

GLOBAL MINING RESEARCH

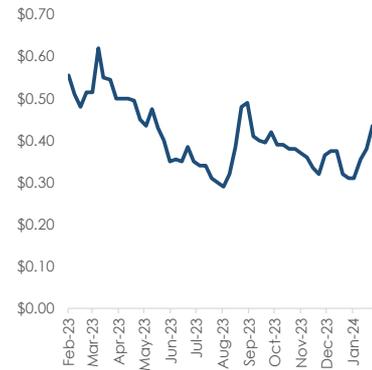
Important Disclosure

This report has been commissioned by the company and as such the share price target and rating are not provided by GMR. All comments and forecasts are independent of the company and rely on GMR's analysis and outlook.

Recommendations

SPD **Not Rated**

Price: Target Price:
 A\$.042 NA



Share prices as at 28 Feb 2024.

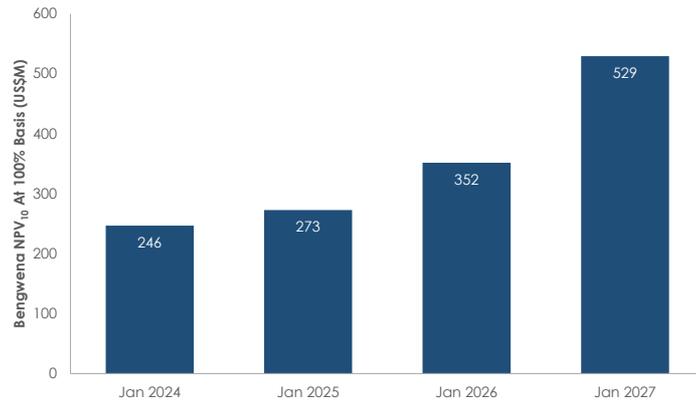
Southern Palladium (ASX:SPD)

Low Cost PGM Developer

Southern Palladium is a small cap project developer, with its main assets a platinum-group metal prospect in the Eastern Limb of the Bushveld Complex in South Africa. The Bengwenyama prospect is adjacent to operating mines, it is high grade and most importantly is shallow, allowing for both low capital costs and quicker than usual development times to first production. SPD is fully B-BBEE (Broad-based Black Economic Empowerment) compliant with local people holding 30% of the project. This is a commissioned report.

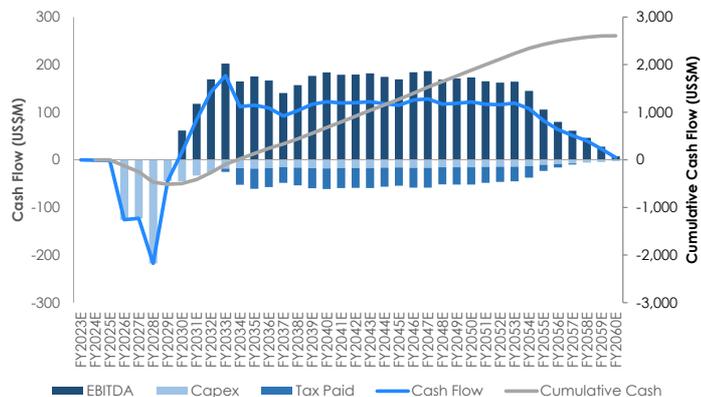
1. At ~350kozpa of PGMs Bengwenyama is a significant asset, but still at an early stage. The key opportunity is for progressive de-risking of the project and unlocking value ahead of financing, where there are multiple options.
2. GMR analysis suggests that Bengwenyama is financially viable with a NPV₁₀ of US\$246M (100% basis) and after-tax IRR of 16% on base case assumptions. Notably, the valuation is very sensitive to underlying inputs. At spot and an 8% discount rate (used by SPD in the scoping study) the NPV is US\$130M.
3. Weakening platinum and palladium prices over the last year create an opportunity for investors buying counter-cyclically. The low market cap leaves SPD as a high risk but potentially higher return prospect.

Fig 1: GMR Forecast Bengwenyama (100% Basis) Valuation Through Time US\$M NPV₁₀



Source: Global Mining Research

Fig 2: GMR Forecast Bengwenyama Cash Flow Forecasts Using GMR Prices



Source: Global Mining Research

Contacts

David Radclyffe (Research)
 +61 2 9810 7330
 davidr@globalminingresearch.com

Tony Robson (Research)
 +44 755 4400 653
 tonyr@globalminingresearch.com

David Haughton (Research)
 +1 647 629 3854
 davidh@globalminingresearch.com

Southern Palladium Overview

SPD owns 70% of the Bengwenyama PGM project.

Southern Palladium Limited (SPD) was incorporated in 2020 and is listed on the ASX and JSE with a capitalisation of ~US\$25M. The key asset is the 70% stake in the high grade Bengwenyama PGM development project in South Africa.

The in-country Board is well diversified and includes members from the local community. As well as owning 30% of the project, the Bengwenyama Community owns 9% of SPD, with the Board and management owning ~16%.

Bengwenyama may be smaller than other Eastern Limb PGM projects but is high-grade.

Bengwenyama Asset High Grade

Relative to nearby PGM mines, Bengwenyama is smaller in contained ounces but fortunately has higher grades. The deposit across the Merensky and UG2 reefs holds 150Mt (100%) at 4.6g/t on a 4E basis (platinum, palladium, rhodium, gold) or 5.4g/t on a 7E basis (with iridium, ruthenium, and osmium). Add in the nickel and copper base metals and Bengwenyama holds 55Moz on a platinum equivalent basis or 25Moz gold equivalent, both substantial figures.

GMR values SPD's share of Bengwenyama at A\$220M at NPV₁₀ for an IRR of 15%.

Bengwenyama Financial Returns

GMR estimates the base case 70% share of Bengwenyama owned by SPD has a NPV₁₀ of US\$175M and an after-tax IRR of 15.8%. This rises, on a one-year forward basis, to a NPV₁₀ of US\$273M (100%) based on a long-term ZAR/USD of 17, with platinum at US\$1,175/oz and palladium at US\$1,400/oz.

Low initial capex of only US\$408M (plus US\$104M to full production) helps create the projected high returns. At peak production (FY3033E), SPD's share equates to US\$345M revenue and US\$140M EBITDA/year. By focusing on the UG2 reef, at 9.63g/t 7E resource (6.55g/t 7E mined), early returns are maximised.

The positive Scoping Study is to be followed by a PFS and FS then funding ahead of 2028 start-up.

Project Delivery Timetable

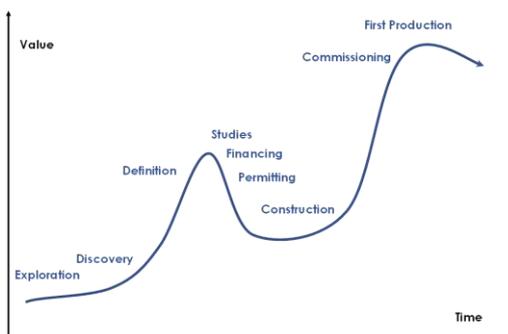
SPD substantially increased resources last year, with near term targets to tighten up drill spacing and bring more ounces into Measured and Indicated categories. The recent Scoping Study shows positive economic outcomes, and a 32-year mine life. For this year and next, SPD is to proceed with a Pre-Feasibility Study then full Feasibility Study and subject to financing commence construction perhaps in 2025 with first production potentially in 2028.

GMR values SPD at A\$219M (or A\$2.44/share).

SPD At Fraction Of Valuation

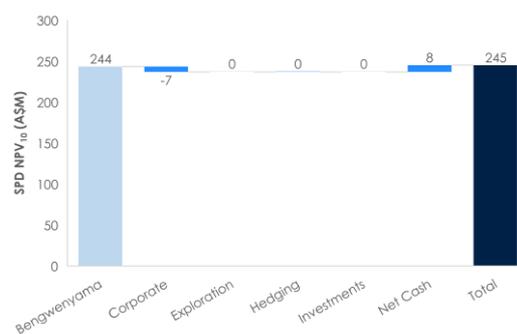
GMR values SPD at A\$245M (or A\$2.73/share undiluted), which is multiples of the current market capitalisation. Even though the current per share figure is likely to be diluted with expected equity raising rounds (unless acquired), the gap suggests equity upside for investors. SPD is not a low-risk proposition, needing to raise capital (debt and equity) ahead of several construction years to first production.

Fig 3: Lassonde Curve – SPD At The Definition / Studies Stage



Source: Global Mining Research

Fig 4: SPD Sum Of The Parts A\$M NPV₁₀ Using GMR Prices



Source: Global Mining Research

Southern Palladium SWOT Analysis

Strengths

The key is the project, which is high grade and very robust financially.

- The Bengwenyama Project is high grade and because of that very robust and highly attractive financially, on GMR's analysis.
- High grades, shallow mining depths and modern mining layout and equipment should lead to low costs relative to global peers.
- Current cash on hand of ~A\$8M (including at the project level) provides near term financing (current burn rate ~A\$0.2M/month).

Weaknesses

SPD has a small market cap with makes raising equity problematic.

- SPD has a small market cap, which makes raising equity more problematic. This may well force the company to seek a larger partner, resulting in SPD either receiving a smaller share of production and profits, or even reverting to a royalty position.
- Although the Board and management team are well staffed with suitably qualified people for a company at its stage of development, numbers would need to be substantially increased in coming years.
- While a Scoping Study has been produced and SPD has a large inventory, it is still in the initial part of the project development, with further studies, approvals, and financing ahead for the business.

Opportunities

An equity partner may significantly reduce financing issues.

- SPD may seek to introduce a partner with greater financial capabilities, which would significantly reduce financing issues. The key opportunity would be to have a see-through corporate price for the project in the market.
- The scoping study is based on a 2.4Mt/yr concentrator, but targeted mining volumes are at a ~2.0Mt/yr production rate from two declines. This implies ~20% upside by running the concentrator at capacity.
- The exploration potential of Bengwenyama remains open, especially as mineralisation dips away to the north. Positively, mineralisation is reasonably uniform as is consistent with this type of deposit.

Threats

Timetable may slip, and the company attract peer interest ahead of first production.

- Project timetables for mining projects have been known to slip, and SPD may fall under this trap. That said, GMR has assume first production is four years out, which should be adequate.
- The project does not have an offtake agreement for the concentrate product. Whilst that is not unusual at this point in the development, it is a key risk that remains to be addressed ahead of FID.
- Given SPD's low market cap but highly valuable asset, it is possible that the company could attract corporate interest from peers ahead of first production. The management team owns only 16.5% and the local people only 9.3%, leaving the SPD register reasonably open.

GMR Production Outlook For Bengwenyama

GMR has made some simplifying assumptions compared with the Scoping Study.

GMR has made some simplifying assumptions compared with the 31 January 2024 Scoping Study that yields minor variations to production, grade, and costs.

The Scoping Study estimates LOM total cash costs at US\$785/oz 6E and AISC at US\$836/oz 6E.

LOM production is calculated as 7.6Moz 4E with 6.5Moz 4E payable included in 8.8Moz 6E with 7.1Moz 6E payable (note that Osmium has zero payable).

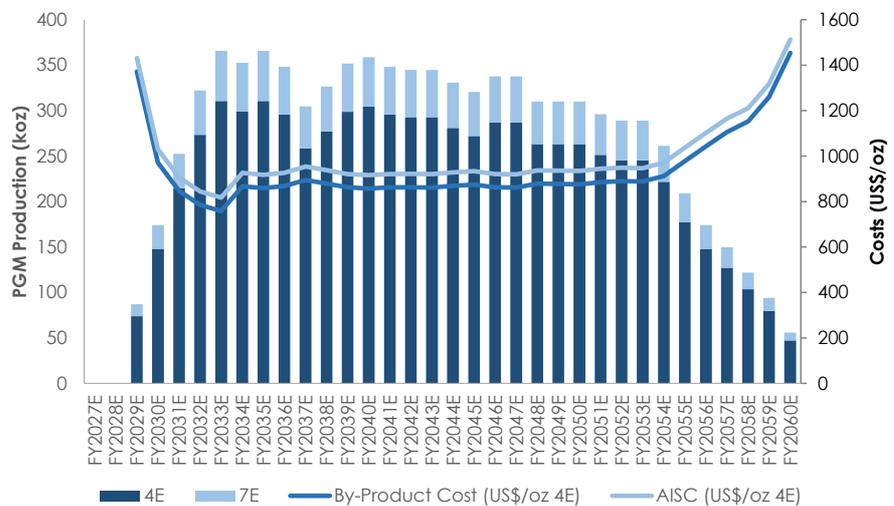
The Scoping Study estimates the LOM total cash costs at US\$785/oz 6E and AISC at US\$836/oz 6E using its commodity price assumptions, which differs slightly from the GMR base case assumptions.

The fixed versus variable costs account for the higher assumed operating costs during the initial and concluding periods of lower throughput.

Fig 5: GMR 4E & 7E Production & Costs Outlook

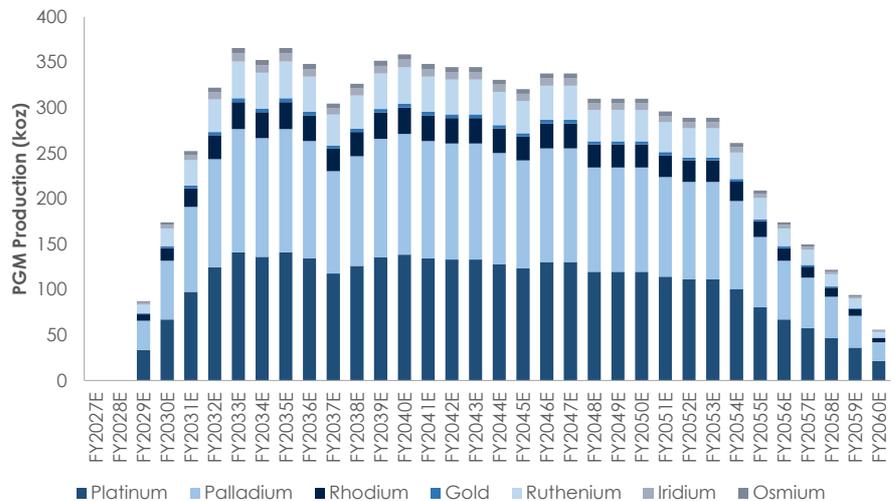
Assumptions	Unit	Study	Spot
Platinum	US\$/oz	1,200	877
Palladium	US\$/oz	1,100	954
Rhodium	US\$/oz	5,000	4,475
Gold	US\$/oz	1,800	2,029
Ruthenium	US\$/oz	470	440
Iridium	US\$/oz	5,000	5,000
Osmium	US\$/oz	n/a	n/a
Copper	US\$/t	8,200	8,375
Nickel	US\$/t	18,500	16,990
Chrome	US\$/t	285	205
Exchange	ZAR/USD	18.9	19.3
Tax Rate	%	27	

Southern Palladium Scoping Study 31Jan 2024 & FactSet



Source: Global Mining Research

Fig 6: GMR PGM Production Outlook



Source: Global Mining Research

Cash Flow Forecast, Peak Cash Outflow In FY2028

Bengwenyama is forecast to be cash flow positive in the second year of production (FY2030).

Bengwenyama is forecast to be cash flow positive in the second year of production (FY2030) as throughput rates exceed 1Mtpa and increasingly so when throughput reaches the 2Mtpa rate in year 7 (FY2033).

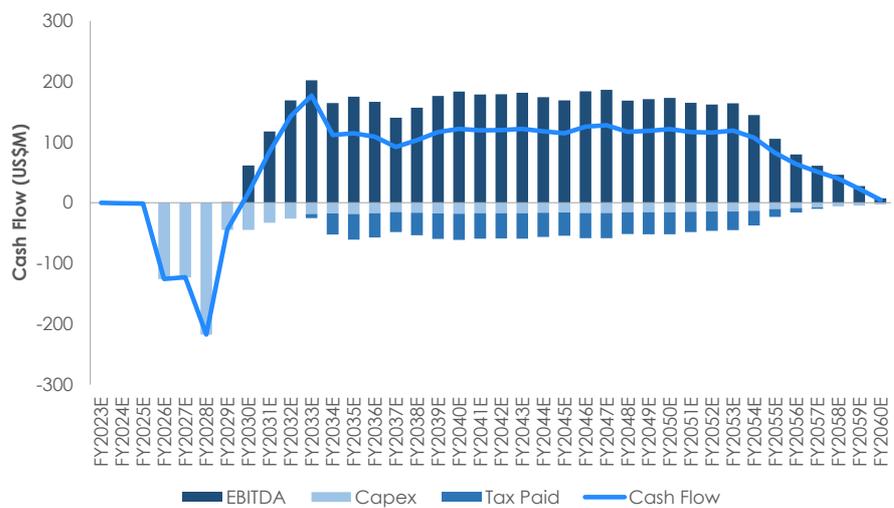
The GMR capital expenditure profile matches that of the Scoping Study in Rand terms, but the variation on the FX assumption translates to a different US\$ result (SPD used R18.9=US\$1.00 compared to GMR long-run at R17.0=US\$1.00).

Maximum cash outflow is forecast in FY2028 at US\$218M (US\$190M spot) while the cumulative cash outflow peaks in FY2029 at US\$513M (US\$460M in FY2030 at spot) with the impact of the ZAR/USD exchange rate the driver for the differential.

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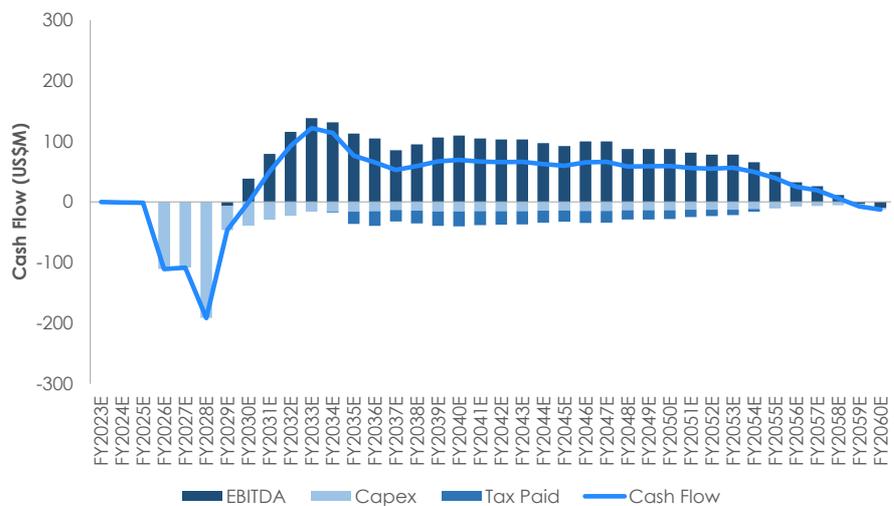
Cumulative cash outflow peaks in FY2029 at US\$513M (US\$460M in FY2030 at spot)

Fig 7: GMR Bengwenyama Cash Flow Forecasts Using GMR Deck



Source: Global Mining Research

Fig 8: GMR Bengwenyama Cash Flow Forecasts Using Spot Prices



Source: Global Mining Research

The GMR financial model for Bengwenyama follows the Scoping Study and assumes Year-Zero is FY2026 with mine startup in Year-Three (FY2029).

The GMR model is most sensitive to the ZAR/USD rate followed by the assumed mining rate (R/t) then the discount rate.

Sensitivity Analysis – Most Sensitive To FX

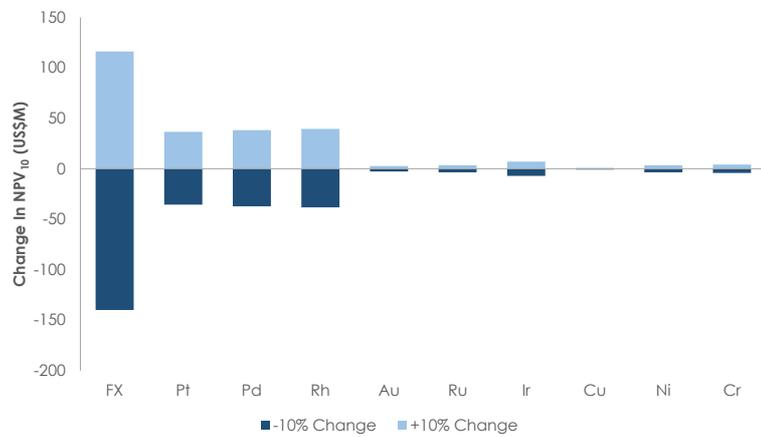
The GMR financial model for Bengwenyama follows the Scoping Study and assumes Year-Zero is FY2026 with mine startup in Year-Three (FY2029). The production ramp-up follows the Scoping Study, but the grade profile is simplified at the resource average in the absence of detailed annual grade profile/source.

The base case after-tax NPV₁₀ is calculated at US\$246M on GMR assumptions while the flat spot commodity prices yield NPV₁₀ of just US\$42M.

The Scoping Study base case NPV₈ is US\$532M, while the GMR model calculates the NPV₈ at US\$418M using GMR prices and US\$131M using spot prices.

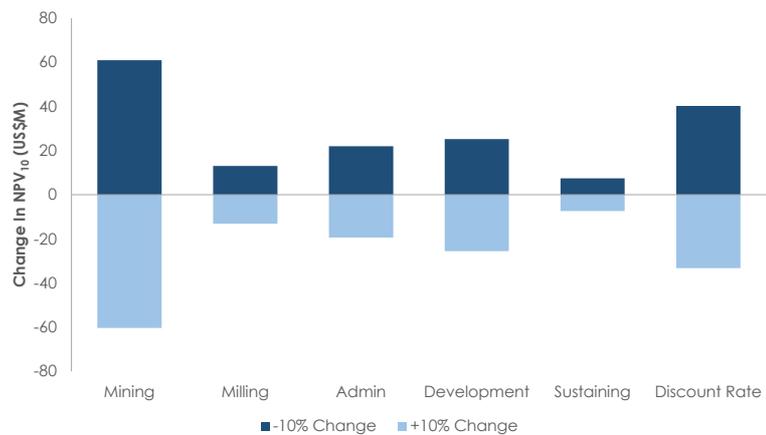
The GMR model is most sensitive to the ZAR/USD rate followed by the assumed mining rate (R/t) then the discount rate. The model is also more sensitive to the Pt, Pd and Rh prices than similar percentage changes to the development capital.

Fig 9: Bengwenyama Project Sensitivity Analysis To Commodity Assumptions, Starting At Spot



Source: Global Mining Research

Fig 10: Bengwenyama Project Sensitivity Analysis To Cost Assumptions, Starting At Spot



Source: Global Mining Research

SPD held A\$12M in cash at year-end June 2023 and ~A\$8M more recently in December 2023.

The Scoping Study is silent on funding options, but avenues to consider include equity, debt, royalty/stream, asset sale, partial sale, joint ventures.

SPD needs to raise at least US\$520M (using spot) to develop the Bengwenyama project, which is a significant undertaking for a stock trading at US\$21M market capitalisation.

The quality of the Bengwenyama project suggests that other corporate entities should consider exposure to the project.

Significant Project Funding Required

Southern Palladium held A\$12M in cash at year-end June 2023 and ~A\$8M more recently in December 2023. The Bengwenyama project development needs R7.7B (US\$408M) of initial capital mostly in Year 0 to 2 (2026 to 2028) and a further R2.0B (US\$104M) in ongoing capital ahead of full production plus R7.7B (US\$406M) of stay-in-business capital over the mine life, according to the Scoping Study.

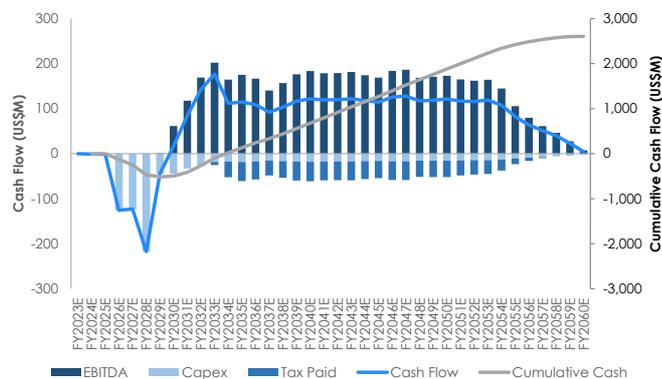
GMR analysis calculates the maximum negative cash flow in FY2030E at US\$460M using spot or US\$513M in FY2029 using GMR prices, although some of the R2.0B of ongoing capital is funded by operating cash flow.

GMR estimates that SPD needs to raise at least US\$520M to develop the project, which is a significant undertaking for a stock trading at US\$25M market cap. The SPD documents state a US\$403M peak funding requirement, including early cash flows. GMR has taken a conservative approach to working capital and the US\$104M capital spend in years 3-6 ahead of full production in year 7 and relies on a R18.9=US\$1.00 exchange rate.

The Scoping Study is silent on funding options, but avenues to consider include equity, debt, royalty/stream, asset sale, partial sale, joint ventures.

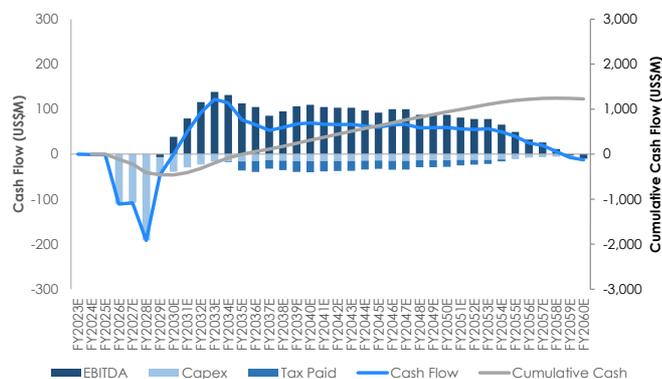
The quality of the Bengwenyama project suggests that other corporate entities should consider exposure to the project, but the prevailing weak commodity prices may deter the current appetite of existing PGM producers.

Fig 11: GMR Bengwenyama Cash Flow Forecasts Using GMR Prices



Source: Global Mining Research

Fig 12: GMR Bengwenyama Cash Flow Forecasts Using Spot Prices



Source: Global Mining Research

PGM Prices Under Pressure, Improvements Ahead?

Platinum group metals (PGMs) performed poorly during 2023.

The platinum group metals (PGMs) performed poorly during 2023 with platinum down 14%, palladium down 46% and rhodium down 64% due to concerns of global economic growth and the implications for demand.

Automotive demand accounts for + 90% of rhodium demand, + 84% palladium and + 41% platinum in 2023E

Automotive demand accounts for 90% of rhodium demand, 84% palladium and 41% platinum in 2023E, according to Johnson Matthey PGM Market Report 2023.

South Africa dominates the mine supply of PGMs, representing 72% of platinum, 37% of palladium (Russia at 40%), and 82% of rhodium in 2023E, according to Johnson Matthey PGM Market Report 2023

The metal price performance has been reflected in stock prices with Impala Platinum (or Implats or IMP:JSE) down 66%, Anglo American Platinum (or Amplats or AMS:JSE) down 47% and Northam Platinum (or NPH:JSE) down 38% in 2023.

Margin compression has forced some PGM producers to take drastic action to preserve profitability.

Margin compression has forced some PGM producers to take drastic action to preserve profitability. In December 2023, Amplats announced a series of actions to improve its competitive position while preserving long-term optionality, including cost cutting, overhead reduction, contract renegotiations, capital outlay deferral, resequencing of growth and to prioritise high-margin production.

Primary and secondary (recycling) supply of PGMs was down due to South African mines issues and Russian sanctions (especially for Pd)

Primary and secondary (recycling) supply of PGMs was down due to South African mines issues and Russian sanctions (especially for Pd). South Africa was hit by maintenance, load-shedding (power shortages), and operational challenges with Johnson Matthey estimating 6% lower output in 2022 that continues in 2023. However, reduced supply was offset by lacklustre demand.

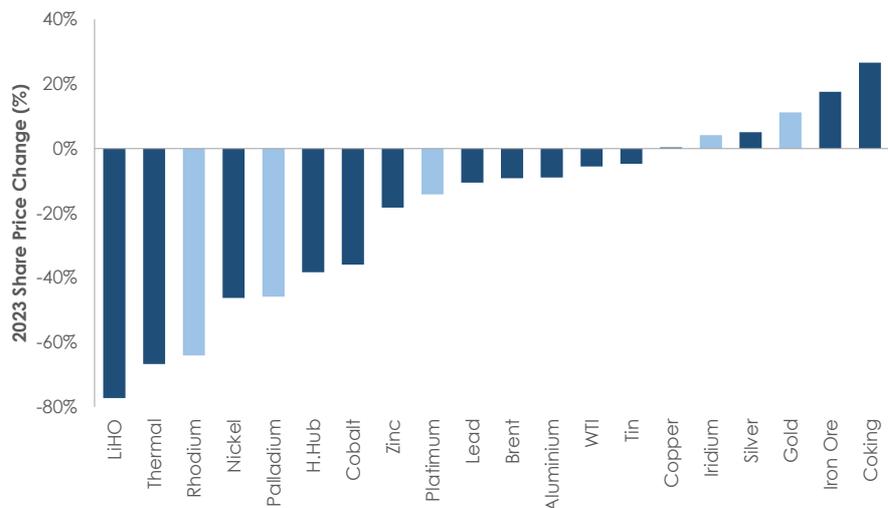
Despite the gloom, commodity forecasters project a more favourable midterm outlook.

Despite the gloom in 2023, commodity forecasters including the World Platinum Investment Council project a more favourable midterm outlook for PGM given forecast supply deficits ahead. Although the influence of auto production/sales and industry destocking may influence the near-term.

Improvements in the PGM outlook would be welcome for PGM producers and especially a junior stock seeking to develop a promising PGM mine.

Improvements in the PGM outlook would be welcome for PGM producers and especially a junior stock seeking to develop a promising PGM mine on the Eastern Limb of the Bushveld in South Africa.

Fig 13: Commodity Price Changes During 2023



Source: Global Mining Research

The long-term price assumptions used by Southern Palladium in its recent Scoping Study have been compared with those used in recent studies.

Scoping Study Assumptions

PGM prices historically have been volatile, which makes forecasting long term prices in development project models more problematic. This is especially the case currently with depressed prices and some production being curtailed, as prices move into the cost curve.

The long-term price assumptions used by Southern Palladium in its recent Scoping Study have been compared with those used in recent studies by Chalice and Ivanhoe. These are then compared to GMR and spot prices.

Overall Southern Palladium assumptions appear within the range of others for commodities, although the use of effectively spot Rand (weaker to the USD) is the key point of difference.

Fig 14: Assumptions Of Other PGM Development Projects

Commodity	Units	Chalice* Gonneville (Aug 2023)	Ivanhoe Platreef (Mar 2022)	S. Palladium Bengwenyama (Jan 2024)	GMR Long Term	Spot
Platinum	US\$/oz	1,300	1,100	1,200	1,175	877
Palladium	US\$/oz	1,100	1,450	1,100	1,400	954
Rhodium	US\$/oz	Na	5,000	5,000	4,400	4,475
Gold	US\$/oz	1,900	1,600	1,800	1,650	2,029
Nickel	US\$/lb	8.62	8.00	8.39	9.20	3.80
Copper	US\$/lb	3.99	3.50	3.72	4.25	7.71
ZAR/USD		Na	16.0	18.9	17.0	19.3

* Gonneville 1.5Mtpa case

Source: Global Mining Research.

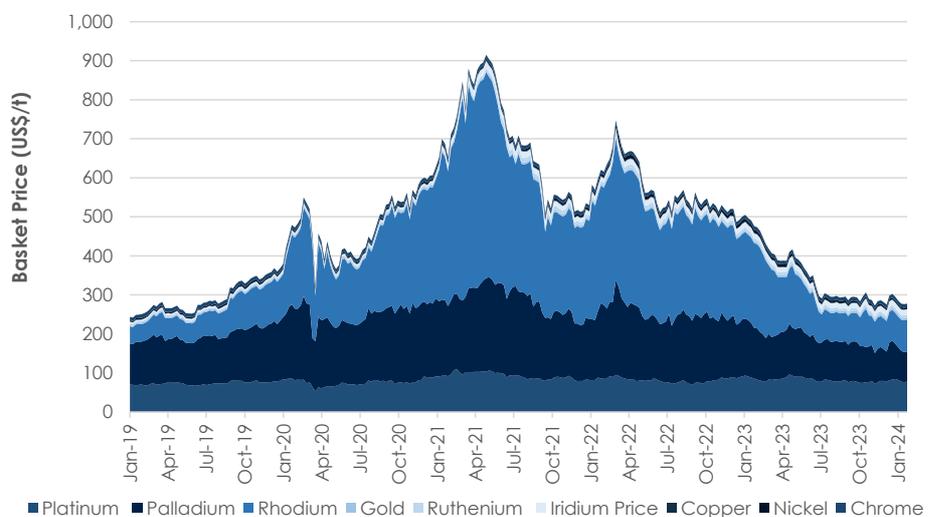
Overall Southern Palladium assumptions appear within the range of others for commodities.

Basket Price Volatility

The volatility of PGM prices is clearly highlighted in the construction of a notional historical basket price for the Bengwenyama project.

The volatility of PGM prices is clearly highlighted in the construction of a notional historical basket price for the Bengwenyama project. This is based on a milled tonne of ore to recoverable and payable product based on resource grades for the UG2 Resource Grade (excludes Osmium). Over the last five years the notional basket price has ranged between US\$300/t and US\$900/t of product.

Fig 15: Historical Bengwenyama Product Basket Price (Milled Tonne Of Ore Basis)



Source: Global Mining Research

Bengwenyama PGM Project Location

SPD owns a 70% stake in the Bengwenyama PGM project located on the Eastern Limb of the Bushveld Complex in the Limpopo Province of South Africa.

Southern Palladium owns a 70% stake in the Bengwenyama PGM (platinum group metals) project located on the Eastern Limb of the Bushveld Complex in the Limpopo Province of South Africa.

Bengwenyama is about 250km east-northeast of Pretoria (the capital of South Africa) and is underlain by the PGE-mineralised UG2 chromitite and pyroxenitic Merensky Reef of the Rustenburg Layered Suite of the Bushveld Complex.

Bengwenyama comprises of the farms Nooitverwacht 324 KT and Eerste Geluk 327 KT. At its closest point, the Bengwenyama project lies about 9km west of the town of Steelpoort, and 20km west-southwest of the larger town of Burgersfort which are both sources of labour and mining equipment.

Eerste Geluk is mostly flat topography (760m to 1,200m above sea level), except for the hill near the boundary with Nooitverwacht which is mountainous (at 860m to 1,700 m above sea level). Vegetation is typical denuded grassland and scrub.

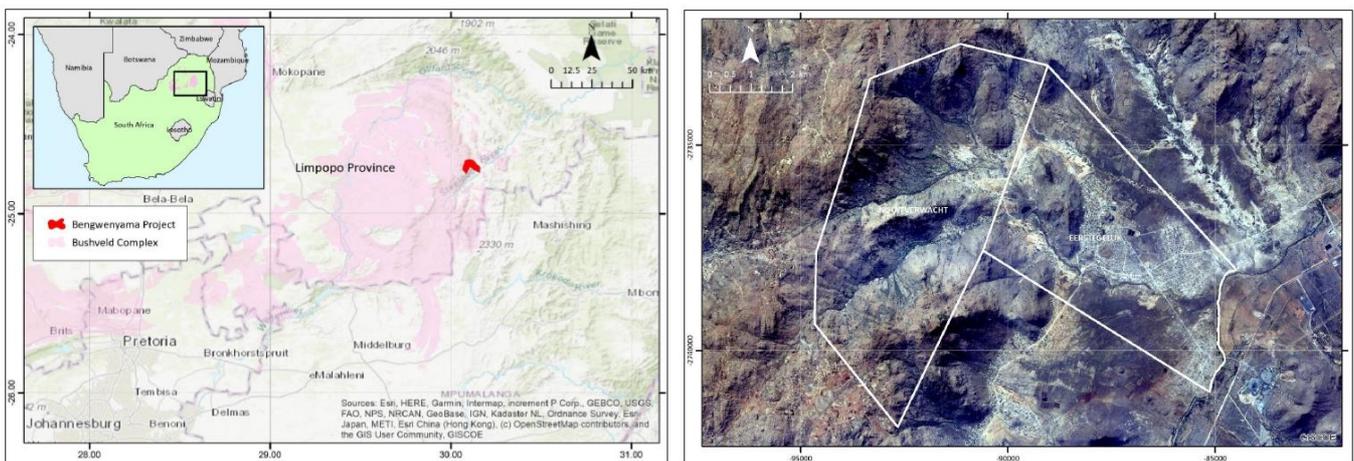
The R555 main road (single carriage asphalt) runs just south of the southern boundary of Bengwenyama and there is a railway siding at Steelpoort. Grid power runs along the R555 and would be available to mining operations, subject to permitting and regulatory approvals. The De Hoop dam, located in the Steelpoort valley, supplies the area with a reliable source of water.

No mining-related surface infrastructure is present at Bengwenyama, which is in the exploration phase of assessment and development.

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The Bengwenyama project appears to be the extension of the Modikwa PGM mine owned by Anglo Platinum to the north, the Kennedy's Vale/Spitzkop project owned by Eastern Platinum to the south and Grootboom owned by Samancor Chrome to the east.

Fig 16: Regional Location Map & Satellite Image



Source: Independent Technical Assessment Report – Bengwenyama PGE Project April 2022

Bengwenyama Project Ownership Structure

Mineral rights to the Bengwenyama project are owned 100% by the Miracle Upon Miracle Investment Pty Ltd (MUM) which is owned 70% by SPD and 30% by Nurinox Investments Pty Ltd which is owned 100% by the local Bengwenyama community. Both MUM and Nurinox are incorporated and domiciled in South Africa.

Southern Palladium was formed in December 2020.

Southern Palladium was formed in December 2020 to acquire its holding in MUM, with all the previous MUM shareholders to be shareholders in SPD. The stock was floated (via IPO) on the Australian Securities Exchange (ASX) on 8-June-2022.

MUM holds 100% of the Preferent Prospecting Right over the Properties issued under Section 104 of the South African Minerals and Petroleum Resources Development Act, 2002 (MPRDA), and registered as LP30/5/1/1/002PPR (for the Bengwenyama Project) that covers both farms of Nooitverwacht 324 KT and Eerste Geluk 327 KT.

The Prospecting Right permits MUM to explore for platinum, palladium, rhodium, ruthenium, osmium, iridium, gold, copper, nickel, chrome, cobalt, and silver for an initial five years that was renewed on 13-Feb-2021 for a further three years.

The Bengwenyama community held uninterrupted occupation of Nooitverwacht for more than a century but was dispossessed of Eerstegeluk in 1945 and later successfully lodged a land claim for its restoration to the community (in 2014) after numerous court cases including the Constitutional Court and Supreme Court.

At the Bengwenyama project, the B-BBEE policy of the South African government has been achieved.

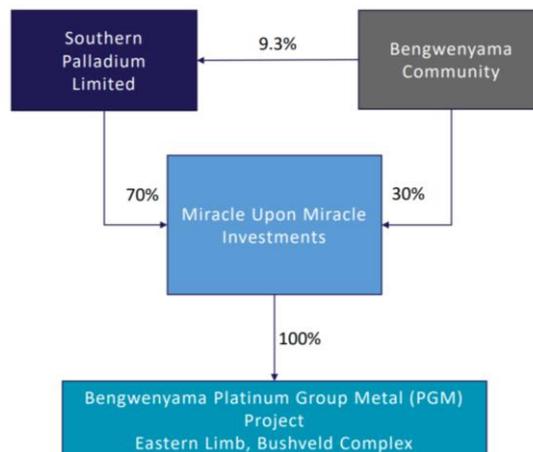
At the Bengwenyama project, the Broad Based Black Economic Empowerment (B-BBEE) policy of the South African government is principally determined and achieved in terms of section 104 of the MPRDA through the Bengwenyama (as the relevant local community) holding an indirect minimum ownership interest of at least 30% in the Prospecting Right.

On 29-Sep-23, SPD officially submitted its application for a Mining Right, which was accepted by the Department of Mineral Resource and Energy (DMRE) on 17-Oct-23. That approval confirms that SPD can initiate comprehensive expert studies and consultations ahead of a DMRE decision by the end of 2024.

There is a "Clawback" provision of up to 50% for the MUM shareholders stake in SPD should two project milestones be missed (1) at least 2Moz 4E JORC reserves and (2) lodge a formal Mining Right application each within four years of the IPO. Note that the project already includes 5.4Moz 4E of UG2 indicated resource and that the Mining Right application was accepted by DMRE in Oct'23.

Fig 17: Southern Palladium Ownership Structure

Mineral rights to the Bengwenyama project are owned 100% by the Miracle Upon Miracle Investment which is owned 70% by SPD and 30% by Nurinox Investments Pty Ltd which is owned 100% by the local Bengwenyama community.



Source: Southern Palladium Presentation September 2023

The primary PGE deposit types within the Bushveld Complex are the stratiform layers (reefs).

The Merensky and UG2 reefs occur at the project and extend from surface to a depth of 1,100m over 10km.

Bengwenyama Project Geological Setting

The primary PGE deposit types within the Bushveld Complex are the stratiform layers (reefs) that occur within the Upper Critical Zone and include the Merensky Reef and UG2 which are present throughout the Rustenburg Layered Suite.

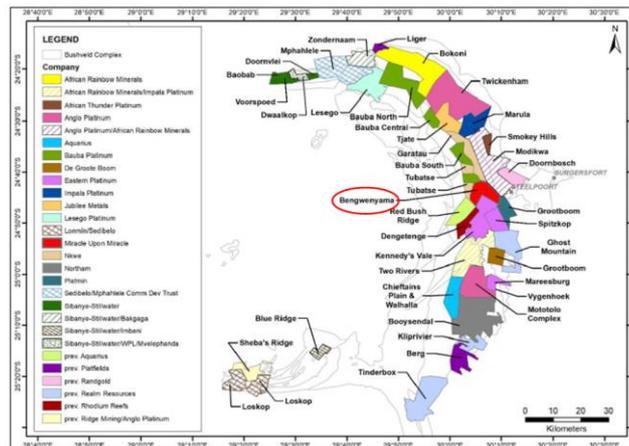
The reefs are mineralised throughout their extent and characterised by significant lateral geological and grade continuity, except for local disruptive features such as potholes, discordant iron-rich pegmatoids, dykes and faults.

The Merensky and UG2 reefs occur at the project and extend from surface to a depth of 1,100m over 10km. Both reefs are exploited by other platinum mining companies for PGMs and base metals elsewhere in the region.

The Merensky Reef and UG2 in the Mineral Resource area dip mostly uniformly to the west at between 10° and 20°. Brittle faulting, related to the regional Steelpoort Fault, is present and resulted in a series of smaller-scale faults in the area.

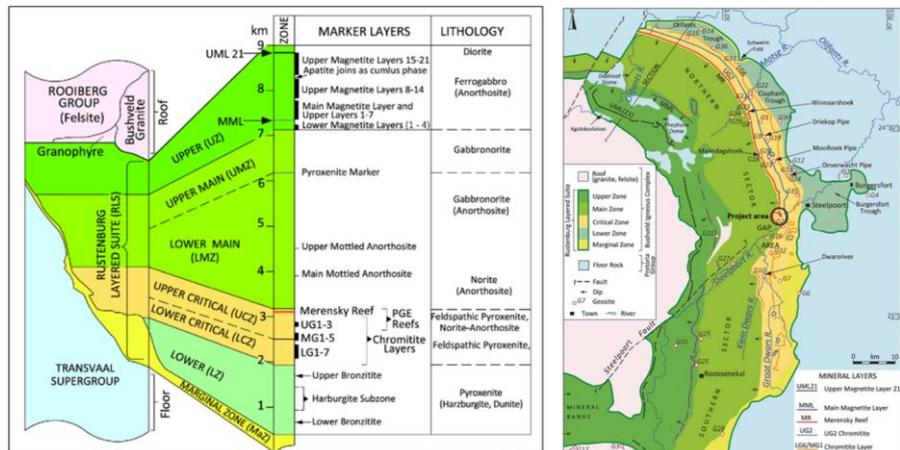
In the project area, the UG2 ranges in thickness from 0.2m to 1.1m, averaging ~0.7m, while the Merensky Reef is between 0.2m and 5.7m thick, averaging ~2m.

Fig 18: Eastern Limb Of The Bushveld Complex



Source: Southern Palladium Prospectus and Pre-Listing Statement – April 2022

Fig 19: Stratigraphy Of The Rustenburg Layered Suite & Generalised Map Of The Eastern Limb



Source: Southern Palladium Prospectus and Pre-Listing Statement – April 2022

Bengwenyama Resource Estimates

Historical drilling was undertaken by Rustenburg Platinum Mines Limited during 1966-1985, then by Nkwe Platinum in 2007/08.

Historical drilling was undertaken by Rustenburg Platinum Mines Limited during 1966-1985 with incomplete records on four drillholes available and no reliance placed on the data. Nkwe Platinum Limited explored the area with 30 diamond drill mother holes (with at least 69 deflections) drilled in 2007/2008, but data is incomplete, and the methodology was not available for review by SPD.

An Inferred resource was estimated on 1-July-2021 and reported on 19-April-2022 in accordance with JORC for inferred 144Mt at 4.07g/t for 18.8Moz 4E based on available Nkwe data and reported by CSA Global mining industry consultants.

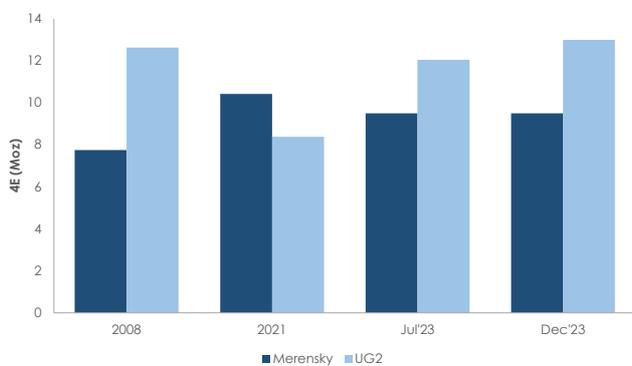
SPD published an updated mineral resource in May 2023 based on 350m drilling grid in the shallow eastern portion of Eestegeluk that also validated the historical drill hole database. The UG2 estimate of 11.65Moz 4E used 10 Nkwe and 24 SPD holes. The data accounted for geological losses for the effect of faults, dykes, and potholes on the UG2 and excluded the "Dome" area in the south of Eestegeluk.

The mineral resource was updated in July 2023 for a combined Merensky and UG2 estimate of 25Moz 7E including 47 drillholes and 13 deflections for 13,776m. The focus was on the UG2 but also intersected the Merensky Reef (MR) located ~260m above the UG2 with the MR resource based on 10 Nkwe and 8 SPD drillholes.

The resource was updated in December 2023 for combined Merensky and UG2 of 26Moz 7E.

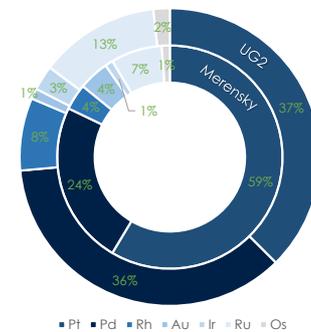
The mineral resource was further updated in December 2023 for combined Merensky and UG2 estimate of 26Moz 7E including an upgrade of UG2 indicated from 3.2Moz 7E in Jul'23 to 6.5Moz 7E in Dec'23 based on 59 drillholes with complete UG2 intersections.

Fig 20: Bengwenyama Resource 4E Estimates



Source: SPD company reports. 4E=platinum+palladium+rhodium+gold

Fig 21: Bengwenyama Dec'2023 Resource Composition



Source: Global Mining Research

Fig 22: Combined Merensky & UG2 Mineral Resource At 1 December 2023

Reef	Resource Category	Tonnes (Mt)	Thickness (m)	Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	Ir (g/t)	Ru (g/t)	Os (g/t)	4E (g/t)	7E (g/t)	Cu (%)	Ni (%)	Cr ₂ O ₃ (%)	4E (Moz)	7E (Moz)
Merensky	Indicated	21.59	2.05	1.59	0.65	0.10	0.12	0.03	0.21	0.03	2.48	2.75	0.038	0.125	0.72	1.72	1.91
	Inferred	77.90	1.97	2.01	0.81	0.13	0.15	0.04	0.25	0.04	3.10	3.43	0.035	0.119	0.73	7.77	8.60
	TOTAL	99.49	1.99	1.92	0.78	0.12	0.14	0.04	0.24	0.04	2.97	3.28	0.035	0.120	0.72	9.49	10.50
UG2	Indicated	20.80	0.73	3.60	3.61	0.75	0.12	0.25	1.24	0.17	8.08	9.75	0.033	0.162	30.19	5.40	6.52
	Inferred	29.99	0.74	3.63	3.37	0.77	0.10	0.26	1.25	0.17	7.87	9.54	0.038	0.165	29.12	7.58	9.20
	TOTAL	50.79	0.73	3.62	3.47	0.76	0.11	0.26	1.25	0.17	7.95	9.63	0.036	0.164	29.56	12.99	15.72
TOTAL	TOTAL	150.28	1.57	2.49	1.69	0.34	0.13	0.11	0.58	0.08	4.65	5.43	0.040	0.130	10.47	22.48	26.22

Source: Southern Palladium Scoping Study 31 January 2024. 7E=4E+ruthenium+iridium+osmium

Resource Estimates Benchmarking

Operating PGM mines on the Eastern Bushveld include Mototolo (100% AMS), Modikwa (50% AMS, 41.5% African Rainbow Minerals or ARM, 6% Mampudima and 2.5% Matimatjatji), Marula (73.26 IMP and 26.7% Tubatse Platinum), Two Rivers (54% ARM and 46% IMP), and Booyensdal (100% NPH).

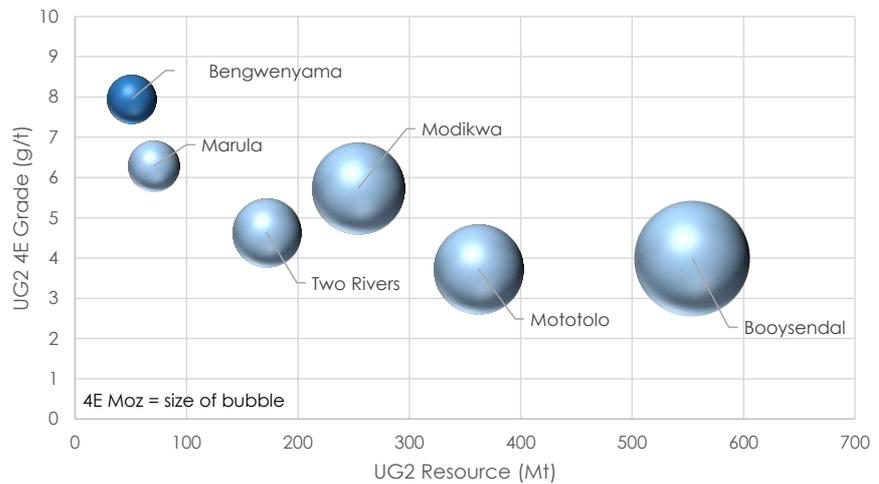
Each of the operating PGM mines exploit the UG2 Reef with resources estimated for the Merensky Reef. Booyensdal mines the Merensky with a trial mine at Modikwa and construction at Two Rivers.

The Bengwenyama UG2 resource grade of 8.0g/t E4 is the best of the current producing PGM mines on the Eastern Limb, although the resource tonnage of 51Mt is the lowest at this stage largely due to limited exploration to date. The higher grade may be due to assumed geological loss assumptions and/or reef width versus mining width dilution assumptions.

Fig 23: Eastern Limb UG2 Reef 4E Resource

Operating PGM mines on the Eastern Bushveld include:

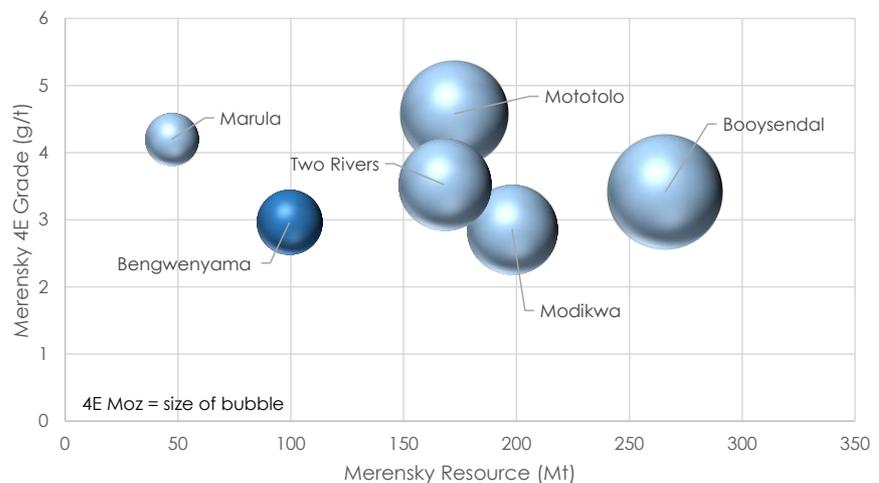
- +Mototolo (100% AMS),
- +Modikwa (50%AMS, 41.5% ARM)
- +Marula (73.26 IMP),
- +Two Rivers (54% ARM, 46% IMP),
- +Booyensdal (100% NPH)



Source: Global Mining Research. Resource = Reserve + Measured + Inferred + Inferred

Fig 24: Eastern Limb Merensky Reef 4E Resource

The Bengwenyama UG2 resource grade of 8.0g/t E4 is the best of the current producing PGM mines on the Eastern Limb.



Source: Global Mining Research. Resource = Reserve + Measured + Inferred + Inferred

Bengwenyama Exploration Plans

At the time of the IPO, SPD proposed a two-phase exploration drill program.

At the time of the IPO, SPD proposed a two-phase exploration drill program.

Phase 1: Infill drilling of the shallowest portion of the deposit (in the east and central areas) on a 350 m grid spacing to upgrade the Mineral Resource to Indicated and to provide sufficient confidence to support downstream mining and economic studies. The primary focus is the UG2 at depths less than 500m. The plan includes 63 drillholes (with deflections) for 24,500m drilled for ~A\$7.4M.

Phase 2: Widely spaced drilling within the Exploration Target area upgrading to Inferred Mineral Resources and improve confidence in the entire Project area. The plan includes 12 drillholes (with deflections) for 13,600m drilled for ~A\$3.6M.

At 30-Sep-2023, the drilling program had completed 19,447m of drilling with seven rigs on site and assay results for 39 UG2 and 10 Merensky Reef (MR) intersections received with an additional 19 UG3 and 2 MR intersections awaiting assay.

On 23-Oct-23, SPD announced that the independent consulting firm OHMS confirmed the suitability of both conventional and mechanised underground mining methods for the UG2 Reef with parameters in line with other PGM mines. The absence of chromite stringers in the UG2 hangwall suggests scope for a minimum stope width of ~1m (compared with the average UG2 reef width of 0.7m), which may reduce dilution. Conventional mining can mine 1m stopes while mechanised mining widths are up to 2m.

On 6-Dec-2023, SPD announced that preliminary unoptimized testing indicates the Bengwenyama UG2 can be treated with conventional methods with metallurgical recoveries of 80-85% and concentrate grades no less than 140g/t 4E.

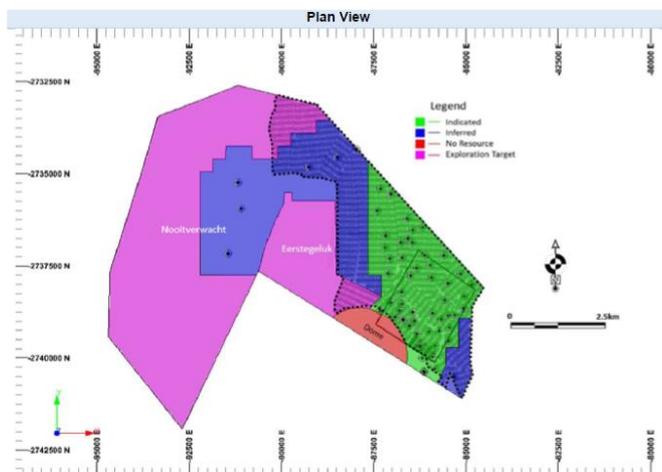
The company stated that the recoveries are consistent with other UG2 operations on the Eastern Limb (such as Anglo Platinum with Mototolo 84% & Modikwa 87%, and Implats with Marula 86-88% & Two Rivers 81%).

On 7-Dec-2023, SPD stated that the drilling focus has shifted to the North Horst Block to convert the inferred mineral resource and exploration target into indicated resources for the upcoming Pre-Feasibility Study.

A Scoping Study for the project was released on 31 January 2024.

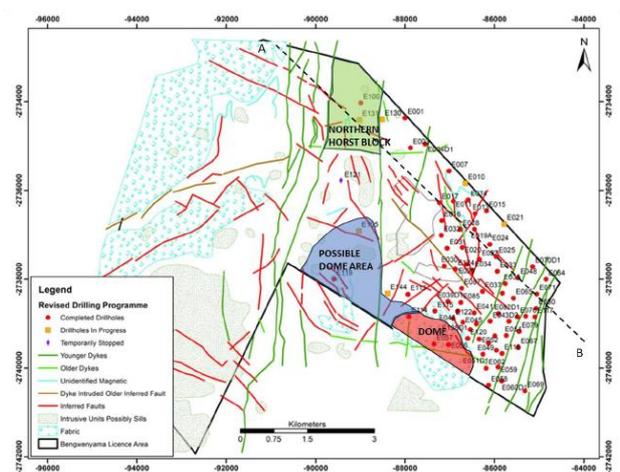
A Scoping Study for the project was released on 31 January 2024.

Fig 25: Mining Area (Shaded) In Mineral Resource Category



Source: Southern Palladium Scoping Study 31 January 2024

Fig 26: Location Of Completed Drillholes At January 2024



Source: Southern Palladium Scoping Study 31 January 2024

Bengwenyama Mine Development Plans

Initial mining at the will focus on the underground extraction of PGMs from the high grade UG2.

Mine access development consists of two 6mx4m declines.

Underground mining is expected at 170t/mth (~2Mtpa) using conventional mining with a 1.1m stoping width.

Initial mining at the Bengwenyama project will focus on the underground extraction of PGMs from the high grade UG2 Chromitite Reef.

Mine access development consists of two 6mx4m declines sunk at a maximum angle of 10° for trackless equipment. The declines split mining into two areas called South (accessed by the Primary Decline) and North (Secondary Decline) which is elevated due to faulting and inaccessible by the primary decline.

The mining method selected is hybrid mining applied to a narrow reef orebody with a combination of mechanised development and conventional stoping (using pneumatic handheld drills) to maximise ore extraction with limited dilution.

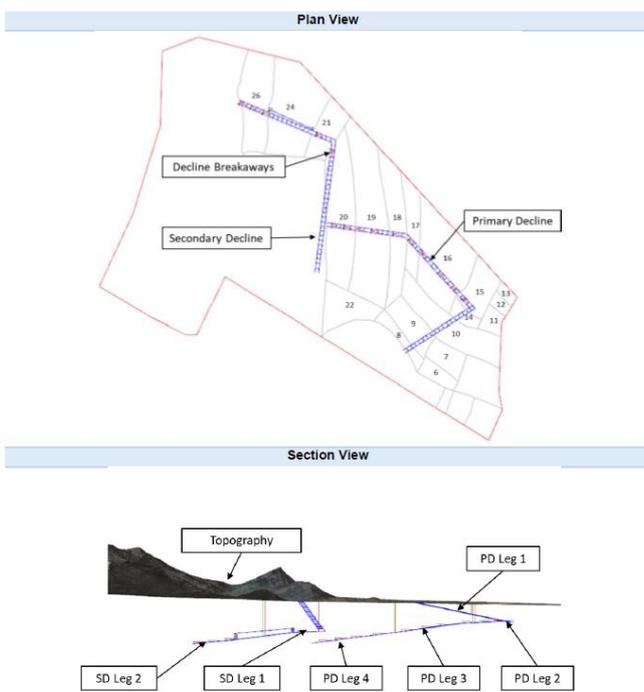
To extract the ore, the mining method requires pre-development of a mining block which includes on-reef haulage drives and centre gulleys.

Underground mining is expected at 170t/mth (~2Mtpa) using conventional mining with a 1.1m stoping width. Pneumatic handheld drills are used in the stopes to drill production holes with a face advance limited by the drill rod length.

The Bengwenyama proposed 1.1m stoping width is typical of the Eastern Limb PGM mines, such as Modikwa (1.2m) and Marula (1.2m), although wider at Mototolo (2.2m) and Two Rivers (2.5m).

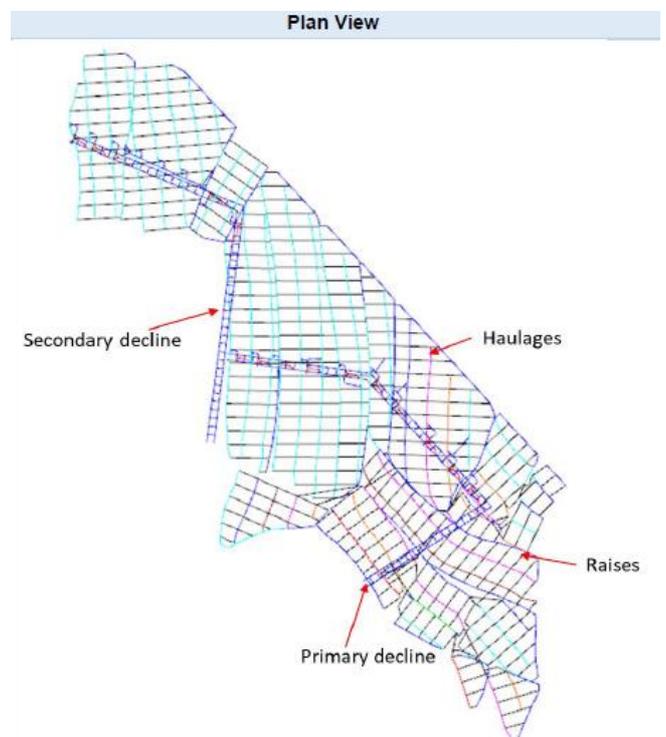
The mining advance direction is determined by the strike of the orebody and stoping will be done in a double-sided configuration. Blasted ore will be removed with a scraper winch from the face along a strike gully into a loading bay at the bottom of the gully.

Fig 27: Decline Access Schematic Map



Source: Southern Palladium Scoping Study 31 January 2024

Fig 28: Mine Design Map



Source: Southern Palladium Scoping Study 31 January 2024

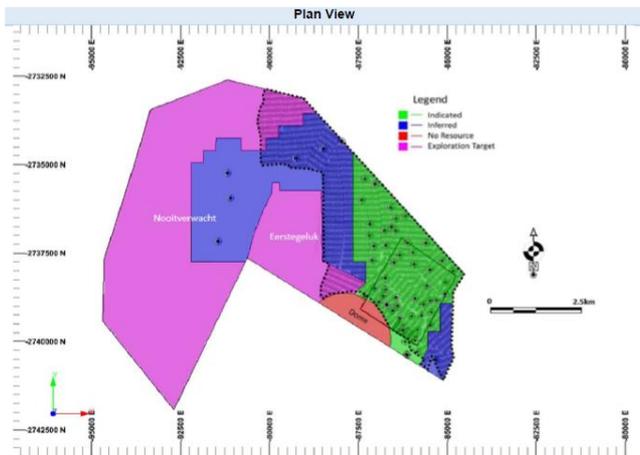
Accessing More Than Resources

The LOM plans seek to exploit ore classified as inferred and inferred plus an exploration target area beyond the limits of the current drilling program.

The life-of-mine (LOM) plans seek to exploit ore classified as indicated and inferred plus an exploration target area beyond the limits of the current drilling program. Indicated represents 54% of the plan with inferred at 38% and exploration at 8%.

At this stage the Eerstegeluk block has the greatest density of drilling and contains all the indicated resource, while the Nooitverwacht block is less explored.

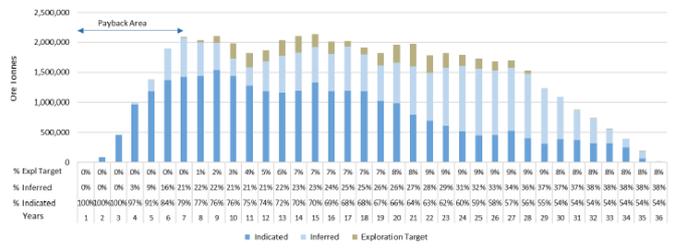
Fig 29: Mining Area Mineral Resource Category



Source: Southern Palladium Scoping Study 31 January 2024

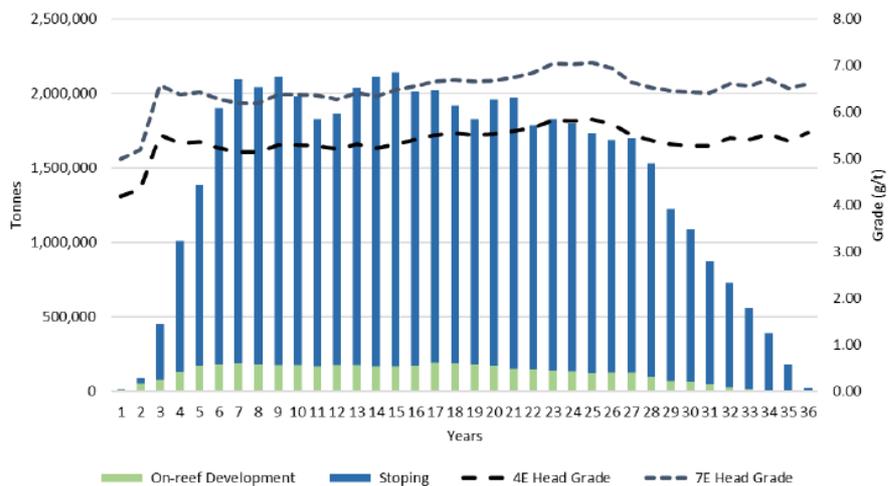
Fig 30: Mineral Resource Contribution

Mining Inventory	Tonnes (Mt)	Grade 4E (g/t)	Grade 7E (g/t)	Content 4E (Moz)	Content 7E (Moz)	Contribution %
Indicated	28.04	5.36	6.47	4.84	5.83	54%
Inferred	19.69	5.50	6.60	3.48	4.22	38%
Exploration	4.17	5.43	6.59	0.72	0.88	8%
TOTAL	51.90	5.42	6.55	9.04	10.93	100%



Source: Southern Palladium Scoping Study 31 January 2024

Fig 31: Bengwenyama Mined Ore & Grade Profile



Source: Southern Palladium Scoping Study 31 January 2024

The current design for the planned process plant is based on a conventional flow sheet to obtain a concentrate which contains marketable 7E PGM.

The plant has a design capacity of 200kt/mth (2.4Mtpa) while a feed rate of 170kt/mth (2Mtpa) was used in the Scoping Study.

GMR mining, throughput and grade profiles are simplified from the Scoping Study.

Bengwenyama Processing Plans

The current design for the planned process plant is based on a conventional MF2 (2 x mill float) flow sheet consisting of primary and secondary milling and flotation, with a processing route to obtain a concentrate which contains a marketable content of 7E PGM. A chrome concentrate will be produced using conventional spirals and sold separately.

The plant infrastructure is expected to be developed near the "Dome" area of the Eerstegeluk 327 KT farm with the first mine decline portal accessing UG2 ore in the "Payback" area followed by the second nearby decline to access the UG2 in the Northern Horst Block.

The process plant has a design capacity of 200kt/mth (2.4Mtpa) while a feed rate of 170kt/mth (2Mtpa) was used in the Scoping Study.

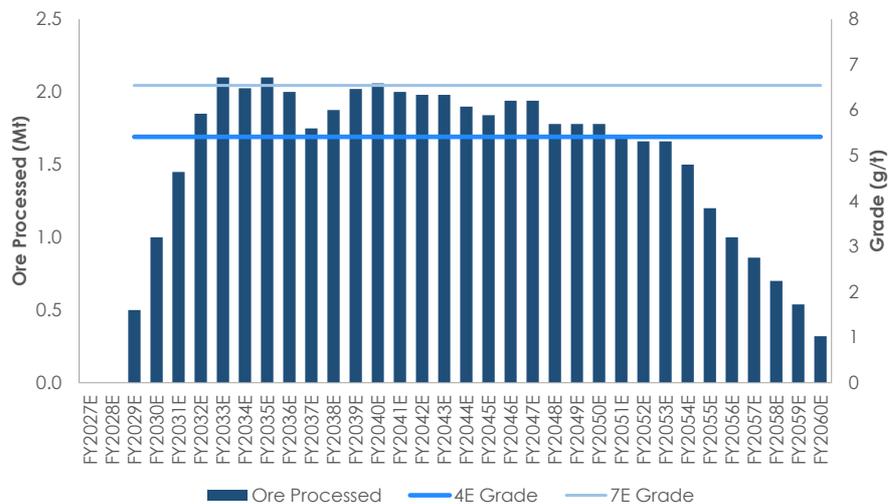
SPD plan to truck the concentrate product to Rustenburg (415km by road) for smelting which is where most of the concentrate from Eastern and Western Limb is processed. The Chrome ore concentrate is assumed (in the Scoping Study) to be trucked to either Maputo (400km away) or Durban (740km) ports and sold on the open export market, although local smelters may be available for treatment.

GMR mining, throughput and grade profiles are simplified from the Scoping Study assumptions in the absence of more precise annual mining/processing data.

Fig 32: GMR Throughput and Grade Assumptions

Commodity	Recovery	Payable
Platinum	85%	86%
Palladium	85%	86%
Rhodium	85%	86%
Gold	85%	86%
Ruthenium	71%	55%
Iridium	75%	45%
Osmium	75%	0%
Copper	75%	68%
Nickel	35%	73%
Chrome	15%	100%

Southern Palladium Scoping Study 31Jan 2024



Source: Global Mining Research

Capital Cost Assumptions

The Scoping Study provides details of the capital expenditure.

The Scoping Study provides details of the capital expenditure for the development and operation of the Bengwenyama project based on Initial Capital for years zero to three at R7.7B (including R1.1B contingencies) plus Ongoing Capital incurred after year three (first production) at R2.0B (including R0.2B contingencies) for a sub-total of R9.7B (R1.4B including contingencies).

Stay in business (or sustaining) capital is estimated at R7.7B which equates to nearly R150/tonne of ore.

initial Capital for years zero to three at R7.7B (including R1.1B contingencies) ...

...plus Ongoing Capital incurred after year three (first production) at R2.0B (including R0.2B contingencies) ...

for a sub-total of R9.7B (R1.4B including contingencies)

Stay in business (or sustaining) capital is estimated at R7.7B.

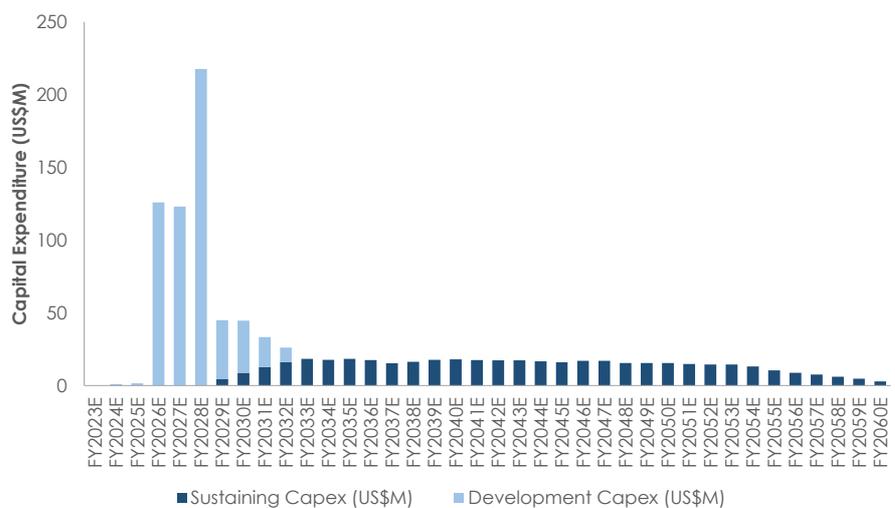
Fig 33: Bengwenyama Project Capital Expenditure

Capital Expenditure	ZAR Million	USD Million
Initial Capital		
Direct Mining Capital	1,408	75
Capitalised Development	973	52
Plant Capital	1,872	99
TSF Capital	435	23
Shared Infrastructure Capital	1,848	98
Contingency	1,161	62
Total Initial Capital	7,697	408
Ongoing Capital		
Direct Mining Capital	181	10
Capitalised Development	897	48
Plant Capital	0	0
TSF Capital	676	36
Ongoing Direct Capital	0	0
Contingency	216	11
Total Ongoing Capital	1,970	104
Stay-in-Business Capital		
Stay in Business Mining Capital	6,377	338
Stay in Business Plant Capital	1,285	68
Total Stay-in-Business Capital	7,662	406

ZAR18.9=US\$1.00

Source: Southern Palladium Scoping Study 31 January 2024

Fig 34: GMR Capital Expenditure Profile



Source: Global Mining Research

Operating Cost Assumptions

The Scoping Study LOM operating costs are estimated at R2,335/t including R1,585/t mining of the UG2 ore plus R320/t milling/processing plus R430/t for administration. The cost assumptions appear conservative compared with other Eastern Limb PGM mines.

Additional costs include royalty and refining costs. The South African royalty for unrefined metal stands at 6% for PGMs, 4% for copper and nickel and 3% for gold. Those royalty rates halve for refined metal.

Fig 35: Bengwenyama Operating Cost Summary

The LOM operating costs are estimated at R2,335/t including:

+R1,585/t mining of the UG2 ore
+R320/t milling/processing
+R430/t for administration.

Operating Costs	Unit	ZAR	USD
Mining Costs			
Fixed Costs	Cost('000)/Month	1,513	80
Stoping	Cost per t	1,513	80
Raise Development	Cost per m	14,881	789
Haulage Development	Cost per m	29,537	1,565
Decline Development	Cost per m	40,169	2,129
ASG Development	Cost per m	12,341	654
Fleet Lease*	Cost per Ore t	62	3.3
Other Mining	Cost per Ore t	5.7	0.3
Processing Costs			
Fixed Costs	Cost('000)/Month	8,555	453
Variable Costs	Cost per Ore t	238	13
Technical & Shared Services			
Overheads Fixed Costs	Cost('000)/Month	4,093	217
Engineering Fixed Costs	Cost('000)/Month	7,634	405
Variable Costs	Cost per Ore t	98	5.2
Regulatory Costs			
	Cost('000)/Month	61,855	3,278
Sales			
PGM Conc. Transport	Cost/Conc. t	924	49
Chrome Conc. Logistics	Cost/Conc. t	1,393	74
Chrome Conc. Selling Costs	% of Cr Revenue	5%	5%
Total Corporate Costs	Cost('000)/Month	2,000	106

* Fleet lease cost scheduled over 11 years

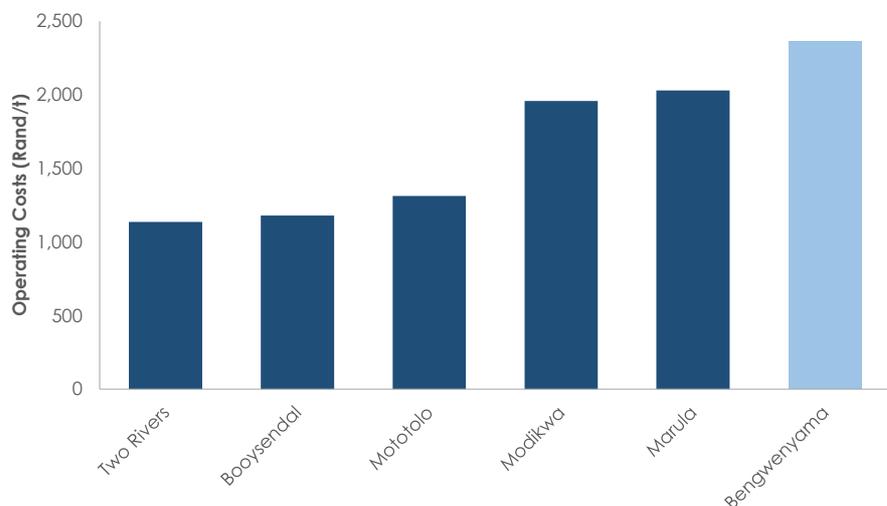
ZAR18.9=US\$1.00

Operating Costs	Unit	ZAR	USD
Mining	Cost per Milled t	1,585	84
Processing	Cost per Milled t	320	17
Other	Cost per Milled t	413	22
Off-mine Overheads	Cost per Milled t	17	1
Total	Cost per Milled t	2,335	124

Source: Southern Palladium Scoping Study 31 January 2024

Fig 36: Eastern Limb PGM Mine Operating Costs

The cost assumptions appear conservative compared with other Eastern Limb PGM mines.



Source: Global Mining Research

Eastern Limb Mine Benchmarking

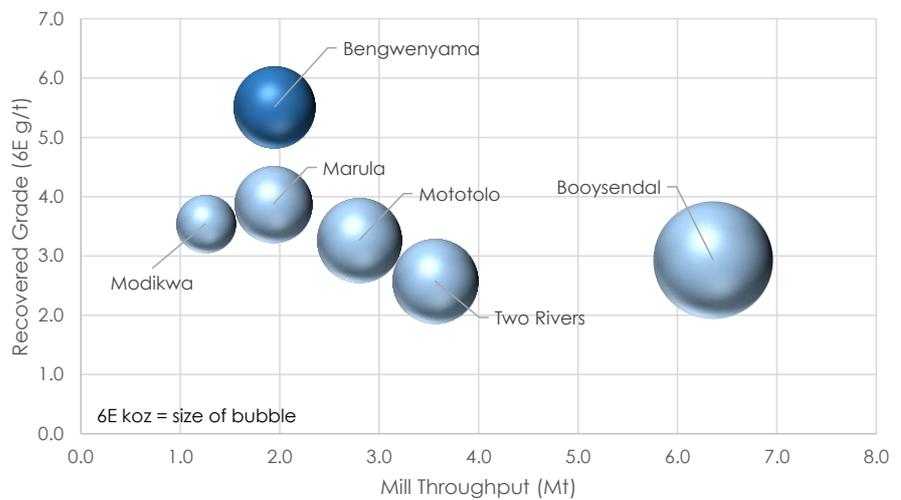
Operating PGM mines on the Eastern Bushveld include Mototolo, Modikwa, Marula, Two Rivers, and Booyendal that can be benchmarked against Bengwenyama for mining comparisons.

Bengwenyama is at the smaller end of the spectrum for mine throughput at 2Mtpa, but better assumed grades (based on 70% of resource estimates) yield higher production than most at lower AISC on a 6E basis.

Bengwenyama is at the smaller end of the spectrum for mine throughput at 2Mtpa, ...

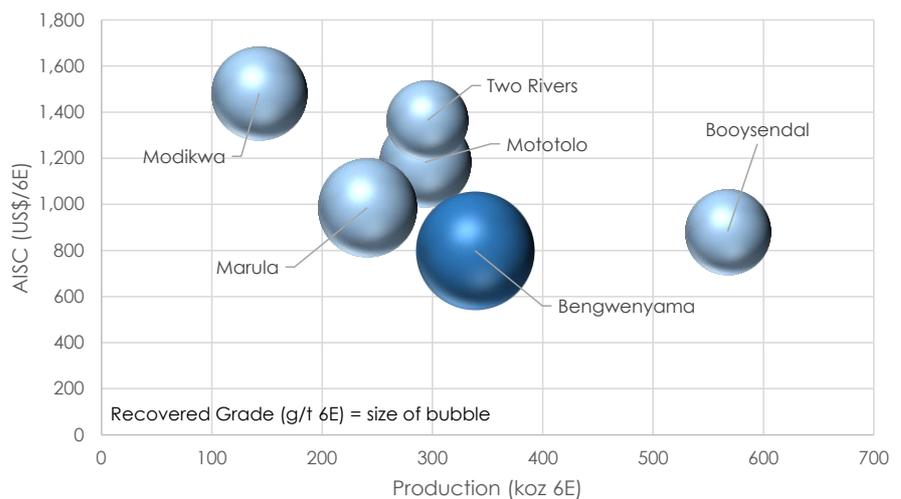
...but better assumed grades yield higher production than most at lower AISC on a 6E basis

Fig 37: Eastern Limb PGM Throughput Versus Grade Versus Production



Source: Global Mining Research. Using FY2023 for Eastern Limb mines & FY2032 for Bengwenyama.

Fig 38: Eastern Limb PGM Production Versus AISC Versus Grade



Source: Global Mining Research. Using FY2023 for Eastern Limb mines & FY2032 for Bengwenyama.

Positioned Favourably On The PGM Cost Curve

Bengwenyama compares favourably with the existing Eastern Limb PGM mines in terms of 4E grade and operating costs.

The Scoping Study estimates for Bengwenyama position the project favourably compared with the existing Eastern Limb PGM mines in terms of 4E grade and operating costs.

Southern Palladium provided a global PGM cost curve in the Scoping Study that highlights the assumed low-cost position of Bengwenyama when compared with operating PGM mines around the world.

Fig 39: Eastern Limb PGM Mine Benchmarks For FY2023 Versus Bengwenyama FY2032E

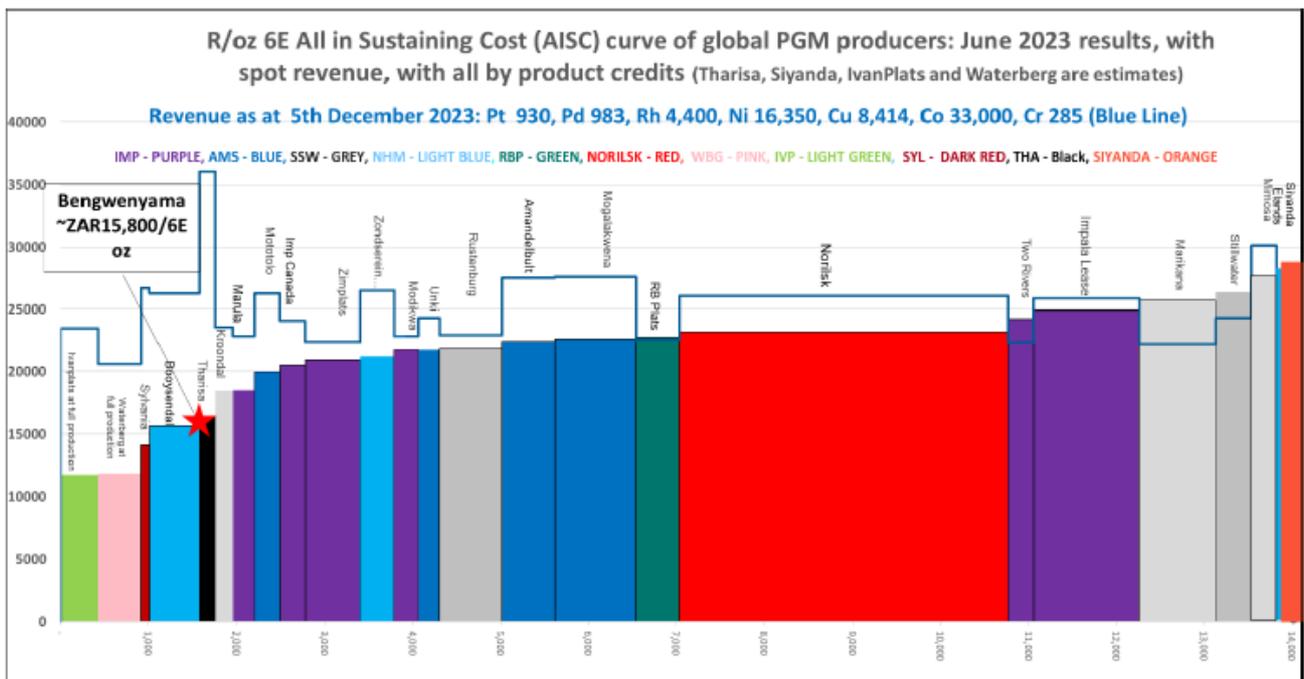
Commodity	Recovery	Payable	Grade	4E Prill	6E Prill
Platinum	85%	86%	3.42	45%	41%
Palladium	85%	86%	3.47	44%	40%
Rhodium	85%	86%	0.76	10%	9%
Gold	85%	86%	0.11	1%	1%
Ruthenium	71%	55%	1.25		8%
Iridium	75%	45%	0.26		1%
Osmium	75%	0%	0.17		
Copper	75%	68%	0.04%		
Nickel	35%	73%	0.16%		
Chrome	15%	100%	29.56%		

Southern Palladium Scoping Study 31 Jan 2024 & GMR Prill Calculations Using Spot

		YE June 2023					FY2033E Project
		Mototolo	Modikwa	Marula	Two Rivers	Booyendal	
Mill Throughput	Mtpa	2.8	1.3	1.9	3.6	6.4	2.1
Grade	6E g/t	3.3	3.5	3.9	2.6	2.9	5.5
Production	6E koz	293	143	241	295	568	360
Opex	R/t milled	1,313	1,958	2,030	1,136	1,179	2,298
TCC	R/oz 6E	14,639	19,299	16,303	13,974	13,880	12,326
AISC	R/oz 6E	20,903	26,140	17,423	24,130	15,684	13,190
Net Revenue	RM	9,760	2,227	6,851	7,897	19,240	8,374
EBITDA	RM	4,952	2,608	3,046	3,030	9,381	3,437
Basket Price	US\$/PGM	2,130	2,261	1,813	1,716	1,722	1,571
ZAR/USD		17.7	17.7	17.7	17.7	17.8	17.0

Source: Global Mining Research. Note different ZAR/USD assumption for Bengwenyama versus FY2023.

Fig 40: Global Platinum Group Metals Cost Curve 2023



Source: Southern Palladium Scoping Study 31 January 2024

Board and Key Management

R.Baxter (Non-Exec Chair)
 previously CEO of the Minerals
 Council of South Africa.

Roger Baxtor (Non-Executive Chairman) – Recently joined the board as non-executive director. Roger was the previously the CEO of the Minerals Council of South Africa retiring in 2023. He was a founding director of the World Platinum Investment Council and remains the Chairman. Roger holds a Bachelor of Commerce.

J.Odendaal (MD) also CEO of MUM.

Johan Odendaal (Managing Director) – Johan joined the company in mid-2021 and has over 30 years of experience in the mining and finance industry. A geologist by training, Johan has worked as a mining consultant and financial analyst for most of his career. He is also the CEO of MUM.

M.Stirzaker (NED) mining finance background.

Mike Stirzaker (Non-Executive Director) – Mike joined the company in late 2020, he is a chartered accountant by training with over 40 years of experience. His career has focused on mining finance and investment including as joint Managing Director of RFC Group, Finance Director of Finders Resources and partner at Pacific Road. He holds a number of other board positions.

D.van Heerden (NED) also head of mining engineering at Minxcon.

Daniel van Heerden (Non-Executive Director) – Daan is mining engineer with over 30 years industry experience both in South Africa and overseas. He is currently the head of Mining Engineering at Minxcon (who conducted the scoping study). Daan joined the company in mid-2021.

R.Thomas (NED) mining engineering background.

Rob Thomson (Non-Executive Director) – Rob joined Southern Palladiums board in late 2020. He is a mining engineer with over 40 years' experience across gold and base metals having worked in South Africa and Asia. He holds a number of other board positions.

G.Hiller (NED) engineering background.

Geoff Hiller (Non-Executive Director) – Geoff also joined Southern Palladiums board in late 2020. He is a mining / civil engineer with over 25 years' experience in the mining sector. He holds a number of other board positions in listed mining companies.

Capital Structure

SPD has 89.8M shares on issue.

Southern Palladium has 89.8M ordinary shares on issue.

In addition, there are unlisted options (Series A & B totalling ~3.7M options with strike price of A\$0.875 expiring May 2026) and 1.2M performance rights (expiring over June 2026).

Nicolas Daniel Resources is the largest shareholder at 14.1% followed by B-BBEE group Nurinox at 9.3%.

Regal Funds Management is the key institution on the share register with an 6.55% interest.

Appendix – SPD Financial Summary – GMR Prices

Fig 41: SPD Financial Summary, Using GMR Prices

Southern Palladium (SPD)		Global MINING RESEARCH					
Recommendation	N/A	Analyst David Radclyffe					
As at 27-Feb-24							
Year End	June						
Share Price	\$0.27 US\$/share	\$0.42 A\$/share					
Target Price	N/A US\$/share	N/A A\$/share					
Net Present Value	10% \$1.79 US\$/share	\$2.73 A\$/share					
	0% \$18.47 US\$/share	\$28.24 A\$/share					
Market Cap	25 US\$M						
Ordinary Shares	90 M						
Options & Warrants	0 M						

CASH FLOW ANALYSIS - A\$M						
(June Year End)	2023A	2024E	2025E	2026E	2027E	2028E
Cash Flows From Operating Activities						
Receipts From Customers	0	(0)	(0)	(0)	(0)	(0)
Payments To Suppliers	(2)	(1)	(1)	(1)	(1)	(1)
Other	1	(0)	(2)	(13)	(24)	(38)
Cash Flows From Investing Activities						
Acq. of Property, Plant and Equip.	0	(3)	(2)	(168)	(171)	(302)
Disposals	0	(0)	(0)	(0)	(0)	(0)
Other	(5)	(0)	(0)	(0)	(0)	(0)
Cash Flows From Financing Activities						
Proceeds From Borrowings	0	0	190	200	300	100
Repayment of Borrowings	0	5	0	0	0	0
Other	0	0	0	0	0	0
Net Increase In Cash Held						
Cash At Beginning of Year	18	12	12	196	214	318
Cash At End of Year	12	12	196	214	318	76

PRICE ASSUMPTIONS - LINKED PRICES						
(June Year End)	2023A	2024E	2025E	2026E	2027E	2028E
Exchange Rate A\$/US\$	0.67	0.66	0.73	0.75	0.72	0.72
Exchange Rate ZAR/US\$	17.77	18.35	17.50	17.00	17.00	17.00
Gold US\$/oz	1,831	1,938	1,800	1,725	1,652	1,660
Platinum US\$/oz	974	1,036	1,150	1,150	1,176	1,182
Palladium US\$/oz	1,744	1,084	1,350	1,450	1,402	1,409
Copper US\$/lb	3.76	3.85	4.18	4.23	4.27	4.33
Nickel US\$/lb	10.86	8.26	8.60	9.20	9.23	9.37

FINANCIAL SUMMARY						
(June Year End)	2023A	2024E	2025E	2026E	2027E	2028E
NPAT (pre-Abs) (A\$M)	-7	-1	-3	-12	-23	-37
Adj. EPS (A\$/share)	-0.08	-0.01	-0.03	-0.14	-0.26	-0.41
PER (x)	50.0x	50.0x	50.0x	50.0x	50.0x	50.0x
EBITDA (A\$M)	-1	-1	-1	-1	-1	-1
EBITDA/share (A\$/share)	-0.01	-0.01	-0.02	-0.02	-0.02	-0.02
EV/EBITDA (x)	50.0x	50.0x	50.0x	50.0x	50.0x	50.0x
Cash Gen/share (A\$/share)	-0.01	-0.02	-0.04	-0.16	-0.29	-0.44
P/Cash Gen (x)	-30.0x	-27.0x	50.0x	50.0x	50.0x	50.0x
FCF Yield (%)	-17%	-12%	-15%	-484%	-521%	-906%
Dividend (A\$/share)	0.00	0.00	0.00	0.00	0.00	0.00
Dividend Yield (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Ordinary Shares (M)	89.8	89.8	89.8	89.8	89.8	89.8

PROFIT AND LOSS STATEMENT - A\$M						
(June Year End)	2023A	2024E	2025E	2026E	2027E	2028E
Operating Revenue	0	-0	-0	-0	-0	-0
Other Revenue	0	0	0	0	0	0
Operating Costs	-1	-1	-1	-1	-1	-1
Other Costs	0	0	0	0	0	0
EBITDA	-1	-1	-1	-1	-1	-1
Depreciation	-0	-0	-0	-0	-0	-0
EBIT	-1	-1	-1	-1	-1	-1
Share of Equity Profit	-1	0	0	0	0	0
Interest	-5	0	-3	-16	-32	-51
Pretax Profit	-7	-1	-4	-18	-33	-52
Tax on Recurring Income	0	0	1	5	10	16
Profit After Tax	-7	-1	-3	-12	-23	-37
Minority interests	0	0	0	0	0	0
Adjusted Profit	-7	-1	-3	-12	-23	-37
Non Recurring Items	0	0	0	0	0	0
NPAT	-7	-1	-3	-12	-23	-37
EPS	-0.08	-0.01	-0.03	-0.14	-0.26	-0.41

PRODUCTION - Bengwenyama						
	2023A	2024E	2025E	2026E	2027E	2028E
Platinum - koz	0	0	0	0	0	0
Palladium - koz	0	0	0	0	0	0
Rhodium - koz	0	0	0	0	0	0
Gold - koz	0	0	0	0	0	0
Nickel - kt	0	0	0	0	0	0
Copper - kt	0	0	0	0	0	0
Chrome-kt	0	0	0	0	0	0
3PGE + Au - koz	0	0	0	0	0	0
3PGE+ Au COSTS - US\$/oz						
By-Product	0	0	0	0	0	0
AISC	0	0	0	0	0	0
AIC	0	0	0	0	0	0

RESERVES/RESOURCES						
Southern Palladium (SPD)	4E Oz (Millions)	Mine Life (Years)	EV/oz (US\$/oz)			
Published 4E Reserves	0.0	NA	0			
Published 4E Resources	22.5	#DIV/0!	1			
GMR 4E Questimate	8.0	#DIV/0!	2			
DIVISIONAL EBIT - A\$M						
Bengwenyama	0	0	0	0	0	0
Other	-1	-1	-1	-1	-1	-1
EBIT	-1	-1	-1	-1	-1	-1

NET PRESENT VALUE		
	10% NPV A\$M	/ share
Bengwenyama (70)	244	2.71
Corporate	-7	-0.08
Exploration	0	0.00
Investments	0	0.00
Net Cash	8	0.09
Options & Warrants	0	0.00
Total NPV	245	2.73
P/PNV		0.15x

Source: Global Mining Research

Appendix – SPD Financial Summary – Spot Prices

Fig 42: SPD Financial Summary, Using Spot Prices

Southern Palladium (SPD)		Global MINING RESEARCH					
Recommendation	N/A	Analyst David Radclyffe					
As at	5-Feb-24						
Year End	June						
Share Price	\$0.23 US\$/share	\$0.36 A\$/share					
Target Price	N/A US\$/share	N/A A\$/share					
Net Present Value	10% \$0.05 US\$/share	\$0.08 A\$/share					
	0% \$8.50 US\$/share	\$13.04 A\$/share					
Market Cap	21 US\$M						
Ordinary Shares	90 M						
Options & Warrants	0 M						

CASH FLOW ANALYSIS - A\$M						
(June Year End)	2023A	2024E	2025E	2026E	2027E	2028E
Cash Flows From Operating Activities						
Receipts From Customers	0	(0)	(0)	(0)	(0)	(0)
Payments To Suppliers	(2)	(1)	(1)	(1)	(1)	(1)
Other	1	(0)	(2)	(13)	(24)	(38)
Cash Flows From Investing Activities						
Acq.of Property, Plant and Equip.	0	(5)	(6)	(170)	(166)	(284)
Disposals	0	(0)	(0)	(0)	(0)	(0)
Other	(5)	(0)	(0)	(0)	(0)	(0)
Cash Flows From Financing Activities						
Proceeds From Borrowings	0	0	190	200	300	100
Repayment of Borrowings	0	5	0	0	0	0
Other	0	0	0	0	0	0
Net Increase in Cash Held						
Cash At Beginning of Year	18	12	10	190	206	314
Cash At End of Year	12	10	190	206	314	90

PRICE ASSUMPTIONS - LINKED PRICES						
(June Year End)	2023A	2024E	2025E	2026E	2027E	2028E
Exchange Rate A\$/US\$	0.67	0.65	0.65	0.65	0.65	0.65
Exchange Rate ZAR/US\$	17.77	18.80	18.90	18.90	18.90	18.90
Gold US\$/oz	1,831	1,994	2,036	2,036	2,036	2,036
Platinum US\$/oz	974	907	894	894	894	894
Palladium US\$/oz	1,744	1,057	946	946	946	946
Copper US\$/lb	3.76	3.78	3.81	3.81	3.81	3.81
Nickel US\$/lb	10.86	7.92	7.32	7.32	7.32	7.32

FINANCIAL SUMMARY						
(June Year End)	2023A	2024E	2025E	2026E	2027E	2028E
NPAT (pre-Abs) (A\$M)	-7	-1	-3	-12	-23	-36
Adj. EPS (A\$/share)	-0.08	-0.01	-0.03	-0.14	-0.26	-0.41
PER (x)	50.0x	50.0x	50.0x	50.0x	50.0x	50.0x
EBITDA (A\$M)	-1	-1	-1	-1	-1	-1
EBITDA/share (A\$/share)	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
EV/EBITDA (x)	50.0x	50.0x	50.0x	50.0x	50.0x	50.0x
Cash Gen/share (A\$/share)	-0.01	-0.02	-0.04	0.16	-0.29	-0.43
P/Cash Gen (x)	-30.0x	-23.4x	50.0x	50.0x	50.0x	50.0x
FCF Yield (%)	-20%	-21%	-30%	-580%	-603%	-1014%
Dividend (A\$/share)	0.00	0.00	0.00	0.00	0.00	0.00
Dividend Yield (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Ordinary Shares (M)	89.8	89.8	89.8	89.8	89.8	89.8

PROFIT AND LOSS STATEMENT - A\$M						
(June Year End)	2023A	2024E	2025E	2026E	2027E	2028E
Operating Revenue	0	-0	-0	-0	-0	-0
Other Revenue	0	0	0	0	0	0
Operating Costs	-1	-1	-1	-1	-1	-1
Other Costs	0	0	0	0	0	0
EBITDA	-1	-1	-1	-1	-1	-1
Depreciation	-0	-0	-0	-0	-0	-0
EBIT	-1	-1	-1	-1	-1	-1
Share of Equity Profit	-1	0	0	0	0	0
Interest	-5	0	-3	-16	-32	-51
Pretax Profit	-7	-1	-4	-17	-33	-52
Tax on Recurring Income	0	0	1	5	10	16
Profit After Tax	-7	-1	-3	-12	-23	-36
Minority interests	0	0	0	0	0	0
Adjusted Profit	-7	-1	-3	-12	-23	-36
Non Recurring Items	0	0	0	0	0	0
NPAT	-7	-1	-3	-12	-23	-36
EPS	-0.08	-0.01	-0.03	-0.14	-0.26	-0.41

PRODUCTION - Bengwenyama						
	2023A	2024E	2025E	2026E	2027E	2028E
Platinum - koz	0	0	0	0	0	0
Palladium - koz	0	0	0	0	0	0
Rhodium - koz	0	0	0	0	0	0
Gold - koz	0	0	0	0	0	0
Nickel - kt	0	0	0	0	0	0
Copper - kt	0	0	0	0	0	0
Chrome-kt	0	0	0	0	0	0
3PGE + Au - koz	0	0	0	0	0	0
3PGE+ Au COSTS - US\$/oz						
By-Product	0	0	0	0	0	0
AISC	0	0	0	0	0	0
AIC	0	0	0	0	0	0

RESERVES/RESOURCES						
Southern Palladium (SPD)	4E Oz (Millions)	Mine Life (Years)	EV/oz (US\$/oz)			
Published 4E Reserves	0.0	NA	0			
Published 4E Resources	22.5	#DIV/0!	1			
GMR 4E Questimate	8.0	#DIV/0!	2			
DIVISIONAL EBIT - A\$M						
	2023A	2024E	2025E	2026E	2027E	2028E
Bengwenyama	0	0	0	0	0	0
Other	-1	-1	-1	-1	-1	-1
EBIT	-1	-1	-1	-1	-1	-1

NET PRESENT VALUE		10% NPV A\$M / share
Bengwenyama (70)	5	0.05
Corporate	-6	-0.07
Exploration	0	0.00
Investments	0	0.00
Net Cash	8	0.09
Options & Warrants	0	0.00
Total NPV	7	0.08
P/PNV		4.64x

Source: Global Mining Research

Appendix – Commodity Price Assumptions

Fig 43: GMR Commodity Price Assumptions

	GMR Calendar Year Assumptions															
	Spot		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	
	Spot	Spot +10%														
Precious Metals																
Gold	US\$/oz	2,029	2,231	1,943	1,888	1,750	1,675	1,656	1,664	1,673	1,681	1,690	1,707	1,715	1,724	
Platinum	US\$/oz	877	964	967	1,150	1,163	1,179	1,185	1,191	1,197	1,203	1,209	1,215	1,221	1,227	
Palladium	US\$/oz	954	1,049	1,329	1,100	1,500	1,400	1,412	1,419	1,426	1,434	1,441	1,448	1,455	1,463	
Rhodium	US\$/oz	4,475	4,923	6,631	4,500	4,400	4,417	4,439	4,461	4,483	4,506	4,528	4,551	4,574	4,597	
Ruthenium	US\$/oz	440	484	465	413	400	403	405	407	409	411	413	415	417	419	
Iridium	US\$/oz	5,000	5,500	4,681	4,250	4,000	4,015	4,035	4,055	4,076	4,096	4,117	4,137	4,158	4,179	
Base Metals																
Copper	US\$/lb	3.80	4.18	3.85	4.05	4.20	4.25	4.30	4.36	4.43	4.50	4.56	4.63	4.70	4.77	4.84
Nickel	US\$/lb	7.71	8.48	9.75	8.00	9.20	9.20	9.30	9.44	9.59	9.73	9.88	10.03	10.18	10.33	10.49
Chrome	US\$/lb	0.09	0.10	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Foreign Exchange																
AUD/USD		0.65		0.66	0.69	0.75	0.74	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
USD/ZAR		19.32		18.46	18.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00

Source: Global Mining Research

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Contact Global Mining Research

Australia

Global Mining Research Pty Ltd
Suite 10, 340 Darling Street, Balmain, NSW 2041
P: +61 2 9810 7330
E: contact@globalminingresearch.com

United Kingdom

Global Mining Research Pty Ltd
Suite 10, 340 Darling Street, Balmain, NSW 2041
P: +61 2 9810 7330
E: contact@globalminingresearch.com