Chief operating officer's review

The focus of the year was on stability, growth and delivery amid a sometimes turbulent operating environment which saw constrained supply chains and labour market tightness at Impala Canada and extended safety stoppages, intermittent power supply and periods of community unrest at South African operations.

11 Shaft at Impala Rustenburg

Creating a better future through **superior performance**

We were pleased to initiate and advance a series of exciting organic projects designed to ensure Implats has a long-term and sustainable future.

Gerhard Potgieter
Chief operating officer

Despite these challenges, the Implats operations collectively delivered a creditable performance and we were pleased to initiate and advance a series of exciting organic projects, which signal a step-change in our ability to invest in long-horizon growth. These projects are designed to ensure Implats has a long-term and sustainable future.

Key projects

Energy security and decarbonisation projects
Over the next five years, R4.3 billion has been allocated to ensuring each operation has renewable energy in the mix, to meet the Group's decarbonisation targets and strengthen energy security. Impala Canada is already 95% powered by renewable hydro power (5% natural gas), and Zimplats' energy mix is 50:50 thermal to renewable hydro power.

Zimplats obtained a 185MW power generation licence, with the first phase of the solar project (35MW, US$37 million) in progress with completion expected in FY2023. This is the first large-scale project towards meeting the Group's short-term (2030) decarbonisation target of a 30% reduction against the 2019 baseline, and it supports Implats' stated ambition of achieving carbon neutrality by 2050.

In addition, several pre-feasibility studies are underway – 33MW of solar plant generation is at feasibility stage at Marula, and pre-feasibility studies were completed at Impala Rustenburg and Impala Refineries – to establish additional renewable energy capacity of around 200MW by 2025, with additional capacity possible. These studies are conducted in parallel to Implats' programme development to purchase electricity from independent power producers.

Zimplats mine replacement and beneficiation projects
In November 2021, the board approved the expansion of existing smelter capacity at Zimplats and the installation of SO_2 abatement to mitigate its air quality impacts, at a total capital vote of US$521 million. Together with the phased solar plant projects, this will result in an industry-leading environmental footprint for the Zimbabwean smelting facilities. The expansion will accommodate an additional 600 000 6E PGM ounces per annum, which post-smelting will be transported to the South African processing facilities for further refining. Advancing in-country beneficiation in future remains a Group aspiration. First matte production from the new 38MW furnace is scheduled for Q3 FY2024, with commissioning of the SO_2 abatement plant expected in Q2 FY2025.

The US$468 million mine replacement projects, focused on upgrading Bimha Mine and developing the new Mupani Mine, progressed well. Full production of 3.1 million tonnes and 3.6 million tonnes per annum remains on schedule for Q1 FY2024 and Q1 FY2028, respectively. Bimha and Mupani will replace the Ngwarati, Rukodzi and Mupfuti mines, on depletion.

6E in concentrate
3.17Moz
(-4%)

Impala (-9%)
Canada (-5%)
Zimplats (0%)
Marula (+12%)

2021: 3.29Moz

Unit cost (stock-adjusted)
R17 364/oz
(+17%)

Canada (+25%)
Impala (+22%)
Zimplats (+10%)
Marula (+9%)

2021: R14 840/oz

Capital
R9.1bn
(+41%)

Zimplats (+68%)
Impala (+35%)
Canada (14%)
Marula (-6%)

2021: R6.4bn

Chief operating officer's review (continued)

The Phase 3A growth project involves the construction of an initial 0.9 million tonnes per annum module at the third concentrator plant (US$104 million), together with associated additional mining fleet (US$18 million) and infrastructure. The project is on schedule with plant commissioning on track for Q1 FY2023.

In addition, a project to refurbish the Selous Base Metal Refinery in Zimbabwe to nameplate capacity is at the bankable feasibility stage, which is expected to be completed by Q1 FY2023. Post-approval, in-country base metal extraction will be prioritised, with an anticipated three to five year lead time.

Impala Refineries expansion projects

The nature and quantum of ore feeds generating the Group's PGM production continues to evolve over time, while ounce production is set to increase in line with Implats' growth and beneficiation strategy – as such, R3.9 billion over five years has been allocated to improving the South African processing facilities. Circa R500 million has been approved to de-bottleneck sections of the base metals refinery in Springs and expand treatment capacity by circa 10% in the medium term to provide room for future growth. In addition, the Group is building a new final metals facility, including three new processing sections and the required utilities and ancillary areas. Feasibility studies into further capacity expansions at the South African base and precious metals refineries are well advanced.

Marula Phase II expansion project

The R5.1 billion Marula Phase II project was approved by the board during the year. It serves to replace production as the current Marula life-of-mine I depletes, and includes a concentrator plant expansion allowing for incremental production growth. The project will deliver a 17-year life-of-mine extension to FY2039, with a circa 20% increase in milling capacity to 2.4 million tonnes per annum. Capital expenditure is planned over six years, with first production scheduled for FY2023 and full capacity expected in FY2028.

Two Rivers Merensky mine, UG2 plant expansion and tailings projects

In partnership with African Rainbow Minerals, Implats has committed R5.7 billion over the next five years to construct a new Merensky mine at the Two Rivers operation. The Merensky mining project was approved in FY2021 and will expand production by circa 180 000 6E ounces, with first concentrate production scheduled in FY2024 and full production planned for FY2025. Initial mining activities to support the creation of a run-of-mine (ROM) stockpile started in February 2022 with mining project completion expected in December 2024. Implats has a 46% stake in Two Rivers, but 100% of the 180 000 ounces of 6E production will be treated through the Group's smelting and refining facilities.

The 40 000 tonnes per month UG2 plant expansion was commissioned in early H2 FY2022, with mining rates ramping up to maintain higher annualised feed rates to secure increased ounce production. The tailings storage facility (TSF) expansion which facilitates both the UG2 expansion and Merensky project is nearing completion.

Mimosa North Hill project

The US$90 million North Hill project will extend Mimosa's life-of-mine by circa 10 years to 2044. The feasibility study was completed and presented to the Mimosa board in FY2022 and a Memorandum of Understanding is under discussion with the Zimbabwean government. The project will increase life-of-mine at the current production platform and sustain 227 000 tonnes per month into the existing processing plant. Steady-state production is forecast for 2034. A plant optimisation project underway at Mimosa is aimed at improving process recoveries.

Impala Canada mill decoupling project

A mill decoupling project at Impala Canada was approved in May 2021 and will decouple the SAG mill from the crushing section to optimise the availability of milling capacity, throughput and grind. The combination of equipment change orders, scope changes and inclement weather have compounded supply chain challenges prevalent in Ontario. Project costing has been revised to C$29.3 million and the expected completion date has been deferred by three months to Q2 FY2023.

Royal Bafokeng Platinum (RBPlat) transaction

The Group launched the proposed acquisition of RBPlat in November 2021. The proposed transaction is highly compelling and will unlock significant value from the neighbouring operations and contiguous orebodies of Impala Rustenburg and RBPlat, and secure a Western Limb production base to entrench the region's position as the most significant source of global primary PGM production.

Operational review

Impala

Impala Rustenburg navigated an increasingly disrupted operational environment in FY2022. Challenges from the socio-economic pressures facing its labour force, communities and municipal, provincial and national administrations resulted in additional complexity. Production was negatively impacted by heightened community contestation, poor service delivery, unprotected industrial action among the contractor workforce and unstable power supply from Eskom. A disappointing and tragic retracement in safety performances also resulted in lengthy mine stoppages. These factors resulted in interruptions to the mining cycle and impacted grade due to changes in ore mix mined, resulting in severely impeded operational momentum during the period. Sequential improvements were delivered in the final quarter of the period as a series of targeted strategies and interventions were scoped and implemented to address the underlying challenges.

Impala's strategic focus remains on transitioning to a lower-cost and sustainable operation. The team continues to focus on strengthening and optimising the business through investing in mineable face length, enhancing and de-risking critical infrastructure, and progressing a suite of life-of-mine extensions to support sustained production levels in the medium and longer term. Plans to increase capacity across its industry-leading processing assets are being advanced.

Total development declined by 8% in the period, however, mineable face length increased by 2% to 25.8km with improvements at 12,16 and 20 shafts compensating for the closure of 9 Shaft. Tonnes milled decreased by 8% to 9.80 million tonnes and milled grade declined to 3.86g/t due to operational interruptions at high-grade shafts and higher relative production in the lower-grade trackless section which negatively impacted ore mix.

Refined 6E production of 1.14 million ounces was 15% lower than the prior year, due to lower production volumes coupled with reduced available processing capacity flowing from the extended rebuild of Number 3 furnace. This furnace was scheduled for a partial rebuild during Q3 FY2022. However, accelerated wear lead to the decision to undertake a full rebuild – extending the maintenance period to approximately four months from the previously expected six weeks.

Impala Rustenburg has a progressive shaft closure decommissioning and rehabilitation project in place, with the first phase of the project set to continue throughout 2022 and into 2023. Most of the structural steel has been removed from the 2A and 8 shaft, with demolition of the concrete structures such as buildings, plinths and floors progressing well. The shafts are scheduled to be fully rehabilitated during the year, including the remediation of contaminated surface and/or underground areas.

Impala Refining Services (IRS)

Receipts of 6E matte and concentrate from mine-to-market operations increased by 2% to 1.41 million ounces. Receipts from managed operations at Marula and Zimplats increased by 11% to 878 000 6E ounces, while receipts from Two Rivers and Mimosa declined by 10% to 534 200 ounces. Third-party 6E receipts decreased by 3% to 351 000 ounces as the ramp-up of deliveries from new contracts was slower than expected and certain third-party customers faced operational challenges.

Refined 6E volumes decreased by 1% to 1.72 million ounces, benefiting from a consistent processing performance in H1 FY2022 and the reduction in previously accumulated excess inventory. Sales volumes of 1.75 million 6E ounces decreased by 3% as sales of minor PGMs decreased year-on-year, following the opportunistic destocking of refined inventory into higher pricing in the previous year.

The cash operating costs associated with smelting, refining and marketing IRS production increased 6% to R2.0 billion.

Zimplats

Zimplats continued to deliver consistent results with sustained operating momentum. During the year, capital project activity at the mine increased significantly as the operation focuses on harnessing the inherent mining flexibility and optionality offered by the asset. Project development is concentrated on optimising processing capacity and infrastructure, while simultaneously delivering a step-change in the mine's carbon footprint and environmental performance. This will position Zimplats as a low-carbon producer of PGMs, entrenching its position as a premier low-cost, capital-efficient, shallow and mechanised asset.

Milled volumes increased by 1% to 6.88 million tonnes as increased milling from the ROM stockpile compensated for lower volumes from Ngwarati (following repairs to the decline access necessitated by the high-wall subsidence in FY2021) and Mupfuti (where equipment availability was negatively affected by a maintenance contractor changeover). 6E concentrate production of 589 000 ounces was flat year-on-year, while matte production increased 1% to 583 000 ounces.

Marula

Cash flows from Marula resulted in the repayment the BEE loans and delivered a stellar operating performance during the year. The mine achieved record production as ongoing stakeholder interventions limited community disruptions and the safety performance improved allowing the operation to reap the full benefit of an improved mining performance.

Milled tonnage improved by 11% to 2.00 million tonnes, while a strong mining performance advanced the ratio of stoping-to-development tonnes, resulting in a 4% increase in the 6E milled head grade to 4.53g/t. Concentrate production increased by 12% to 259 000 6E ounces from 231 000 ounces in FY2021, which had benefited from yield gains from surface sources.

Impala Canada

Impala Canada continued to struggle with a challenging and complex operating environment. The impact of a shortage of critical skills and logistical constraints related to supply chain issues, were compounded by the Omicron wave of the pandemic, which saw the reintroduction and tightening of certain lockdown measures. Several interventions to address staffing constraints and increase operational flexibility and consistency are being implemented.

The operation delivered mill throughput of 3.69 million tonnes, a 6% decline from the previous year. The 4% improvement in head grade to 2.68g/t partially offset lower milled production and yielded 249 000 6E ounces in concentrate.

Two Rivers

Two Rivers faced several operational challenges in a period marked by extended safety stoppages, community interruptions and intermittent power instability. The secondary mill expansion project was commissioned in February 2022 and facilitated higher milled throughput in the period, partially offsetting the impact of operational challenges. Milled volumes improved by 5% to 3.46 million tonnes, despite the impact of an extended safety stoppage early in the period. These volume gains were offset by a 6% lower milled grade of 3.22g/t 6E, impacted by both the split reef and the milling of ore stockpiles to offset the production impact of safety stoppages. As a result, 6E concentrate volumes increased by 1% to 303 000 6E ounces.

Mimosa

Mimosa operated well in the period. However, the operation was hampered by processing instability due to a change in reagent suppliers because of global supply chain constraints, intermittent power interruptions and poor water quality, which together led to low process recoveries and negatively impacted reported metal production.

Milled volumes declined by 2% to 2.82 million tonnes, while milled grade was marginally lower at 3.82g/t. As a consequence of the processing challenges, volumes of 6E concentrate decreased 6% to 246 000 ounces. Ongoing work to improve plant performance yielded recovery benefits towards year-end.

Outlook and appreciation

The operational focus for FY2023 is to re-establish positive operational momentum at Impala Canada and Rustenburg, ramp-up installed milling capacity at Zimplats and Two Rivers, and advance our significant suite of life-of-mine extension and growth projects across our mining and processing assets.

Implats' strong position is testament to our increasing strategic and operating agility and the significant capabilities of our resilient and innovative people. I extend my sincere appreciation to our management and operating teams across the Group and look forward to working together to build on the strong foundation we have developed over the last few years.

To give effect to the Group's longer-term strategy, which seeks to evolve with the world in which we operate, we have increased our internal capacity to explore and understand the potential associated with new business opportunities and the transition to alternative future-facing high value commodities.

Gerhard Potgieter
Chief operating officer