



Processing site visit

17-18 September 2025



Agenda for the next two days

Wednesday 17 September

Start time	Agenda topic	Speaker
18:30	Welcome, overlay of programme and induction video	Leroy Mnguni
18:35	Processing overview	Agit Singh
19:00	Processing assets	Quintin van Rooyen, Kiran Chaitram, Hayley Prinsloo
19:45	Q&A	
20:15	Dinner and drinks	
21:00	End of event	

Thursday 18 September

05:30	Checkout	
06:00	Depart Hunters Rest Hotel to process sites	(with a packed breakfast)
06:30 – 15:00	Site visit at Converter Plant, BMR and PMR	
06:30 – 08:00	Converter plant visit	
08:30 – 10:30	BMR visit	
11:00 – 15:00	PMR visit	
15:00	Closing and thank you	
15:30 – 17:00	Shuttles back to Lanseria International Airport	
15:30 – 18:00	Shuttles back to OR Tambo International Airport	



01 Processing overview

Agit Singh

Executive Head: Processing Operations

Driving industry-leading returns through the delivery of our strategic priorities



Advancing safety & health

Safety underpins our value delivery, defines who we are and shapes our behaviour



Zero harm

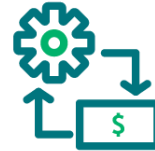


Simplified & strengthened organisation

We continue to streamline our organisation and strengthen key capabilities



Delivering competitive advantage



Achieving operational excellence

We are driving our operational excellence programme to sustain our H1 cost position



Expanding cashflow margins



Investing in our portfolio for maximum value

Clarity on each asset's role, backed by disciplined capital allocation



Sustaining profitability & revenue growth



Driving demand to ensure long-term success

We play our part to support and develop emerging demand opportunities



Growing PGM demand



Integrating sustainability in all that we do

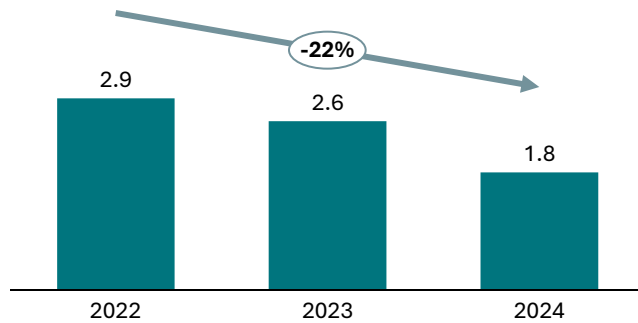
Playing a leadership role to protect and create value, focused on climate & energy, local communities and ethical value chains

Integrated impact through safe operations, efficient resource use & community development



Safe and Stable Processing Operations

Total recordable injury frequency rate

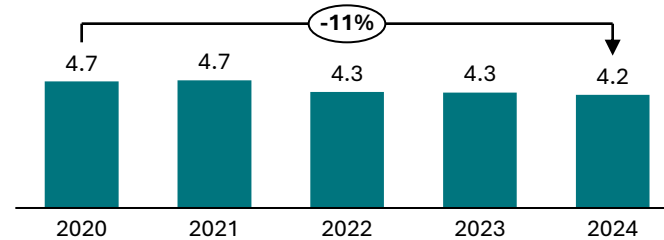


- Embedding lessons learnt to prevent repeats
- Continuing to strengthen our safety maturity and culture
- Integrating deep behavioural understanding into safety programmes
- Improving contractor performance management
- Emphasis on high-risk work and associated controls

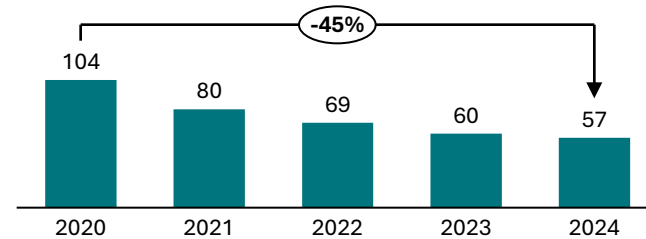


Energy Efficiency

Smelters: Energy Intensity (GJ/ton smelted)



BMR: Energy Intensity (GJ/ton Ni+Cu+Co)



Community Development

Education and Leadership Development

- Educational initiatives support 12 schools

Connectivity and Digital Inclusion

- Providing open-access WiFi to 32 villages enhances connectivity in rural areas

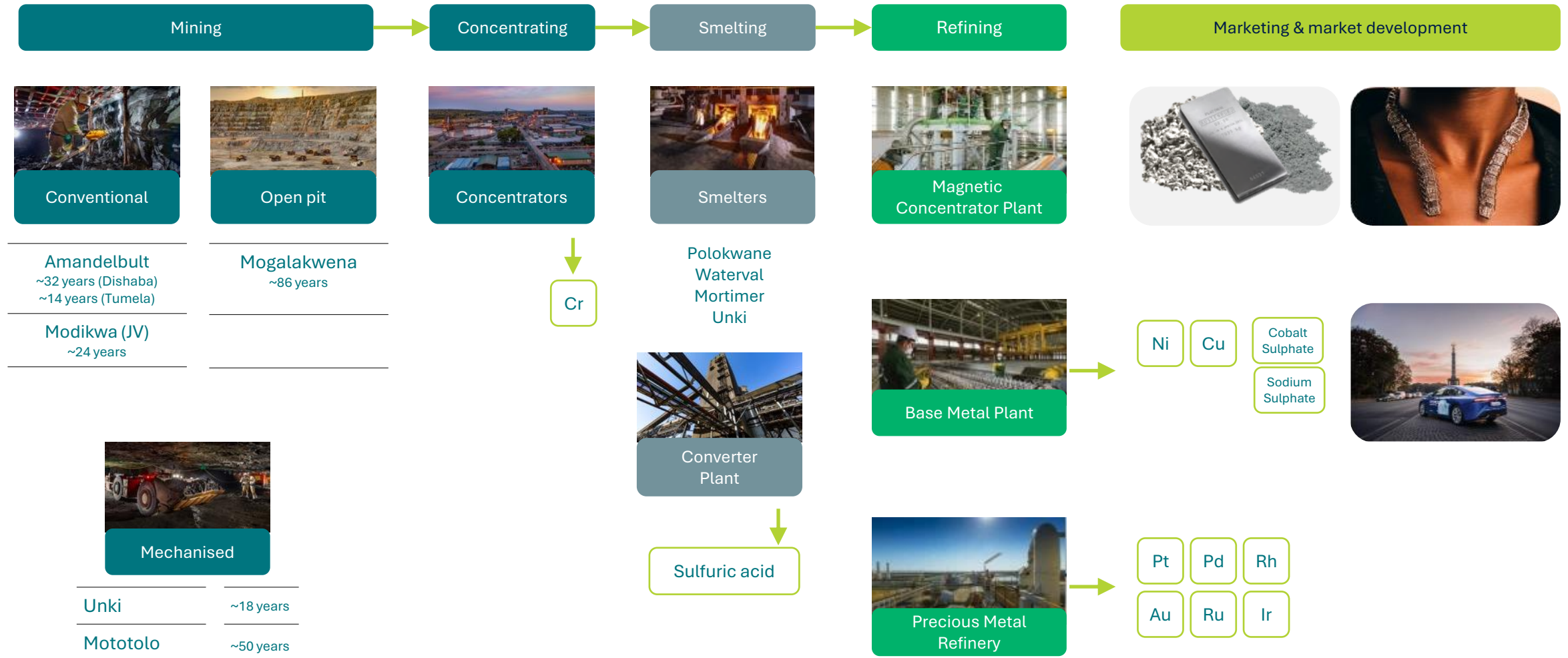
Health and Food Security Initiatives

- Health programs support clinics
- Farming projects improve food security for 1,000 households.

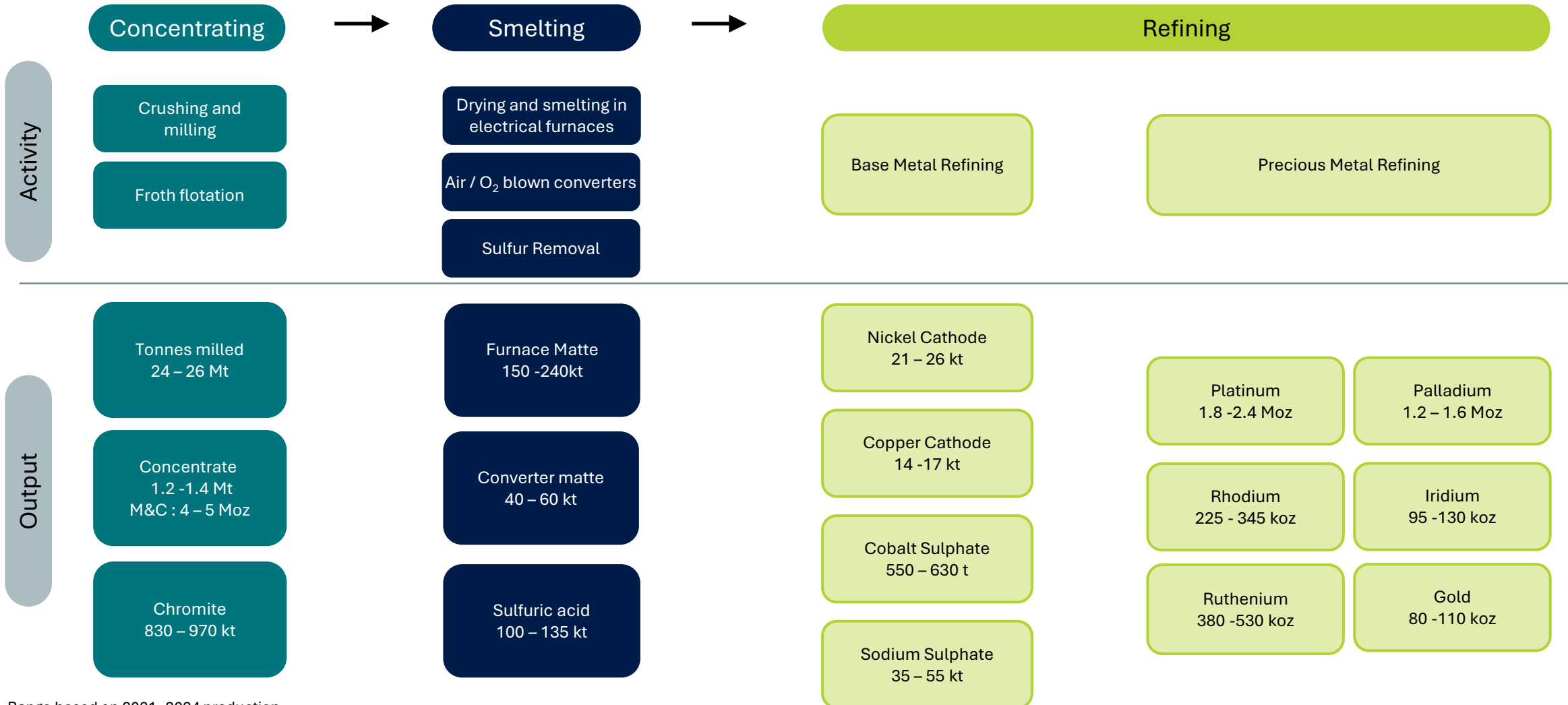
Local Economic Empowerment

- Investing R955 million in local suppliers
- Integrates community skills and boosts the local economy effectively

A world-class integrated portfolio of assets – from mine to market



We produce various high quality products at scale across the value chain



Range based on 2021 -2024 production

Integrated processing is an advantage and provides flexibility



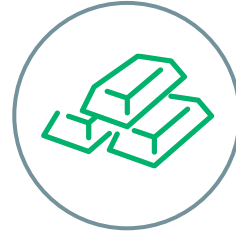
Concentrating

- Flexible processing of all southern African reefs¹
- Effective handling of base metal rich ores
- Efficient chrome recovery



Smelting

- Broad footprint serving multiple regions
- Proprietary converter process capable of treating solid matte feeds
- Benchmark metal recoveries



Refining

- Industry leading high-purity PGMs
- Capacity to refine base metal rich Platreef ore
- Parallel processing of base and precious metals



Flexibility

- Optimising the balance between own production and third-party material
- Maximise value creation
- Convert Mortimer to slag cleaning duty or ramp up/down primary smelting capacity

Upgrading of material through the processing value chain

% Pt in product = 0.004%

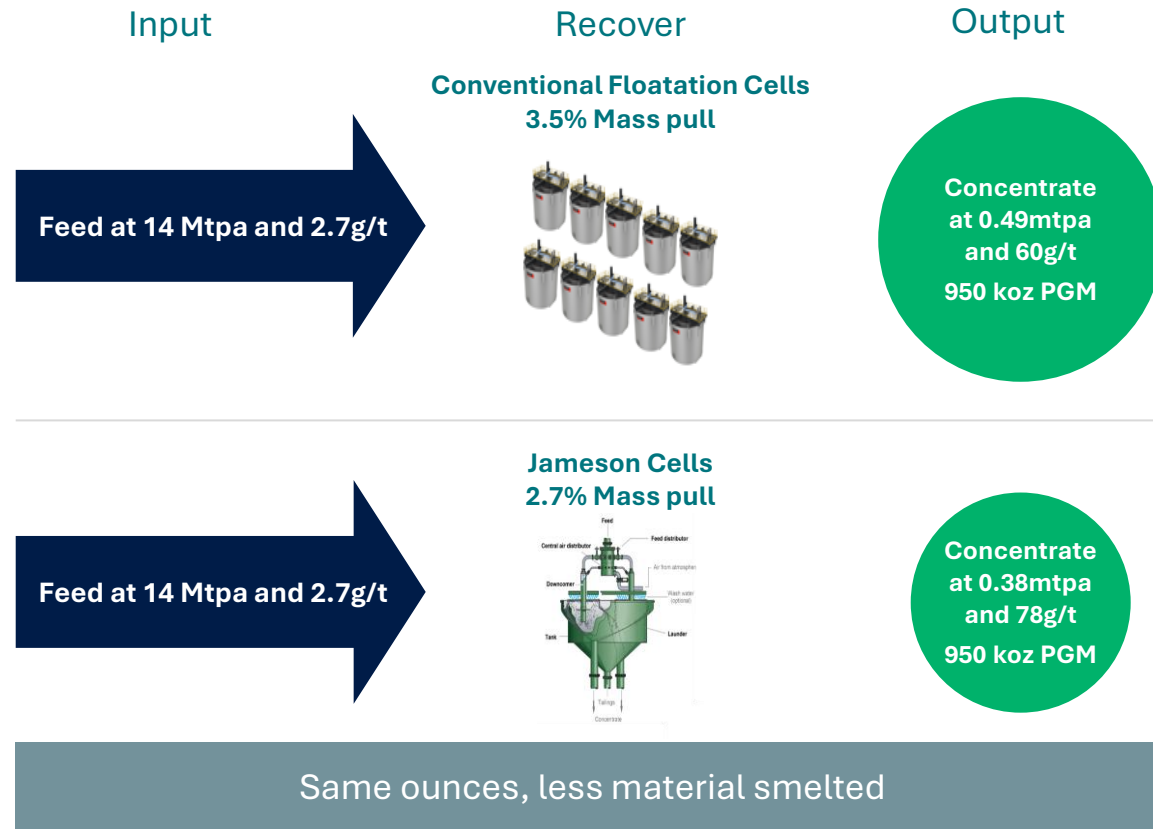
% Pt in product = 0.24%

% Pt in product up to 99.99%

1. Platreef, Merensky, UG2, and Great Dyke ore

Mass pull reduction has tangible benefits

Mass pull reduction—Mogalakwena example



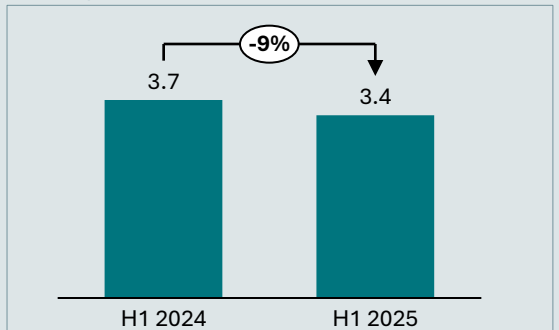
Overall Mogalakwena mass pull benefits

- ~30% Improved concentrate grade
- ~20% Reduced material handling and logistics
- 10–15% Reduced electricity & water consumption
- ~10% Reduced Scope 2 CO₂ emissions

Mogalakwena mass pull Improved 9% in H1 2025

Benefits of Jameson cells starting to show

Mass pull %



Benefits mass pull reduction realised



9% reduction in trucks on the road



5% reduction in electricity consumption

Source: Company reports; Valterra Platinum

We have the leading processing footprint in Southern Africa

Smelting:

- Largest fleet of smelting operations
- Leading furnace operating and maintenance practices
- Efficiency improvements from mass pull optimisation
- Reconfiguring smelting for efficiencies and recovery improvements
- Mortimer Smelter provides us flexibility, and an ability to ramp up or down capacity

Refining:

- Highly capable refining operations delivering benchmark recoveries
- High-quality final metal products achieving premium prices

Source: Company reports; JOM World Nonferrous Smelter Survey

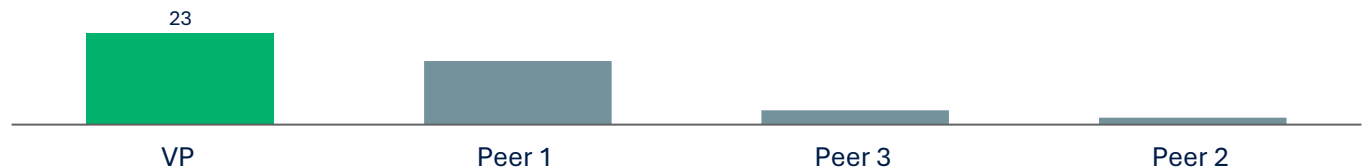
We have a leading smelter footprint in southern Africa...

Southern African smelter capacity by power input
MW



... and significant base metals refining capacity

Nickel produced
kt, 4-year average, 2021-2024



World's largest refiner of platinum group metals (PGMs)

6E PGM refined
Moz, 4-year average, 2021-2024

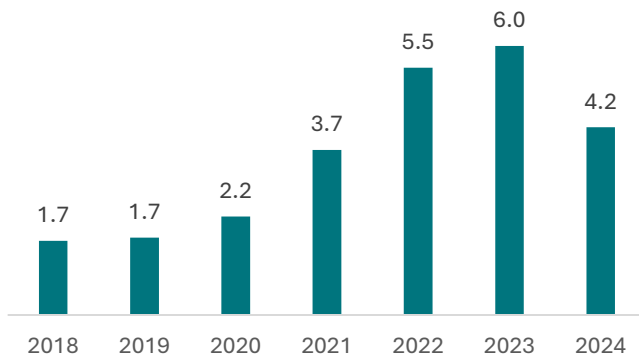


Investing capital in processing to support asset integrity

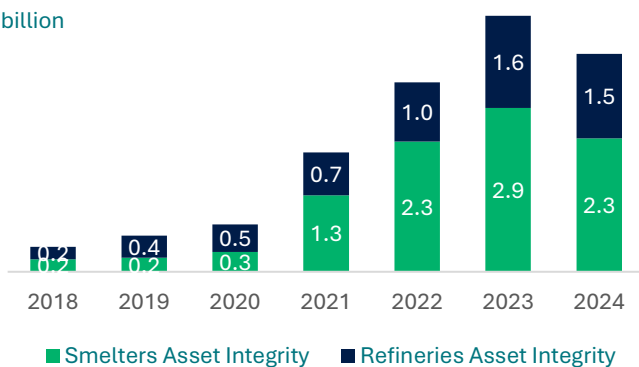
Capital invested

Proven and capitalised processing assets

R billion



R billion



Improvements

Prioritise capital allocation



- Furnace maintenance
- Environmental controls
- Improved asset integrity

Improved stability



- Consistent feed and higher utilisation
- Reduced work-in-progress and finished product inventory levels

Reduced costs

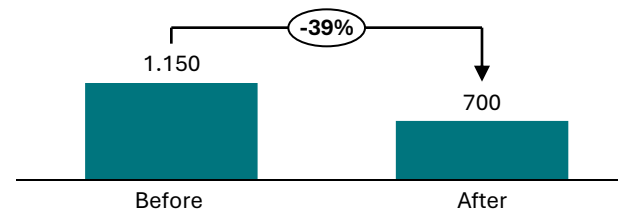


- Increased utilisation across processing operations

Rethinking our furnace rebuild strategy

E.g. Total Furnace Rebuild

Capital Cost, Rm

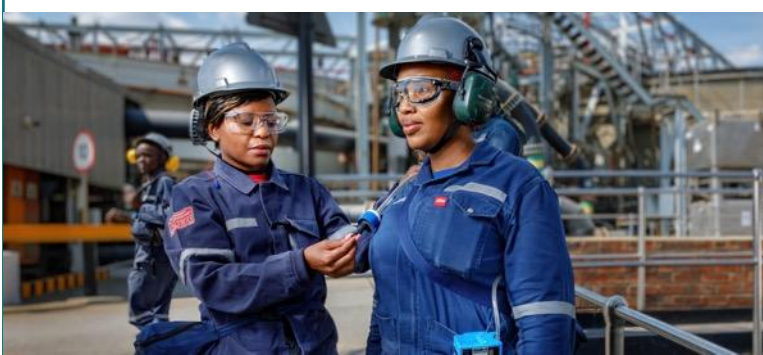


Focus areas

- Improving recovery and efficiency
- Automation and digitisation
- Continued asset integrity of infrastructure
- Robust maintenance strategies
- Operating at optimal inventory levels

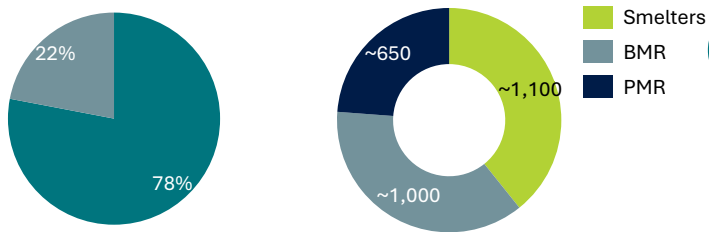
Our people: Driving operational excellence

Organisational profile



Core skills
Support

Employees



Average age: **~40 years**

21% of the workforce are females in critical and senior roles

Average Labour Turnover over the past 5 years is **3%**

Compelling employee value proposition

Culture

Career Development

Employee Wellness

Incentivise High Performance



Strengthening technical capabilities

Skills development and social responsibility enable strategy delivery and long-term success




Process academy



Engineering Skills Training Centre (ESTC)



Early talent programmes

The background image shows a complex industrial facility, likely a smelter or refinery. In the center, a large, circular, rotating vessel is tilted, pouring a bright orange-yellow molten liquid. A worker in a full-body silver heat-reflective protective suit stands to the right of the vessel, observing the process. The facility is filled with various pipes, structural steel, and industrial equipment. A bright light source on the right creates a strong glow and lens flare. A yellow line graphic starts from the left edge, curves under the title, and extends horizontally across the top of the image.

02

Smelting & Converter Plant overview

Quintin van Rooyen
General Manager

Smelters | At a glance

Safety & certification

Commitment to safety

55% reduction in the injury frequency rate over the last 3 years.

International certifications

Facilities are certified under ISO 14001 and ISO 45001 for environmental and occupational health standards.



Sustainable waste management

Achieved zero waste to landfill, emphasising strong sustainable waste-management practices.

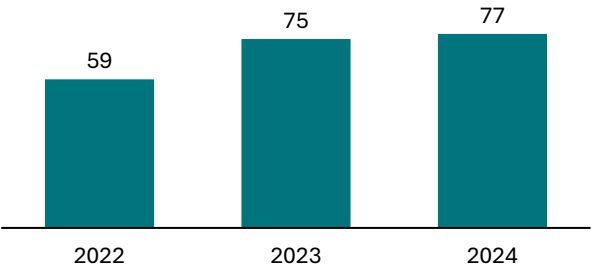
Environmental compliance

Compliance with minimum emissions standards (MES) ensures reduced environmental impact and regulatory adherence.

Integrated value chain

Operational efficiency positions the smelters as key components in Valterra Platinum’s integrated value chain.

% Utilisation



Comprehensive preventative furnace maintenance programme, and broader asset integrity programme.

Continuous investments in our rebuild strategy has delivered no unplanned failures since 2020.

Asset & infrastructure

Furnace infrastructure at Waterval

Waterval operates two 34MW primary furnaces, a 23MW slag-cleaning furnace, dual redundancy Top Submerged Lance (TSL) converter furnaces, and two acid plants.

Furnaces at Polokwane, Waterval, Mortimer, and Unki

Enabling efficient concentrate processing. Polokwane Smelter further produces acid from SO₂ abatement.

Operational resilience

Robust infrastructure and utility services enable high-capacity operation while meeting safety and environmental standards. Mortimer Smelter is being re-purposed for a dual purpose of treating concentrate and converter slag tailings, which will enable optimisation of capital on the balance sheet.

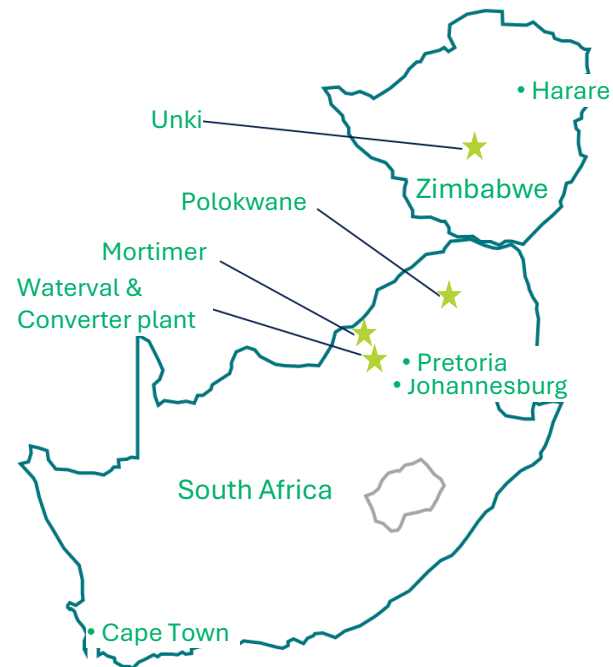


Operational excellence

Smelters | World-class assets

Large and geographically diversified footprint

Flexible processing of Platreef, Merensky, UG2 and Great Dyke ore concentrates

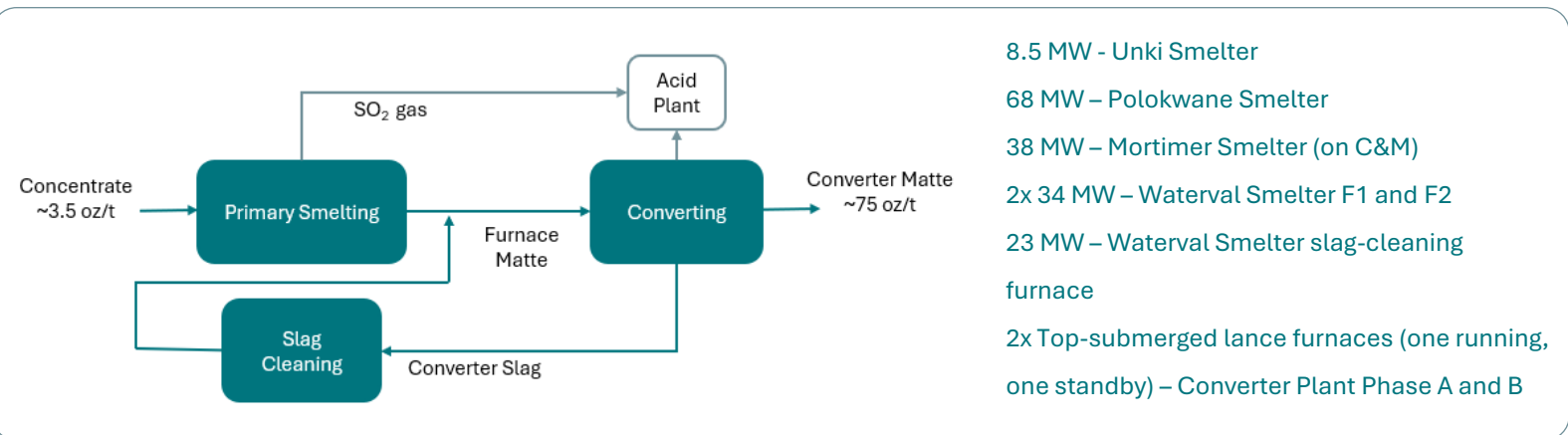


Proprietary continuous converter process
Flexibility to modulate smelter capacities

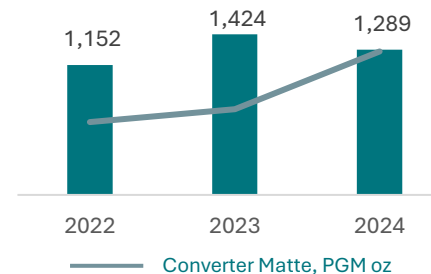
Significant installed asset base

Operational excellence

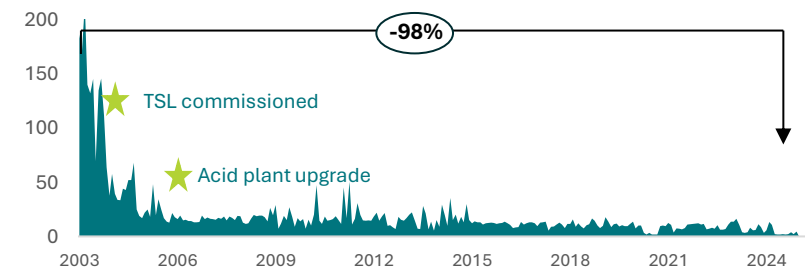
Robust operating and maintenance practices
Process safety and design



Benefits of improved utilisation with Mortimer on care and maintenance

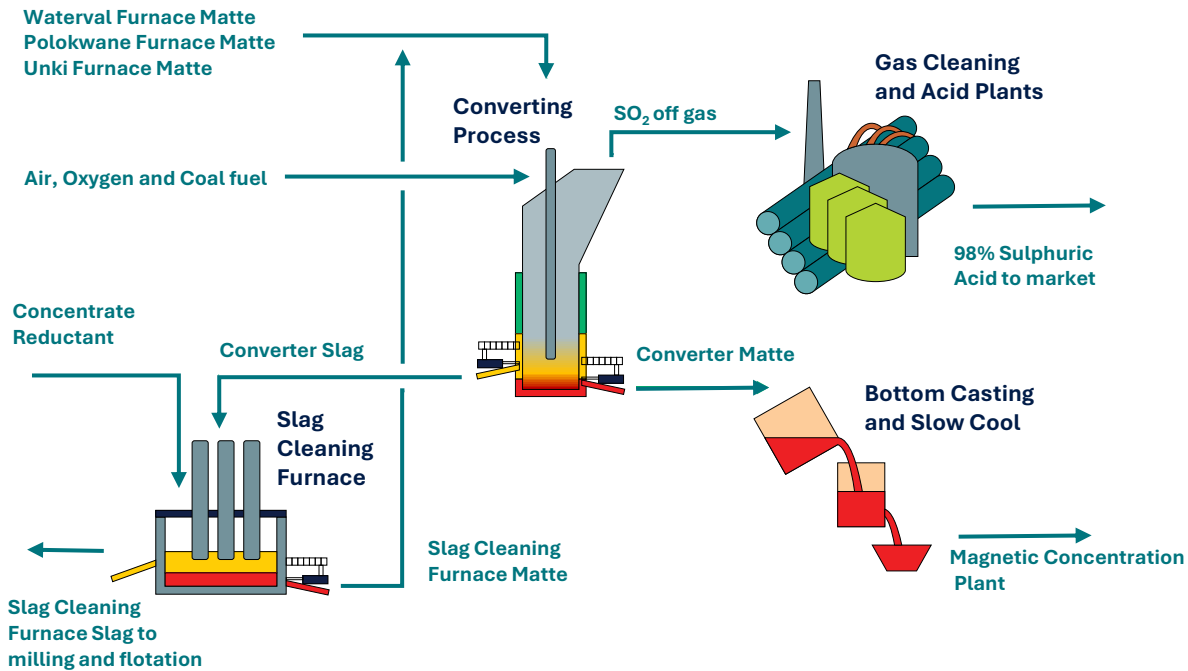


SO₂ emissions reduction – tonnes per day



Converter Plant | One of its kind | What we do

Process Flow – Only Converter Plant in PGM industry



Nickel converting capacity increased by >35%
SO₂ site emissions reduced by >98%

Uniquely positioned to lead

Superior recovery: Best in industry PGM and base metal recoveries.

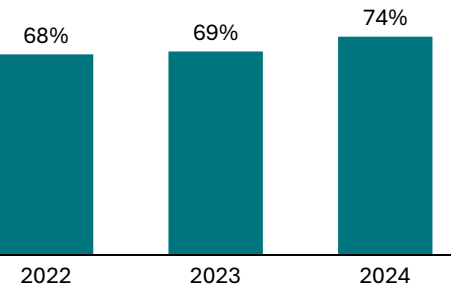
Efficient slag cleaning: Maximises PGM and base metals recovery from slag; matte recycled for further refining and improved recoveries.

Stream decoupling: Slow-cool process allows for early base metals and PGMs separation, reducing contamination and speeding up processing.

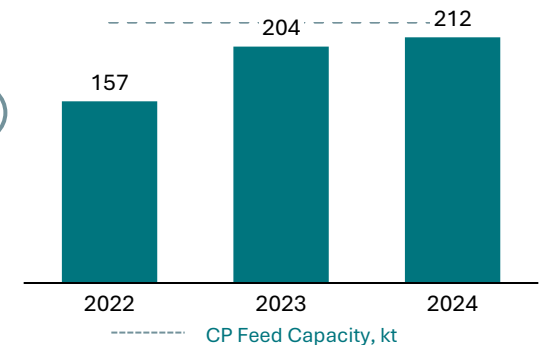
Advanced converting: Outperforms traditional Pierce Smith converters in scale efficiency and environmental impact (SO₂ abatement).

Near capacity production at > 70% availability

Average Annual Availability, %



Furnace Matte Treated, kt





03

Base Metal Refinery and Magnetic Concentrator Plant overview

Kiran Chaitram
General Manager

BMR | At a glance

Safety & certification

Commitment to safety

63% reduction in the injury frequency rate over the last 3 years.

ISO certifications

Facilities are certified under ISO 14001, 9001 and 45001 for environmental and quality management standards.



Hazard exposure reduction

Focus on eliminating high-risk exposure areas to ensure worker safety and reduce hazards.

Sustainability practices

Achieved zero waste to landfill, emphasising strong sustainable waste-management practices.

Integrated value chain

High-quality metal production

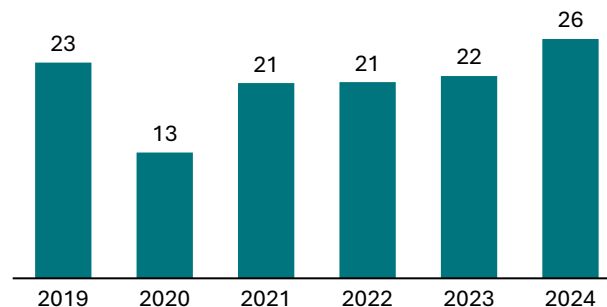
Base metals recognised globally through Nickel Cathode listing on London Metal Exchange.



Efficient metal separation

Magnetic concentration plant separates base metals from PGM concentrates, ensuring purity and consistent product quality.

Record nickel production in 2024, ktpa



Asset & infrastructure

Established infrastructure

Commissioned in 1981 with ongoing upgrades ensuring reliable and efficient operations.

Strategic asset value

A high-value asset which is well capitalized, with a shorter pipeline and carries strategic importance to the business.

Operational excellence

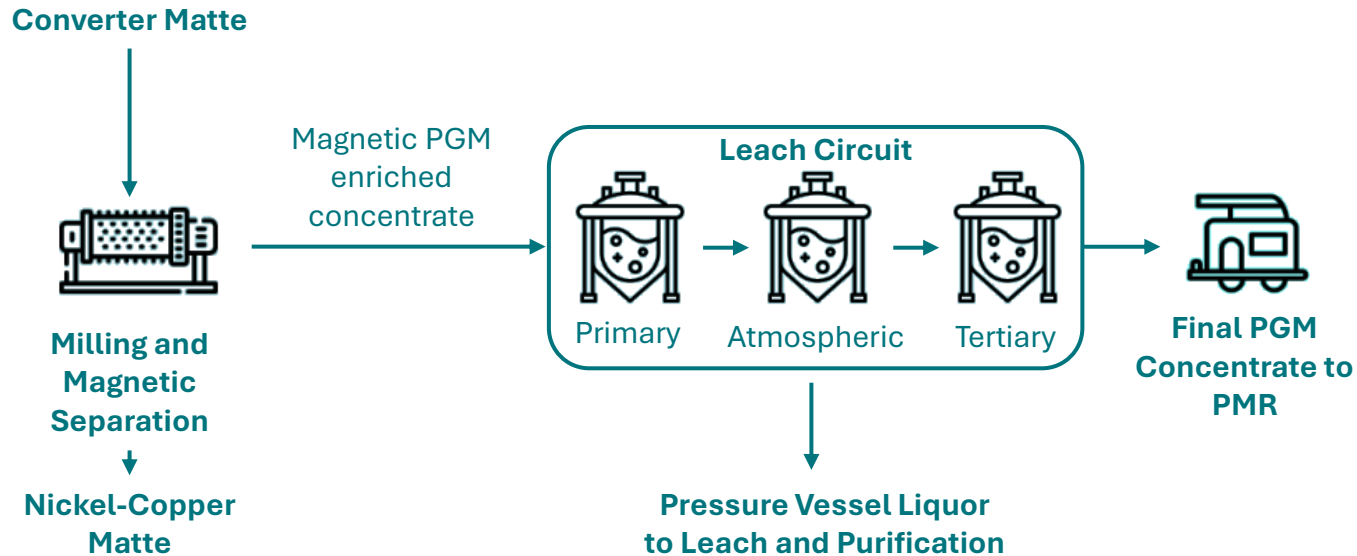
Robust infrastructure supports high production standards, environmental compliance, and adaptability to industry demands.



Operational excellence

Magnetic Concentrator Plant process

Process flow – Unlock the potential of slow-cooled matte

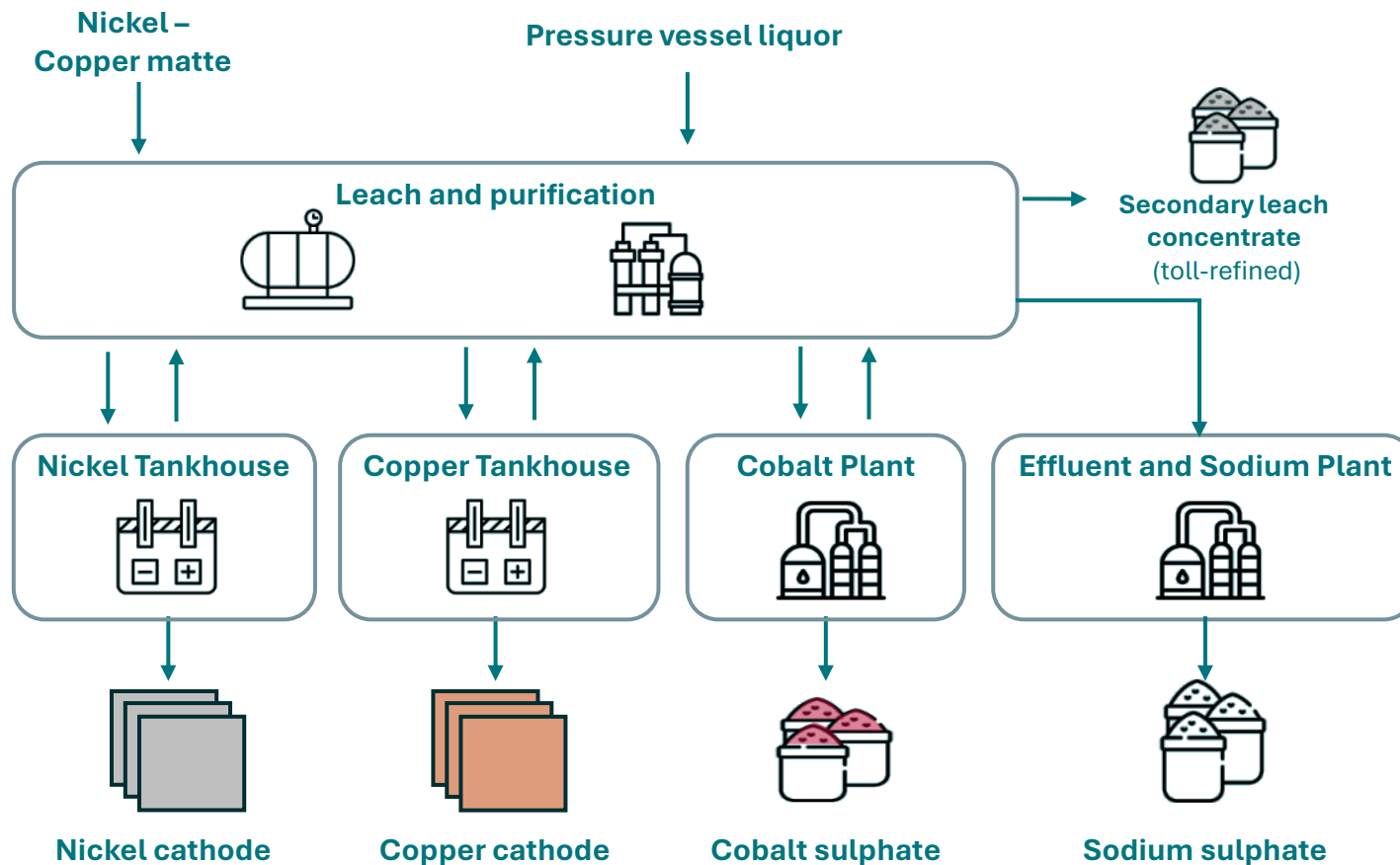


Integrated processing pipeline

- **Fastest route for PGMs to market:**
 - Slow-cooled matte processing for early separation of PGMs from BMs
- **Stable process:**
 - Well established process with excellent separation of base metals from PGMs
- **Continuous improvement:**
 - Eliminated formalin
 - Advance process control of batch processing steps
- **Highest upgrading:**
 - Upgrade of PGMs from 0.24% in converter matte to 60% in final concentrate - 250-fold upgrade

Base metal plant process

Process flow – Maximising value of base metal products



Final product to market

- **Nickel cathode:** Only producer of nickel cathode in the PGM industry, registered with London Metal Exchange.
- **Flexibility in capacity:** Ability to treat high-base metal (~2%) PGM ores (Mogalakwena - Platreef; Unki - Great Dyke) vs low-base metal UG2 ore (~0.1%). Ability to treat additional sources of base metals (crude nickel sulphate).
- **Realising potential:** Record nickel production in 2024 – 26kt nickel cathode.
- **Unique in PGM industry:** Peers produce nickel sulphate and nickel briquettes.
- **Complex Integrated Circuit:** 19 major processing steps ensuring quality, recovery and throughput.
- **Future focused:** Increasing automation with data-driven culture to enhance decision making (for e.g. fully automated Nickel tankhouse).

Our products

The Base Metal Refinery is unique in processing slow cool matte, separating base metals from precious metals, and processing base metals into final product supplying it into the global market. Our final products include nickel cathode, copper cathode, cobalt sulphate and sodium sulphate.

Nickel cathode



Annual production
21 - 26 ktpa

Copper cathode



Annual production
14-17 ktpa

Cobalt sulphate




Annual production
550 -630 tpa

Sodium sulphate



Annual production
35 -55 ktpa

Additionally, BMR produces intermediate products of final concentrate containing PGMs for refining at our PMR.

A worker in a white protective suit and helmet is pouring molten metal into a mold in a refinery. The worker is wearing a white protective suit, a clear face shield, and blue gloves. They are using a long metal rod to guide the pouring of the molten metal into a mold. The background shows industrial equipment, including pipes and a 'GAS ALARM' sign.

04

Precious Metal Refinery overview

Hayley Prinsloo
General Manager

PMR | 30% of global primary PGM production has been through our refinery

Safety & certification

Commitment to safety
23% reduction in the injury frequency rate over the last 5 years.

International certifications
The refinery is certified under ISO 14001, ISO 9001, and ISO 45001, ensuring global safety and quality standards.



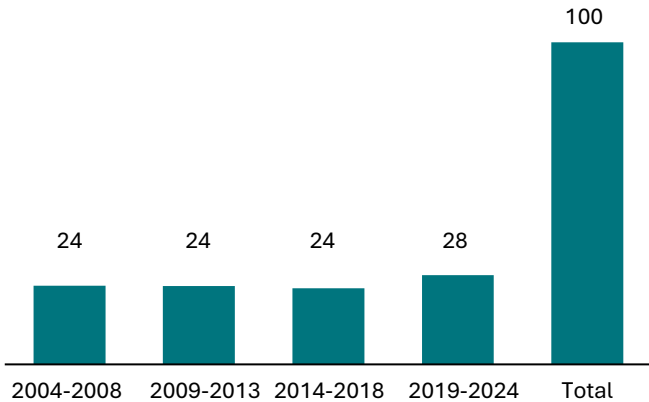
Process safety and sustainability
Process-safety principles enhance operational integrity, supporting the goal of zero-discharge and responsible resource use.



Integrated value chain

Vertically integrated value chain is highly capable and specialised, with investments in precious metals refining capacities, which can support third-party materials processing.

Refined ~ 100 Moz 6E since 2004 which is ~30% of the world's PGM primary production



Refined metals are tailored to meet specific customer needs, improving satisfaction and market responsiveness.

Asset & infrastructure

Established infrastructure
Assets commissioned in 1989 have been maintained and upgraded to support modern refining processes efficiently.

Strategic asset value
The asset is highly valued, reflecting its critical role in the company's portfolio and operational scale.

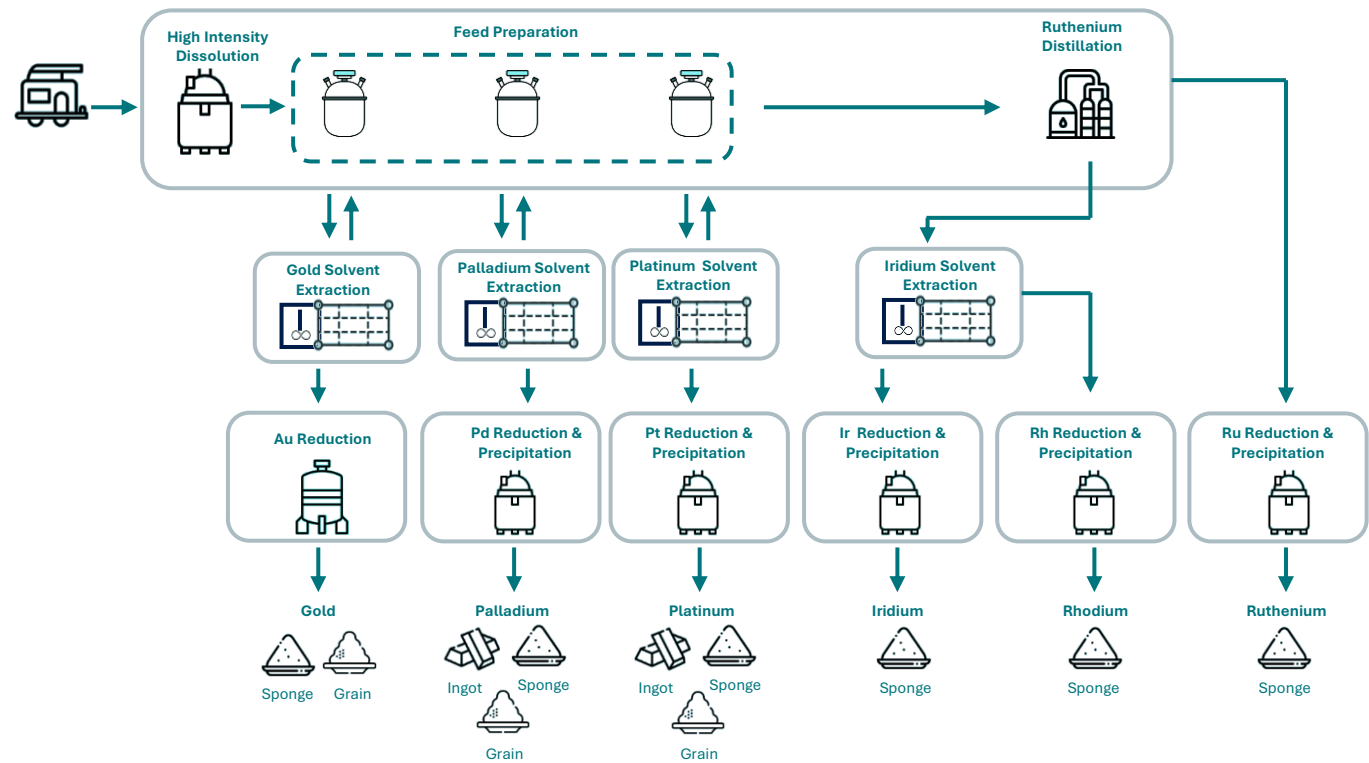
Operational excellence
Combined workforce and infrastructure enable consistent quality and adaptability in the PGM sector.



Operational excellence

PMR | What we do

Simplified process flow – more than 200 processing steps



57 processing steps for platinum								
Dissolution	Au Feed Prep	Au SX	Pd Feed Prep	Pd SX	Pt SX	Strip and Evaporation	Sidestream	Calcination
5	5	3	3	4	3	3	25	6

Our uniqueness sets us apart

High-intensity dissolution: Unique high-pressure chlorine dissolution; boosts efficiency and purity.







Solvent extraction: Selective 6E metal recovery using proprietary extractants; ensures premium purity.

Rhodium precipitation method: High yield and selectivity in acidic conditions.

Dual redundancy: Duplicate systems enable resilience, scalability and uninterrupted production.

PMR | Our products

Precious Metal Refinery is the world's largest refiner of platinum group metals (PGMs), supplying a network of global customers with a range of products.

 <div> PLATINUM 78 Pt </div>	 <div> PALLADIUM 46 Pd </div>	 <div> RHODIUM 45 Rh </div>	 <div> IRIDIUM 77 Ir </div>	 <div> RUTHENIUM 44 Ru </div>	 <div> Gold 79 Au </div>
Annual production 1.8 – 2.4Moz	Annual production 1.2 – 1.6 Moz	Annual production 225 – 345 koz	Annual production 95 – 130 koz	Annual production 380 – 530 koz	Annual production 80 – 110 koz
Good delivery bars, grain and sponge typically refined to 99.99%	Sponge typically refined to 99.95%			Sponge typically refined to 99.6%	



05

Closing

Agit Singh

Executive Head: Processing Operations

Industry-leading processing capacity and capability

Assets

Industry-leading smelting capacity

183 MW smelting capacity

Industry-leading nickel production

26 ktpa Ni production

far surpassing our peers

Capabilities

Operational excellence

Stable and capable

Efficient beneficiation underpinned by highly skilled people

Resilient performance

>100Moz of PGMs

refined over the past ~20 years

Sustainability

Benchmark emission reduction

98% reduction in emissions
over the past 20 years

Our metals better our world

Customer-centred approach

tailored to meet customer needs and requirements

Committed to zero harm and integrating sustainability in all that we do



Thank You