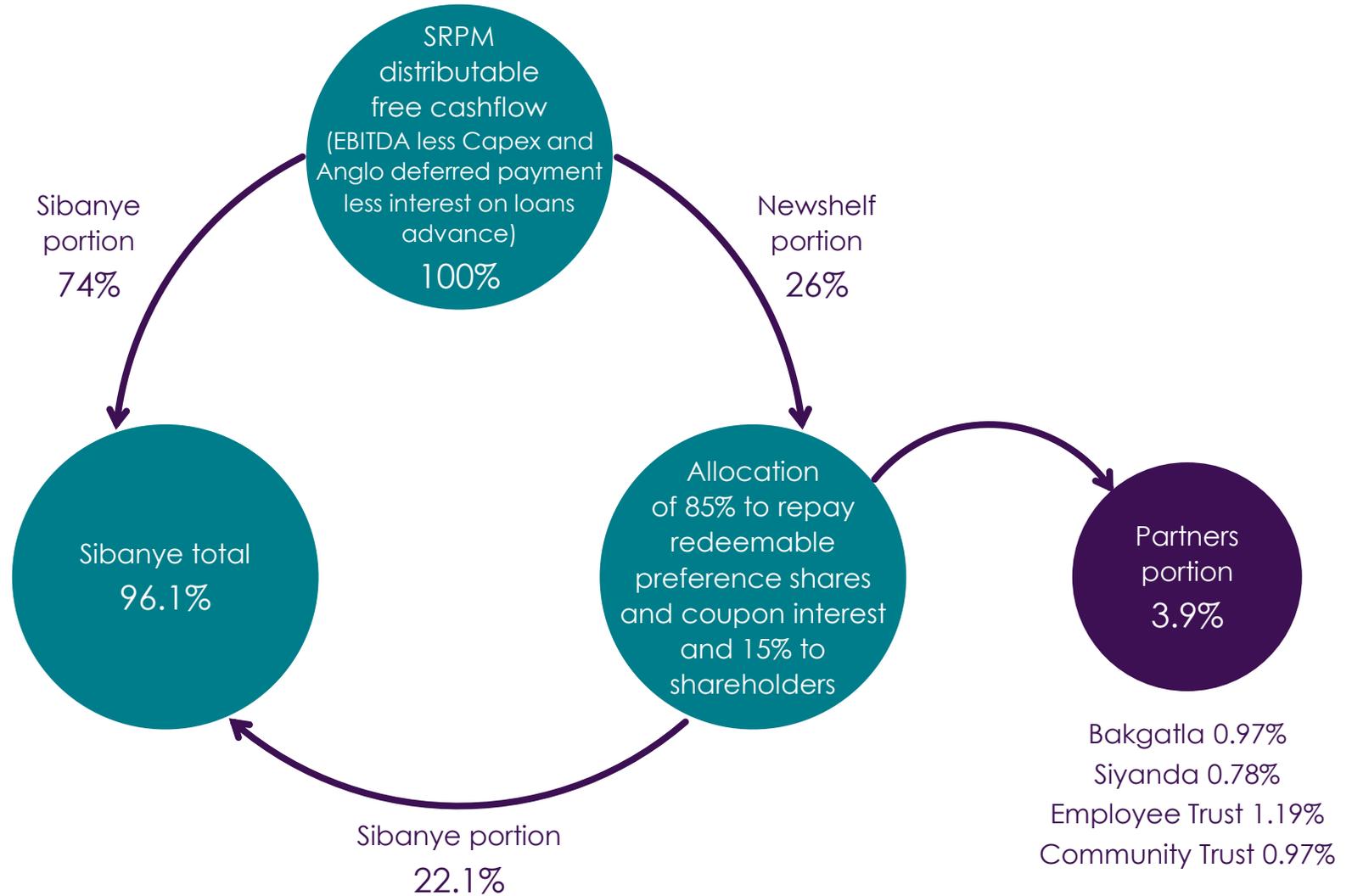
## Rustenburg – shareholding structure - Revised BEE SPV consortium



- Newshelf 1335 Proprietary Limited
- Sibanye

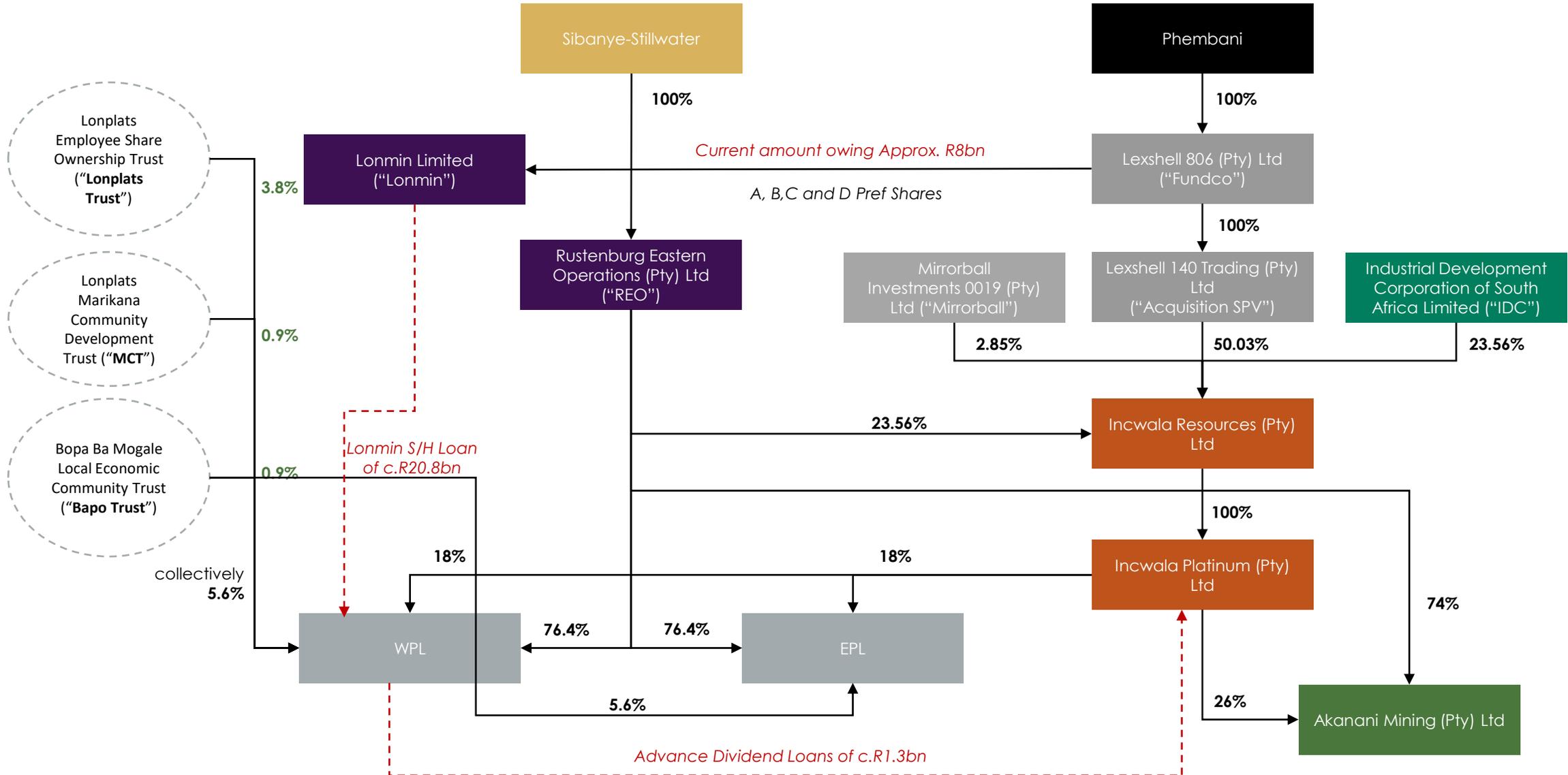
- Sibanye Rustenburg Platinum Mines Employees Trust
- Sibanye Rustenburg Platinum Mines Community Trust
- Bakgatla Bofokeng Proprietary Limited
- Siyanda Resources Proprietary Limited

## Rustenburg - Revised BEE SPV consortium – Share payment structure

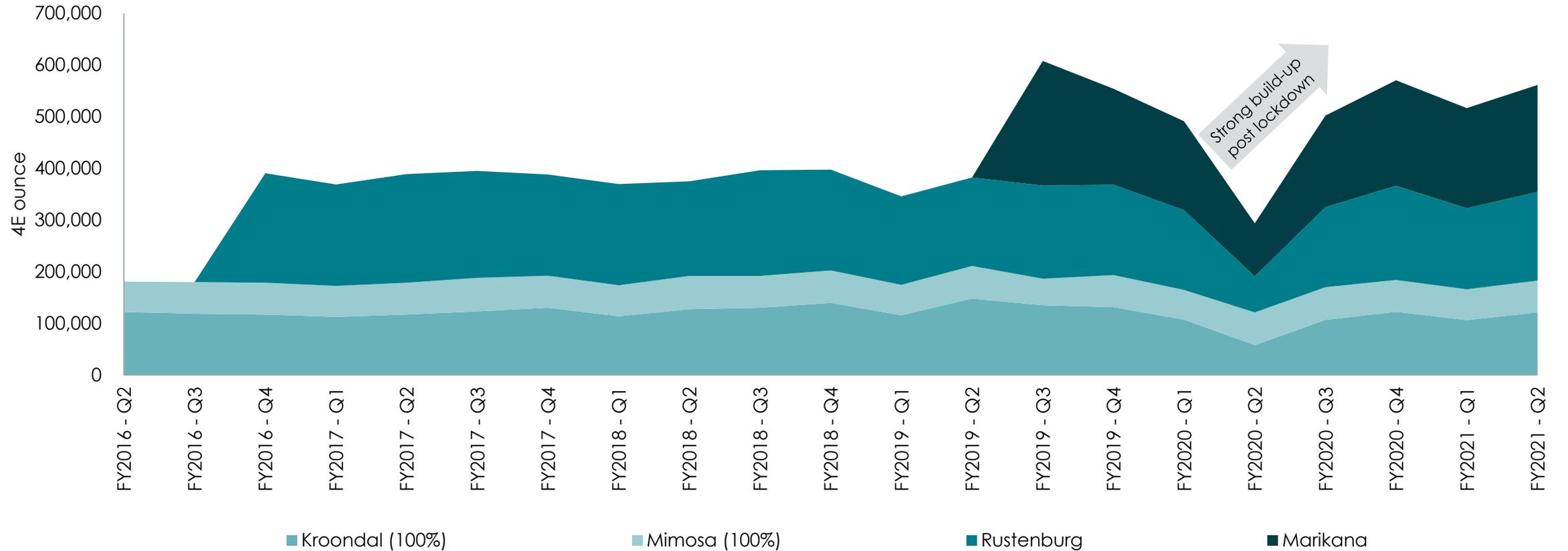


The progressive distributable cash balance will be taken into account for the distribution calculation of the SRPM Shareholders

# Marikana BEE - current Shareholding structure



# Consistent delivery from acquisition date and strong recovery post 2020 lockdown



Consistent performance from all the operations, optimising the reserves

## Consistent delivery and beating guidance

Title	2018	2018 Act	2019	2019 Act	2020	2020 Act	2021
Volume ounces - Moz	1.1 – 1.15	1.18 	1.0 – 1.1	1.10 	1.35 – 1.45	1.58 	1,75 – 1,85
Cost AISC R/4Eoz	10,750 – 11-250	10,417  	12,500 – 13,200	11,943  	19,700 – 21,000	18,280  	18,500 – 19,500
Capital R'm	1,200	1,000	1,400	1,059	2,300	2,200	3,800 excl Project Capital
Comments			Excluding Marikana	Excluding Marikana	Amended Guidance post Lockdown		

- Continuously delivering solid financial performance, despite interruptions like COVID-19, wage negotiations and community interruptions

## Technology enabled water security strategy supporting climate change resilience and sustainable post mining economies

Water Strategic Objectives	Progress	Summary of key initiatives	Embedding ESG
Drive business sustainability through ensuring water availability to support safe and productive operations – water security	<b>Completed</b>	Sustainable supply from emergency boreholes <ul style="list-style-type: none"> <li>• 5 MI/day (production ~4 500 tons per day) from U1 and other boreholes in emergency conditions.</li> </ul>	<b>Develop a climate resilient business</b>
	<b>Completed</b>	Accessing more than 1 000 MI of capacity through the utilisation of old opencast pits and cleaning of process water dams. <ul style="list-style-type: none"> <li>• (1 000 MI to sustain all SA PGM operations for more than two weeks without any other supply)</li> </ul>	
	<b>Near Completion</b>	Develop predictive Water Balance Models to evaluate different scenarios and interventions to support decision making regarding benchmark and target setting, water security strategy and closure strategy and to inform WCWDM plans	<b>Data driven &amp; considered decision making</b>
	<b>In progress</b>	Integrating SA PGM water footprint – linking water rich and water stressed areas within the footprint <ul style="list-style-type: none"> <li>• The pandora pipeline scheme enables transfer of up to 6 MI/day from the Eastern "wet" operations to the Karee operations.</li> <li>• Pipeline installation to the open pits supporting the on-supply of water to Kroondal and Rustenburg (WLTR processing facility)</li> </ul>	<b>Develop a climate resilient business</b>
	<b>In progress</b>	Licensed access to 10 MI/day of water from Crocodile catchment (~16% of the total demand of the SA PGM operations)	
Minimise the impact of our operations on regional water resources	<b>Continuous Improvement</b>	Technology enabled monitoring of dam levels relative to previous periods enabling predictive scenario planning and proactive water management	<b>Data driven &amp; considered decision making</b>
	<b>Continuous Improvement</b>	<ul style="list-style-type: none"> <li>• Optimal tailings density management and maintenance of tailings water recovery and drainage systems to ensure that minimal water is lost on TSFs. (TSFs account for the largest losses of water in the process ~50% water lost over tailings facilities to seepage, evaporation and interstitial lockup.</li> <li>• Field studies and testing to determine the feasibility boreholes to recover impacted seepage from tailings facilities and old mining sites</li> </ul>	<b>Develop a climate resilient business</b>
	<b>Continuous Improvement</b>	Rolling out smart online metering systems (Zednet and Scada) for early detection and response to leakage and wastage.	<b>Data driven &amp; considered decision making</b>
Drive sustainable mine closure strategies	<b>Continuous Improvement</b>	The SA PGM operations has the ability to re-use more than 6 MI/day of treated sewage effluent from its operations.	<b>Develop a climate resilient business</b>
	<b>Planning:</b>	Considering post mining economy in closure strategies with the aim to promote long term sustainable water resources for post mine agriculture, domestic and industrial water use. (I.e. Aquifers created in rehabilitated mining areas and utilized for agriculture availability.)	<b>Entrenching long term economic sustainability: integrated post mining economy</b>

Water sourcing, harvesting and conservation driving water security, key to a sustainable post mining economy