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#### London Platinum Week Presentation

**Southern Palladium Limited** (ASX Code: SPD and JSE Code: SDL) releases the Company's Investor Presentation for London Platinum Week 2024.

Authorised by the Managing Director.

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About Southern Palladium:

Southern Palladium Limited (ASX:SPD, JSE:SDL) is a dual-listed platinum group metal (PGM) company developing the advanced Bengwenyama PGM project, particularly rich in palladium/rhodium, in South Africa. The project is located on the Eastern Limb of the Bushveld Complex, which contains more than 70% of the world's known Platinum Group Metal (PGM) Resources.

The Company, holding a 70% stake in the project, will primarily concentrate on delivering a Pre-Feasibility study. Additionally, following the completion of a geophysical survey conducted in 2022 and the September 2023 submission of the Mining Right application, they will oversee the completion of the diamond drill programme initiated in August 2022, along with several other concurrent technical studies.

Bengwenyama presents a substantial opportunity in the global PGM market. Previous exploration efforts have already yielded a JORC 2012-compliant Inferred Mineral Resource of 25.12Moz within two ore horizons—the UG2 chromitite and Merensky Reef, achieved in 2023.

Southern Palladium Limited ACN 646 391 899 Level 1, 283 George Street, Sydney NSW 2000 Australia Moreover, an assessment conducted by mining industry consultants CSA Global in 2021, has identified a significant exploration target beyond the currently explored area. The Company is led by a seasoned on-ground management team, including some of South Africa's most distinguished mining industry executives.

#### JORC Compliance Statement

The information is extracted from the report entitled "Bengwenyama drilling and PFS progress update: Combined PGE Mineral Resource now totals 25.1Moz (7E basis)' created on 10 July 2023 and is available to view on <u>www.southernpalladium.com</u>. The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.





#### BENGWENYAMA PROJECT UPDATE THE NEXT SIGNIFICANT PGM PRODUCER ON THE EASTERN LIMB

INVESTOR PRESENTATION – LONDON PLATINUM WEEK 2024 | ASX: SPD | JSE: SDL

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#### SOUTHERN PALLADIUM OUR PURPOSE – CREATE SHARED VALUE THROUGH COOPERATIVE PARTNERSHIP

#### **Create Stakeholder Value**



- Timely and efficient delivery of a significant new mine
- Environmental Responsibility
- Uphold the highest safety standards.

#### THE BENGWENYAMA PROJECT

PGM project in the heart of the Eastern Limb of the Bushveld Complex adjacent to Tier 1 Operations

#### **Boosting South Africa's resources economy**



- Community Based Partnership
- 4,000 jobs to be created with a 5x Multiplier effect
- ~ USD2bn in tax and royalties over LoM



Bushveld projects

### BENGWENYAMA PROJECT KEY FEATURES KEY OUTCOMES FROM THE INDEPENDENT MINXCON SCOPING STUDY:

- +30-year mine life averaging 330,000 ozpa PGM (6E) from the UG2 Reef
- Total mining inventory of 10.9Moz. 54% (5.8Moz) at Indicated
  status
- Low capital intensity (US\$403m Peak funding requirement)
- First quartile cash costs (US\$717/oz) assisted by:
  - High orebody grade (6.55g/t, 7E)
  - Shallow intersect of the orebody (100-500m)
  - Proximity of water, power, skilled workforce
- Conventional hybrid mining methods proposed
- Conventional processing plant: metallurgy typical of Eastern
   Limb UG2
  - Likely sale of `180g/t concentrate to third party smelters.
     Chrome to be exported.
- Additional UG2 resource potential. No value attributed to Merensky Reef (9.5Moz)

Note: \*6E – Platinum, Palladium, Rhodium, Ruthenium, Iridium + Au 7E – Includes Osmium

#### Total Merensky Reef and UG2 Reef Resource: 26.22 Moz (7E)





#### **BENGWENYAMA: CONCEPTUAL LAYOUT OF MINE SITE** HYBRID MINING – CONVENTIONAL STOPING WITH MECHANISED DEVELOPMENT 2 MILLION TONNES PER YEAR AT FULL PRODUCTION RATE



# **BENGWENYAMA: PLANT LAYOUT**

#### **CONVENTIONAL MF2 PLANT DELIVERING 85% RECOVERIES**



#### BENGWENYAMA: SMELTER AND REFINERS WELL-ESTABLISHED DOWNSTREAM REFINING PROCESS FOR PGM CONCENTRATE WITHIN SOUTH AFRICA



## **BENGWENYAMA KEY PROJECT RESULTS**



#### MINING INVENTORY TOTALS 11 MILLION OUNCES AT 6.55G/T (7E)

Mining Inventory	Tonnes	Tonnes Grade 4E		Content 4E	Content 7E	Contribution	
	Mt	g/t	g/t	Koz	Koz	%	
Indicated	28.04	5.36	6.47	4,837	5,830	54%	
Inferred	19.69	5.50	6.66	3,481	4,215	38%	
Exploration Target	4.17	5.43	6.59	724	883	8%	
Total	51.90	5.42	6.55	9,042	10,928	100%	





- ~ 79% of the tonnes in the payback period in the Indicated Mineral Resource category with the remainder in inferred.
- There is still a total of 4.8 Moz 7E indicated (~80% of the indicated mining inventory) in the mine plan after the payback period.

Source: Minxcon Scoping Study Update, February 2024



### **BENGWENYAMA KEY PROJECT RESULTS**

### 330KOZ PGM PER YEAR AT US\$771/OZ. NPV<sub>8</sub> OF US\$700M POST TAX

#### 2 Mtpa UG2 Reef

PGM Concentrate (LOM avg) 50 Kt p.a. @ 2.5% mass pull

**Annual production (LOM avg) 330 Koz p.a. 6E** 130 Koz p.a. Pt 125 Koz p.a. Pd 27 Koz p.a. Rh 4 Koz p.a. Au + Ru, Ir, Ni, Cu **Chrome Conc.** 140 Kt p.a. **Peak Funding Requirement** 

US\$403 million (incl. ~15% contingency)

EBITDA (LOM avg) US\$200 million pa

Free cashflow (post-tax) US\$135 million p.a.

Costs (LOM avg) Cash Costs – US\$717/ 6E oz AISC – US\$836/ 6E oz NPV<sub>8%</sub> (post-tax) US\$700 million \* IRR (post-tax) 21%

Payback period 4.5 years (from start of plant production)

**EBITDA margin** 43%



### **BENGWENYAMA PROJECT SENSITIVITIES**



#### A 10% UPLIFT IN PGM PRICES DRIVES A 30% INCREASE IN NPV<sub>8</sub> TO +US\$900M

Change in 6E PGM Price	-10%	-5%	Base	+5%	+10%
Pt Price (USD/oz)	1,080	1,140	1,200	1,260	1,320
Pd Price (USD/oz)	990	1,045	1,100	1,155	1,210
Rhodium Price (USD/oz)	4,500	4,750	5,000	5,250	5,500
Gold Price (USD/oz)	1,620	1,710	1,800	1,890	1,980
Ruthenium (USD/oz)	423	447	470	494	517
Iridium (USD/oz)	4,500	4,750	5,000	5,250	5,500
Basket PGM 6E Price (USD/oz)	1,345	1,420	1,495	1,570	1,644
NPV8% - Pre-Tax (USDm)	744	894	1,043	1,193	1,342
IRR – Pre-Tax (%)	20%	22%	24%	25%	27%
NPV8% - Post Tax (USDm)	486	592	698	803	908
IRR - Post Tax (%)	17%	19%	21%	22%	24%
Payback Period (From Start of Plant Production)	5.3	4.9	4.5	4.2	4.0
Project Cashflow - Post Tax	2,432	2,782	3,132	3,482	3,832

# **BENGWENYAMA:** NEARLY 90% OF REVENUES DRIVEN BY PLATINUM, PALLADIUM, RHODIUM AND A CHROME BY-PRODUCT





"The Bengwenyama project does not require nickel and copper credits to be economic" Basket Price: USD1382/6E Oz



## **BENGWENYAMA: IT'S ALL ABOUT THE GRADE**



Company	Mine/Project	Tonnes Milled	Grade 4E	Production 4E p.a	AISC	AISC
		Mtpa	g/t	kozpa	ZAR/t	USD/4E oz
Member of the Implats Group	Marula	2.0	3.78	210	2,200	1,150
AngloAmerican PLATINUM African Rainbow Minerals	Modikwa	2.6	3.58	240	2,700	1,550
SOUTHERN PALLADIUM	Bengwenyama	2.0	5.42	290	2,706	970
Member of the implats Group African Rainbow Minerals	<b>Two Rivers</b>	3.6	2.54	240	2,050*	1,650
African Rainbow Minerals	Mototolo	2.8	3.36	250	2,250	1,450
	Booysendal	6.4	2.48	450	1,550	1,200

Note: \* Two Rivers – capital not split and includes the new Merensky reef expansion capital development

# **BENGWENYAMA: AN EMERGING FIRST COST QUARTILE PRODUCER**





# BENGWENYAMA: VERY INEXPENSIVE OUNCES AND NOW WITH AN ATTRACTIVE SCOPING STUDY





# **ADVANCING BENGWENYAMA TO PRODUCTION: NEXT STEPS**





#### OUR ACHIEVEMENTS AND GOALS PROJECT DELIVERY ON-TIME AND ON-BUDGET





#### SOUTHERN PALLADIUM LIMITED (ASX:SPD, JSE:SDL) CORPORATE AND ASSET OWNERSHIP STRUCTURE





\* Stated at 100% equity basis, 7E resource (Pt + Pd + Rh + Au + Ir + Os + Ru)

\* Issued if at least 2,000,000 oz of PGM (4E) Reserves have been identified, comprising at least 15 million tonnes and a grade of at least 3.0 grams per tonne within four years after the IPO date

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#### **PGM DYNAMICS ARE EXPERIENCING A CHANGE** Autocatalysts in Internal Combustion Engine ("ICE") (Palladium, Platinum and Platinum market to remain undersupplied **Rhodium** still the biggest throughout 2025 to 2028. driver) Concerns about the long-term **Green hydrogen** sustainability of several operations **Production (PEM)** • Restructuring unprofitable supply which (Platinum and could lead to deeper deficits APPLICATION Iridium) • WPIC estimates that 25% of operations showing neg. margins. **Fuel cells** (Platinum) **RISING DEMAND FOR ALL PGMS** Share Price Performance vs Basket Price **OUR FUTURE IS GREEN** Less economic incentive to substitute ٠ \$1.60 3000 Green movement has sparked platinum for palladium in new vehicles 2800 \$1.40 2600 a significant renewed interest • Increasing confidence in hydrogen's role in \$1.20 2400 in Platinum decarbonising our world. \$1.00 2200 zo/dsn 1800 AUD/oz \$0.80 FCEV is finding traction \$0.60 1600 \$0.40 400 \$0.20 1200 Ś. 1000 08-Jul-2 08-Feb-2 08-Oct-2 **38-Jan-2** 8-Mar-2 8-May-2 )8-Dec--VoV-80 08-Sep-**PGM USE IN VEHICLES** SPD Price Basket Price

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# **INVESTMENT SUMMARY**







# Appendix



Name and Ticker	Exchange	Mkt Cap (A\$m)	Cash (A\$m)	Debt (A\$m)	Enterprise Value (A\$m)	Attributable Resource M,I & I (4E Moz)	M&I as % of total Resources	Grade (4E g/t)	Enterprise Value (A\$) /Resource oz	Sources	Status
Podium Minerals Limited (POD)	ASX	16.87	4.16	0	12.71	5.88	0%	1.28		Activities Report (29 January	Scoping Study
Chalice Mining Limited (CHN)	ASX	439.17	111.35	0	327.82	16.18	53%	0.90		Activities Report (31 January	Scoping Study
Future Metals NL (FME)	ASX	10.33	0.61	0	9.72	4.51	42%	1.51		2023 Annual Report, December 2023 Quarterly Activities Report (31 January 2024)	Scoping Study
Southern Palladium Limited (SPD/SDL)	ASX/JSE	44.88	8.90	0	35.98	15.73	32%	4.65		Activities Report (29 January	Scoping Study
Wesizwe Platinum Limited (WEZ)	JSE	0.00	18.41	709.7	691.29	13.79	75%	4.90		July 2021 R&R CPR, 6mnth June 2023 Interim Financial Report	Operational Downscaling
Platinum Group Metals Ltd. (PTM)	TSX	201.45	10.71	0	190.74	16.67	79%	3.35	11.44	Interim Financial Report, 12 Jan 2024	Definitive Feasibility Study
Bravo Mining Corp. (BRVO)	TSX Venture	234.52	55.47	0	179.05	8.28	39%	1.35		Financial Statements ended Sept 30, 2023, Technical Report 22 Ocotber 2023	Exploration

The information relating to Southern Palladium's resources above is extracted from the report entitled "Mineral Resource Update: UG2 Indicated Mineral Resource doubles to 6.52 Moz (7E) with an increase in grade" created on 7 December 2023 and is available to view on www.southernpalladium.com . The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.