

# MINERAL RESOURCES AND MINERAL RESERVES: A SUMMARY

## WHAT WE DID IN 2022

### SUCCESSSES

- Declared a maiden lithium (Li) Mineral Reserve of 193.6kt of lithium carbonate equivalent (LCE), following the Board approval of the Keliber lithium project in Finland
- Achieved a 133% increase in Li Mineral Resources to 452.9kt of LCE
- Maintained stable Mineral Reserves at our SA PGM and SA Gold operations, where depletion has been offset by additional Mineral Reserves from the completion of a successful feasibility study at the Mimosa PGM operations and increases at DRD GOLD

### CHALLENGES

- The repositioning of our US PGM operations and consequent update of the life of mine (LoM) plans, has resulted in minor decreases in Mineral Reserves (3.6%) and Mineral Resources (6.1%)
- At the Akanani PGM exploration project our mining right application was rejected on a technicality; the Group launched internal appeal proceedings, in accordance with the MPRDA; although confident in our legal position and that we acted within the guidelines during our application, the rejection of our application could impact up to 10% of total Group PGM Mineral Resources



**As a dual-listed company, on the JSE and the NYSE, Sibanye-Stillwater’s Mineral Resources and Mineral Reserves are reported in accordance with the SAMREC Code and subpart 1300 under Regulation S-K of the US Securities Act of 1933 (S-K 1300).**

## APPROACH AND SALIENT FEATURES

The statement of Mineral Resources and Mineral Reserves, as at 31 December 2022, outlines the attributable Mineral Resources and Mineral Reserves at each of our operating mines and projects. The Mineral Resources and Mineral Reserves are compared to the last full declaration made, as at 31 December 2021, and therefore include a 12-month period of production depletion due to mining activity.

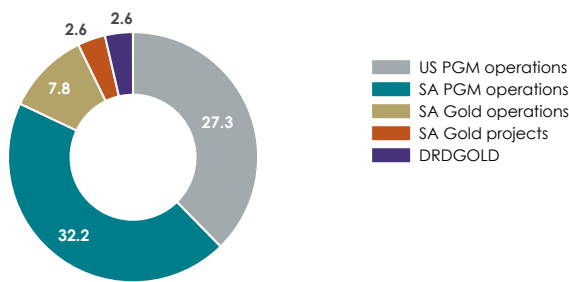
The statement is underpinned by appropriate Mineral Resources management processes and protocols that ensure adequate corporate governance.

This section is a condensed overview of the Mineral Resources and Mineral Reserves Report 2022, which comprises a high-level review of Mineral Resources and Mineral Reserves, as at 31 December 2022, and details the location, geology, mining, processing, operational statistics and changes at each of the Group’s mining operations and projects. The detailed statement of Mineral Resources and Mineral Reserves is available online at [www.sibanyestillwater.com/news-investors/reports/annual/](http://www.sibanyestillwater.com/news-investors/reports/annual/)

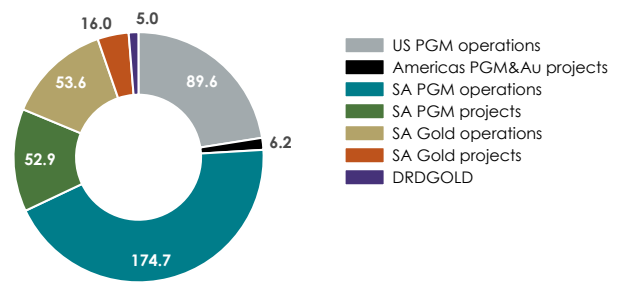
Sibanye-Stillwater has extensive Mineral Resources and Mineral Reserves, the majority of which are precious metals located in the Americas and Southern Africa, as well as battery metals in Europe and the Americas.

MINERAL RESOURCES AND MINERAL RESERVES: A SUMMARY continued

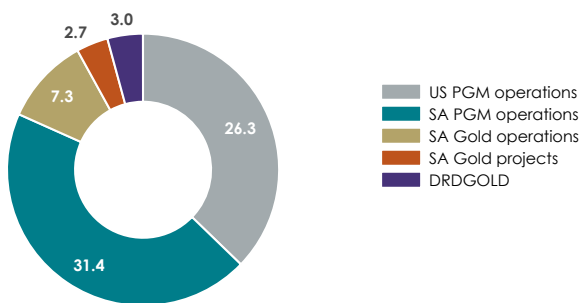
2021 PRECIOUS METALS MINERAL RESERVES (72.5Moz)



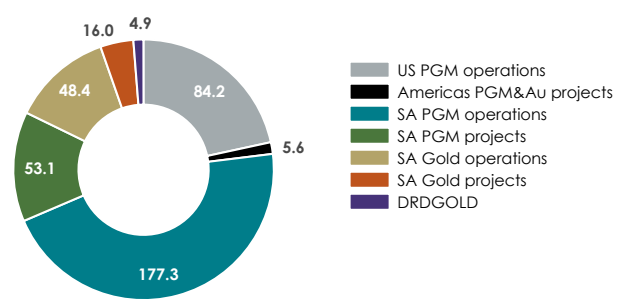
2021 PRECIOUS METALS MINERAL RESOURCE (398.0Moz)



2022 PRECIOUS METALS MINERAL RESERVES (70.6Moz)



2022 PRECIOUS METALS MINERAL RESOURCE (389.5Moz)



Additional Reserves	LCE (kt)	Zinc (mlb)	U <sub>3</sub> O <sub>8</sub> (mlb)	Cu (mlb)
Lithium (Europe)	194			
Zinc (Australia)		446		
Additional Resources	LCE (kt)	Zinc (mlb)	U <sub>3</sub> O <sub>8</sub> (mlb)	Cu (mlb)
Lithium (Europe)	366			
Lithium (US)	87			
Zinc (Australia)		799		
Uranium (SA)			67	
Copper (Americas)				13468

The Group reports in accordance with both the JSE and the US Securities and Exchange Commission (SEC) rules and guidelines on commodity prices used for the estimation of Mineral Resources and Mineral Reserves at all managed operations, development, and exploration properties.

We use forward-looking prices, based on extensive market research, that reflect "through the cycle" pricing. Mineral Resource price assumptions, which focus on longer timeframes, are based on moderately higher prices than for Mineral Reserves to reflect the ore-body flexibility. The US\$ based, forward-looking commodity prices used for the 2022 LOM process has largely been retained from 2021, with only minor changes. The Mineral Reserve gold price has been adjusted marginally downwards by US\$9 (-0.5%), whilst the uranium price has been adjusted upwards to reflect the growing recognition of the role nuclear power will play in securing baseload, low-carbon, green energy supply.

The exchange rate used for the Mineral Resources and Mineral Reserves Declaration as at 31 December 2022 is R16.00/US\$, up from R15.00/US\$ at year end 2021, reflecting the deteriorating long-term ZAR outlook.

## MINERAL RESOURCES AND MINERAL RESERVES: A SUMMARY continued

	31 December 2022						31 December 2021		
	MINERAL RESOURCES			MINERAL RESERVES			MINERAL RESERVES		
Precious metals	US\$/oz	R/oz	R/kg	US\$/oz	R/oz	R/kg	US\$/oz	R/oz	R/kg
Gold	1,800	28,800	925,941	1,650	26,400	850,000	1,659	24,885	800,000
Platinum	1,500	24,000	771,617	1,250	20,000	643,014	1,250	18,750	602,826
Palladium	1,500	24,000	771,617	1,250	20,000	643,014	1,250	18,750	602,826
Rhodium	10,000	160,000	5,144,116	8,000	128,000	4,115,292	8,000	120,000	3,858,084
Iridium	3,000	48,000	1,543,235	2,500	40,000	1,286,029	2,500	37,500	1,205,651
Ruthenium	350	5,600	180,044	300	4,800	154,323	300	4,500	144,678
Base metals	US\$/lb	US\$/tonne	R/tonne	US\$/lb	US\$/tonne	R/tonne	US\$/lb	US\$/tonne	R/tonne
Nickel	7.94	17,500	280,000	7.35	16,200	259,200	7.35	16,200	243,000
Copper	4.54	10,000	160,000	4.06	8,950	143,200	4.06	8,950	134,250
Cobalt	25	55,116	881,848	22	48,502	776,026	22	48,502	727,525
Uranium oxide (U <sub>3</sub> O <sub>8</sub> ) <sup>1</sup>	55	121,254	1,940,066	50	110,231	1,763,696	40	88,185	1,322,772
Chromium oxide (Cr <sub>2</sub> O <sub>3</sub> ), (42% concentrate)	0.07	165	2,640	0.06	150	2,400	0.07	150	2,250

<sup>1</sup> Long-term contract prices

## AMERICAS

### Platinum Group Metals

#### US PGM operations

- Total 2E PGM Mineral Resources of 84.2Moz, a year-on-year decrease of 6.1%
- Total 2E PGM Mineral Reserves of 26.3Moz, a year-on-year decrease of 3.6%

During 2022, a comprehensive update of the Mineral Resource and Mineral Reserve estimation methodology at the Montana operations was undertaken, which also included an update to the mine plan and scheduling. This repositioning of the US PGM operations culminated in a revision to the Mineral Reserves which now supports a 42 year LoM, building up to +700koz of annual production from 2027.

A detailed reconciliation of the 2021 to 2022 US PGM operations' Mineral Reserves is shown in the table below:

Factors	2E PGM (Moz)
Dec 2021 Reserves	27.3
Depletion	(0.5)
Post depletion	26.8
Area inclusion/exclusion	0.4
Geological interpretation	(3.9)
Estimation methodology	2.5
Modifying factors	0.5
<b>Dec 2022 Reserves</b>	<b>26.3</b>

#### PGM Exploration projects in the Americas

In January 2022, the Group reached an agreement with Generation Mining Ltd. to dispose of its 16.5% direct project level interest in the Marathon project, held via Stillwater Canada Inc., a subsidiary of the Group, in exchange for 21,759,332 common shares in

Generation Mining, bringing the Groups' shareholding in Generation Mining to 18.19%. This has resulted in an associated 4.46% decrease in attributable Mineral Resources to 45.3Mt, grading 0.7g/t PGM, 0.2% Cu, 1.6 g/t Ag and 0.1 g/t Au.

On 7 November 2022, the transaction for the sale of Lonmin Canada Inc., including the Denison project, to Magna Mining Inc. (Magna) was completed, for an aggregate disposal consideration of US\$16 million, resulting in the related attributable Mineral Resources being removed from our inventory.

### Battery Metals

#### Lithium exploration projects

- Total Mineral Resources of 10.2Mt grading 0.2% Li (for 86.8kt LCE) and 8.1% H<sub>3</sub>BO<sub>3</sub>

The attributable Mineral Resources in the Rhyolite Ridge Lithium-Boron project (Rhyolite Ridge project), via the Group's shareholding in Ioneer Ltd., were largely unchanged, and only impacted by a minor change in shareholding from 7.1% to 6.95%.

The Group has an agreement with Ioneer Ltd. to establish a 50:50 JV with respect to the Rhyolite Ridge project in Nevada, subject to the fulfilment of all conditions precedent. During 2022, the project advanced to the final stage of permitting, with the U.S. Bureau of Land Management (BLM) publishing a Notice of Intent (NOI) in the Federal Register.

#### Copper exploration projects

- Total copper Mineral Resources of 13,257.1Mlb, a decrease of 0.1%

The Group's attributable total copper Mineral Resources were impacted by a minor change in shareholding in Aldebaran Resources Ltd. from 19.99% to 17.59%. As of 31 December 2022, Aldebaran has unofficially completed expenditures to gain a 60% interest in the Altar project, as per the earn in agreement, however official notification with audited expenditures is still outstanding.

MINERAL RESOURCES AND MINERAL RESERVES: A SUMMARY continued

## SOUTHERN AFRICA

### Platinum Group Metals

#### SA PGM operations

- Total 4E PGM Mineral Resources of 177.3Moz, a year-on-year increase of 1.5%
- Total 4E PGM Mineral Reserves of 31.4Moz, a year-on-year decrease of 2.3%

Mineral Resources were positively impacted (+5.0Moz) by the re-incorporation of the Hoedspruit Mineral Resources into the Rustenburg operation, which was previously (2021) excluded subject to the final approval of the prospecting right renewal.

Mineral Reserves depletion (-1.9Moz) was positively offset by the inclusion of the Mimosa North Hill project following the completion of a positive feasibility study (+1.5 Moz), with minor LoM extensions, due to tail end optimisation at all operations, adding a further 0.5Moz.

Marginal decreases in LoM grades at the Rustenburg operation and Marikana operation resulted in evaluation losses of 0.3Moz, whilst increased geological complexity (faulting) at the Kroondal and Rustenburg operations impacted a further 0.2Moz. An adjustment in modifying factors (-0.3Moz) contributed further to the overall decline of 0.8Moz.

A detailed reconciliation of the 2021 to 2022 SA PGM operations Mineral Reserves is shown below.

#### SA PGM operations – Mineral Reserves reconciliation

Factors	4E PGM (Moz)
31-Dec-21	32.2
2022 Depletion	(1.9)
Economic valuation	1.9
Evaluation	(0.3)
Geological changes	(0.2)
Technical factors	(0.3)
<b>31-Dec-22</b>	<b>31.4</b>

#### SA PGM exploration projects

- Total 4E PGM Mineral Resources of 53.1Moz, an increase of 0.5%

The only year-on-year change relates to the Limpopo project area, where a positive "reasonable prospect for eventual economic extraction (RPEEE)" assessment of a wider, mechanised mining cut was completed. As a result, a revised geotechnical mining cut was accepted and this resulted in the addition of 0.3Moz.

The Group, through its subsidiary Akanani Mining Proprietary Limited (Akanani), held a prospecting right over the Akanani project area. Akanani duly applied for a mining right, which application has been rejected, related to an interpretation on the expiry date of the prospecting right. To secure its position, the Group has launched internal appeal proceedings in accordance with the Minerals and Petroleum Resources Development Act, 2002. The Group has also requested the Minister of Mineral Resources and Energy to suspend the further processing of a third-party prospecting right application over the same area, pending the finalisation of the appeal.

The internal appeal process is progressing within the prescripts of the MPRDA. The Group will resort to court action in order to enforce its rights should the internal appeal not be successful.

## GOLD

#### SA gold operations

- Total gold Mineral Resources of 53.3Moz, a year-on-year decrease of 9.1%
- Total gold Mineral Reserves of 10.3Moz, a year-on-year decrease of 1.5%
- The change in Mineral Resources can be attributed to the Kloof operations where a re-interpretation of the Ventersdorp Contact Reef (VCR) geological facies resulted in a reduction of 5.7Moz, predominantly in the Inferred category, situated below the shafts infrastructure

Mineral Reserves depletion (-0.8Moz), were positively offset by the extension of the Beatrix LoM by one year, and minor increases at Driefontein and Kloof (+0.3Moz), while our attributable interest in DRDGOLD contributed a further 0.7Moz. Notable other changes relate to the closure of Beatrix 4 shaft and the curtailment of operations on 47 level at Kloof 4 shaft (-0.4Moz).

A detailed reconciliation of the 2021 to 2022 SA gold operations' Mineral Reserves is provided below.

#### SA gold operations – Mineral Reserves reconciliation

Factors	Gold (Moz)
31-Dec-21	10.5
Depletion	(0.8)
Post depletion	9.7
Area inclusions/exclusions	0.3
Attributable adjustment	0.7
Geological interpretation	0.05
Economic parameters	(0.4)
Modifying factors	(0.04)
<b>31-Dec-22</b>	<b>10.3</b>

#### SA gold development project

- Total gold Mineral Resources of 9.1Moz, unchanged
- Total gold Mineral Reserves of 2.7Moz, a year-on-year increase of 2.8%

The increase in Mineral Reserves at the Burnstone project was driven by an optimisation of the tail-end production profile.

#### SA gold exploration projects

- Total gold Mineral Resources of 6.9Moz, remained unchanged at the Southern Free State (SOFs) project

## Uranium

#### SA Uranium exploration projects

- Total U<sub>3</sub>O<sub>8</sub> Mineral Resources of 66.6Moz, remain unchanged year-on-year

The uranium Mineral Resources are classified under exploration, but occur within gold operational footprints.

MINERAL RESOURCES AND MINERAL RESERVES: A SUMMARY continued

## EUROPE

### Battery Metals

#### Lithium development project

- Lithium carbonate equivalent (LCE) Mineral Resources of 366.1kt, a year-on-year increase of 248%
- Maiden LCE Mineral Reserves of 193.6kt

During 2022, Sibanye-Stillwater increased its shareholding in Keliber (2021: 26.6%) to 84.96%, enabling Sibanye-Stillwater to act decisively and fast-track the Keliber project. A feasibility study completed by Keliber in February 2022 and updated in October 2022, confirmed the project economics, and on 28 November 2022 the Board approved development of the Keliber lithium project in Finland, beginning with the construction of the lithium-hydroxide refinery. The reported Mineral Reserves reflect the open-pit portion of the project only.

Ongoing exploration activities have also added 30.4kt of LCE to the Mineral Resource Inventory. The increased Mineral Resources are related to the maiden resource estimates of the Tuoreetsaaret and Leviakangas deposits.

## AUSTRALIA

### Zinc operation

- Zinc Mineral Resources of 798.5Mlb, a year-on-year decrease of 21.4%
- Zinc Mineral Reserves of 445.5Mlb, a year-on-year decrease of 31.4%

The year-on-year changes in Mineral Resources and Mineral Reserves were driven by depletion.

## CORPORATE GOVERNANCE

This Mineral Reserve and Mineral Resource declaration represents a condensed and consolidated summary of the full Sibanye-Stillwater Mineral Resource and Mineral Reserve declaration available in the Group Mineral Resource and Mineral Reserve Report, which was published on 24 April 2023 and available at [www.sibanyestillwater.com/news-investors/reports/annual](http://www.sibanyestillwater.com/news-investors/reports/annual)

The Mineral Resources and Mineral Reserves are estimates at a particular date, and are affected by fluctuations in mineral prices, exchange rates, operating costs, mining permits, changes in legislation and operating factors. By-product metals that do not provide a material contribution to potential revenue flows are typically excluded from the statements.

Sibanye-Stillwater prepares and reports its Mineral Resources and Mineral Reserves in accordance with the SAMREC Code, the updated Section 12 of the JSE Listings Requirements, and S-K 1300. For non-managed mineral properties, Mineral Resources and Mineral Reserves are in certain cases prepared under different codes, such as JORC and NI-43-101. These codes are closely aligned with SAMREC, form part of the Committee for Mineral Reserves International Reporting Standards (CRIRSCO), and the estimates are therefore deemed to be consistent with SAMREC and S-K1300.

All financial models used to determine the managed Mineral Reserves are based on current tax regulations as at 31 December 2022. Rounding of figures may result in minor computational discrepancies. Where this happens, it is not deemed significant.

There are teams of Competent Persons (CPs or QPs), designated in terms of the respective national reporting codes, who take responsibility for the reporting of Mineral Resources and Mineral Reserves. Corporate governance on the overall compliance of the Group's figures and responsibility for the generation of a Group consolidated statement has been overseen by the lead CPs, included below. The Group has the written confirmation of the lead CP's that the information, as disclosed in this report, is compliant with the relevant security exchanges' listing requirements (Section 12 of the JSE Listings Requirements, SAMREC Table 1 and S-K1300), and that it may be published in the form and context in which it was intended.

For the managed operations, Stephan Stander is the Group Lead CP for Mineral Resources; and Tom van den Berg is the Group Lead CP for Mineral Reserves. Stephan is a registered member of the South African Council for Natural Scientific Professions (SACNASP 400089/96). Tom is a registered member of the South African Institute of Mining and Metallurgy (SAIMM 700497).



Keliber – starting earthworks for the lithium refinery in Kokkola, Finland

## MINERAL RESOURCES AND MINERAL RESERVES: A SUMMARY continued

## Mineral Resources Inclusive of Mineral Reserves

PGM	31 Dec 2022						31 Dec 2021			
	Tonnes (Mt)	Grade (g/t)	PGM (Moz)	PGM 100% (Moz)	Tonnes (Mt)	Grade (g/t)	PGM (Moz)	PGM 100% (Moz)		
Americas <sup>1</sup>	Operations	Measured	42.6	13.7	18.7	18.7	39.9	14.7	18.9	18.9
		Indicated	50.4	12.8	20.7	20.7	59.1	13.8	26.1	26.1
		<b>Measured + Indicated</b>	<b>93.0</b>	<b>13.2</b>	<b>39.4</b>	<b>39.4</b>	<b>99.0</b>	<b>14.1</b>	<b>45.0</b>	<b>45.0</b>
		Inferred	114.0	12.2	44.8	44.8	113.6	12.2	44.6	44.6
	Exploration	Measured	18.8	0.8	0.5	2.8	23.5	0.9	0.7	2.8
		Indicated	21.5	0.6	0.4	2.3	27.8	0.7	0.6	2.4
		<b>Measured + Indicated</b>	<b>40.3</b>	<b>0.7</b>	<b>0.9</b>	<b>5.1</b>	<b>51.3</b>	<b>0.8</b>	<b>1.3</b>	<b>5.2</b>
		Inferred	5.0	0.5	0.1	0.4	7.5	0.9	0.2	0.6
Southern Africa <sup>2</sup>	Operations	Measured	419.7	4.3	58.2	81.8	440.4	4.2	59.7	83.7
		Indicated	644.1	4.3	89.3	113.7	624.4	4.3	85.8	110.0
		<b>Measured + Indicated</b>	<b>1,063.7</b>	<b>4.3</b>	<b>147.6</b>	<b>195.5</b>	<b>1,064.8</b>	<b>4.2</b>	<b>145.4</b>	<b>193.7</b>
		Inferred	212.3	4.4	29.7	38.5	209.6	4.3	29.3	38.1
	Exploration	Measured	1.8	4.2	0.2	0.3	1.8	4.2	0.2	0.3
		Indicated	253.7	4.1	33.5	47.0	247.3	4.2	33.3	46.6
		<b>Measured + Indicated</b>	<b>255.4</b>	<b>4.1</b>	<b>33.7</b>	<b>47.3</b>	<b>249.0</b>	<b>4.2</b>	<b>33.5</b>	<b>46.9</b>
		Inferred	165.4	3.7	19.4	27.5	162.4	3.7	19.4	27.3
<b>Total Measured + Indicated</b>			<b>1,452.4</b>	<b>4.7</b>	<b>221.5</b>	<b>287.3</b>	<b>1,464.1</b>	<b>4.8</b>	<b>225.2</b>	<b>290.9</b>
<b>Grand total</b>			<b>1,949.1</b>	<b>5.0</b>	<b>315.6</b>	<b>398.5</b>	<b>1,957.2</b>	<b>5.1</b>	<b>318.7</b>	<b>401.5</b>

GOLD	31 Dec 2022				31 Dec 2021					
	Tonnes (Mt)	Grade (g/t)	Gold (Moz)	Gold 100% (Moz)	Tonnes (Mt)	Grade (g/t)	Gold (Moz)	Gold 100% (Moz)		
Americas	Exploration	Measured	656.7	0.1	2.5	2.6	661.4	0.1	2.5	2.7
		Indicated	614.2	0.1	1.7	2.5	622.2	0.1	1.7	2.6
		<b>Measured + Indicated</b>	<b>1,270.9</b>	<b>0.1</b>	<b>4.1</b>	<b>5.2</b>	<b>1,283.6</b>	<b>0.1</b>	<b>4.2</b>	<b>5.2</b>
		Inferred	202.7	0.1	0.5	0.8	206.1	0.1	0.5	0.8
Southern Africa	Operations	Measured	483.5	1.8	28.5	31.4	496.6	1.8	29.3	32.3
		Indicated	401.8	1.4	18.2	20.6	409.2	1.4	18.4	20.8
		<b>Measured + Indicated</b>	<b>885.3</b>	<b>1.6</b>	<b>46.7</b>	<b>51.9</b>	<b>905.9</b>	<b>1.6</b>	<b>47.7</b>	<b>53.1</b>
		Inferred	35.4	5.8	6.6	6.7	41.3	8.2	10.9	11.0
	Development	Measured	1.1	6.2	0.2	0.2	1.1	6.2	0.2	0.2
		Indicated	25.5	5.6	4.6	4.6	25.5	5.6	4.6	4.6
		<b>Measured + Indicated</b>	<b>26.6</b>	<b>5.7</b>	<b>4.8</b>	<b>4.8</b>	<b>26.6</b>	<b>5.7</b>	<b>4.8</b>	<b>4.8</b>
		Inferred	31.5	4.2	4.3	4.3	31.5	4.2	4.3	4.3
	Exploration	Measured	—	—	—	—	—	—	—	—
		Indicated	44.1	4.5	6.4	6.4	44.1	4.5	6.4	6.4
		<b>Measured + Indicated</b>	<b>44.1</b>	<b>4.5</b>	<b>6.4</b>	<b>6.4</b>	<b>44.1</b>	<b>4.5</b>	<b>6.4</b>	<b>6.4</b>
		Inferred	4.0	3.6	0.5	0.5	4.0	3.6	0.5	0.5
<b>Total Measured + Indicated</b>			<b>2,226.9</b>	<b>0.9</b>	<b>62.1</b>	<b>68.4</b>	<b>2,260.2</b>	<b>0.9</b>	<b>63.2</b>	<b>69.6</b>
<b>Grand total</b>			<b>2,500.5</b>	<b>0.9</b>	<b>73.9</b>	<b>80.6</b>	<b>2,543.1</b>	<b>1.0</b>	<b>79.3</b>	<b>86.1</b>

LITHIUM	31 Dec 2022				31 Dec 2021					
	Tonnes (Mt)	Li (%)	LCE (kt)	LCE 100% (kt)	Tonnes (Mt)	Li (%)	LCE (kt)	LCE 100% (kt)		
Europe <sup>3</sup>	Development	Measured	3.7	0.55	106.4	125.3	1.1	0.55	33.3	125.3
		Indicated	8.0	0.48	202.4	238.3	2.4	0.48	62.0	232.9
		<b>Measured + Indicated</b>	<b>11.6</b>	<b>0.50</b>	<b>308.9</b>	<b>363.5</b>	<b>3.6</b>	<b>0.50</b>	<b>95.3</b>	<b>358.2</b>
		Inferred	2.8	0.38	57.2	67.4	0.4	0.42	9.8	36.9
Americas <sup>3</sup>	Exploration	Measured	2.7	0.17	24.8	356.8	2.8	0.17	25.4	356.8
		Indicated	6.1	0.16	50.4	725.2	6.3	0.16	51.6	725.2
		<b>Measured + Indicated</b>	<b>8.8</b>	<b>0.16</b>	<b>75.2</b>	<b>1,082.0</b>	<b>9.0</b>	<b>0.16</b>	<b>77.0</b>	<b>1,082.0</b>
		Inferred	1.4	0.16	11.6	166.8	1.4	0.16	11.9	166.8
<b>Total Measured + Indicated</b>			<b>20.4</b>	<b>0.35</b>	<b>384.1</b>	<b>1,445.5</b>	<b>12.6</b>	<b>0.26</b>	<b>172.3</b>	<b>1,440.2</b>
<b>Grand total</b>			<b>24.6</b>	<b>0.35</b>	<b>452.9</b>	<b>1,679.7</b>	<b>14.4</b>	<b>0.25</b>	<b>194.0</b>	<b>1,643.9</b>

## MINERAL RESOURCES AND MINERAL RESERVES: A SUMMARY continued

URANIUM			Tonnes (Mt)	Grade (kg/t)	U <sub>3</sub> O <sub>8</sub> (Mlb)	U <sub>3</sub> O <sub>8</sub> 100% (Mlb)	Tonnes (Mt)	Grade (kg/t)	U <sub>3</sub> O <sub>8</sub> (Mlb)	U <sub>3</sub> O <sub>8</sub> 100% (Mlb)
Southern Africa	Exploration	Measured	158.0	0.1	40.4	50.5	159.5	0.1	40.5	50.6
		Indicated	49.1	0.2	26.1	28.5	47.5	0.2	25.9	28.3
		<b>Measured + Indicated</b>	<b>207.0</b>	<b>0.1</b>	<b>66.5</b>	<b>79.0</b>	<b>207.0</b>	<b>0.1</b>	<b>66.4</b>	<b>78.8</b>
		Inferred	0.04	1.1	0.1	0.1	0.04	1.1	0.1	0.1
<b>Grand total</b>			<b>207.1</b>	<b>0.1</b>	<b>66.6</b>	<b>79.1</b>	<b>207.1</b>	<b>0.1</b>	<b>66.5</b>	<b>78.9</b>

COPPER			Tonnes (Mt)	Grade (%)	Copper (Mlb)	Copper 100% (Mlb)	Tonnes (Mt)	Grade (%)	Copper (Mlb)	Copper 100% (Mlb)
Americas	Exploration	Measured	656.7	0.4	6,179.2	6,558.0	661.4	0.4	6,200.9	6,559.5
		Indicated	614.2	0.4	5,477.1	6,320.5	622.2	0.4	5,544.1	6,368.7
		<b>Measured + Indicated</b>	<b>1,270.9</b>	<b>0.4</b>	<b>11,656.3</b>	<b>12,878.5</b>	<b>1,283.6</b>	<b>0.4</b>	<b>11,745.0</b>	<b>12,928.2</b>
		Inferred	202.7	0.4	1,812.1	2,098.4	206.1	0.4	1,856.9	2,150.3
<b>Grand total</b>			<b>1,473.6</b>	<b>0.4</b>	<b>13,468.4</b>	<b>14,976.9</b>	<b>1,489.7</b>	<b>0.4</b>	<b>13,601.8</b>	<b>15,078.5</b>

ZINC			Tonnes (Mt)	Grade (%)	Zinc (Mlb)	Zinc 100% (Mlb)	Tonnes (Mt)	Grade (%)	Zinc (Mlb)	Zinc 100% (Mlb)
Australia	Operations	Measured	7.3	3.1	490.7	2,467.0	10.6	3.0	706.9	3,536.2
		Indicated	—	—	—	—	—	—	—	—
		<b>Measured + Indicated</b>	<b>7.3</b>	<b>3.1</b>	<b>490.7</b>	<b>2,467.0</b>	<b>10.6</b>	<b>3.0</b>	<b>706.9</b>	<b>3,536.2</b>
		Inferred	—	—	—	—	—	—	—	—
	Exploration	Measured	0.2	4.8	21.0	105.8	0.2	4.8	21.2	105.8
		Indicated	1.8	5.7	221.0	1,111.1	1.8	5.7	222.1	1,111.1
		<b>Measured + Indicated</b>	<b>2.0</b>	<b>5.6</b>	<b>242.1</b>	<b>1,217.0</b>	<b>2.0</b>	<b>5.6</b>	<b>243.3</b>	<b>1,217.0</b>
		Inferred	0.5	6.5	65.8	330.7	0.5	6.5	66.1	330.7
<b>Total Measured + Indicated</b>			<b>9.2</b>	<b>3.6</b>	<b>732.7</b>	<b>3,683.9</b>	<b>12.6</b>	<b>3.4</b>	<b>950.2</b>	<b>4,753.2</b>
<b>Grand total</b>			<b>9.7</b>	<b>3.7</b>	<b>798.5</b>	<b>4,014.6</b>	<b>13.0</b>	<b>3.5</b>	<b>1,016.3</b>	<b>5,083.9</b>

## Mineral Resources Exclusive of Mineral Reserves

PGM			31 Dec 2022				31 Dec 2021			
			Tonnes (Mt)	Grade (g/t)	PGM (Moz)	PGM 100% (Moz)	Tonnes (Mt)	Grade (g/t)	PGM (Moz)	PGM 100% (Moz)
Americas <sup>1</sup>	Operations	Measured	19.3	10.4	6.4	6.4	15.1	14.3	6.9	6.9
		Indicated	19.1	7.9	4.8	4.8	19.9	13.7	8.8	8.8
		<b>Measured + Indicated</b>	<b>38.3</b>	<b>9.1</b>	<b>11.3</b>	<b>11.3</b>	<b>35.0</b>	<b>14.0</b>	<b>15.7</b>	<b>15.7</b>
		Inferred	114.0	12.2	44.8	44.8	113.6	12.2	44.6	44.6
	Exploration	Measured	18.8	0.8	0.5	2.8	23.5	0.9	0.7	2.8
		Indicated	21.5	0.6	0.4	2.3	27.8	0.7	0.6	2.4
		<b>Measured + Indicated</b>	<b>40.3</b>	<b>0.7</b>	<b>0.9</b>	<b>5.1</b>	<b>51.3</b>	<b>0.8</b>	<b>1.3</b>	<b>5.2</b>
		Inferred	5.0	0.5	0.1	0.4	7.5	0.9	0.2	0.6
Southern Africa <sup>2</sup>	Operations	Measured	262.8	4.7	39.3	54.6	257.2	4.7	38.5	53.5
		Indicated	499.9	4.2	67.4	86.0	488.7	4.2	65.4	83.9
		<b>Measured + Indicated</b>	<b>762.6</b>	<b>4.4</b>	<b>106.7</b>	<b>140.6</b>	<b>745.9</b>	<b>4.3</b>	<b>103.9</b>	<b>137.4</b>
		Inferred	205.3	4.4	28.8	37.4	209.3	4.3	29.2	38.1
	Exploration	Measured	1.8	4.2	0.2	0.3	1.8	4.2	0.2	0.3
		Indicated	253.7	4.1	33.5	47.0	247.3	4.2	33.3	46.6
		<b>Measured + Indicated</b>	<b>255.4</b>	<b>4.1</b>	<b>33.7</b>	<b>47.3</b>	<b>249.0</b>	<b>4.2</b>	<b>33.5</b>	<b>46.9</b>
		Inferred	165.4	3.7	19.4	27.5	162.4	3.7	19.4	27.3
<b>Total Measured + Indicated</b>			<b>1,096.7</b>	<b>4.3</b>	<b>152.6</b>	<b>204.3</b>	<b>1,081.3</b>	<b>4.4</b>	<b>154.4</b>	<b>205.3</b>
<b>Grand total</b>			<b>1,586.4</b>	<b>4.8</b>	<b>245.7</b>	<b>314.4</b>	<b>1,574.1</b>	<b>4.9</b>	<b>247.8</b>	<b>315.8</b>

## MINERAL RESOURCES AND MINERAL RESERVES: A SUMMARY continued

GOLD			Tonnes (Mt)	Grade (g/t)	Gold (Moz)	Gold 100% (Moz)	Tonnes (Mt)	Grade (g/t)	Gold (Moz)	Gold 100% (Moz)
Americas	Exploration	Measured	656.7	0.1	2.5	2.6	661.4	0.1	2.5	2.7
		Indicated	614.2	0.1	1.7	2.5	622.2	0.1	1.7	2.6
		<b>Measured + Indicated</b>	<b>1,270.9</b>	<b>0.1</b>	<b>4.1</b>	<b>5.2</b>	<b>1,283.6</b>	<b>0.1</b>	<b>4.2</b>	<b>5.2</b>
		Inferred	202.7	0.1	0.5	0.8	206.1	0.1	0.5	0.8
Southern Africa	Operations	Measured	203.2	3.0	19.4	20.0	220.4	2.8	19.8	20.2
		Indicated	344.5	1.5	16.2	17.9	396.6	1.3	16.3	18.8
		<b>Measured + Indicated</b>	<b>547.7</b>	<b>2.0</b>	<b>35.6</b>	<b>37.9</b>	<b>617.0</b>	<b>1.8</b>	<b>36.2</b>	<b>39.0</b>
		Inferred	35.4	5.8	6.6	6.7	41.3	8.2	10.9	11.0
	Development	Measured	0.3	13.4	0.1	0.1	0.3	13.8	0.1	0.1
		Indicated	5.8	11.1	2.1	2.1	5.8	11.5	2.1	2.1
		<b>Measured + Indicated</b>	<b>6.0</b>	<b>11.2</b>	<b>2.2</b>	<b>2.2</b>	<b>6.0</b>	<b>11.6</b>	<b>2.2</b>	<b>2.2</b>
		Inferred	31.5	4.2	4.3	4.3	31.5	4.2	4.3	4.3
	Exploration	Measured	—	—	—	—	—	—	—	—
		Indicated	44.1	4.5	6.4	6.4	44.1	4.5	6.4	6.4
		<b>Measured + Indicated</b>	<b>44.1</b>	<b>4.5</b>	<b>6.4</b>	<b>6.4</b>	<b>44.1</b>	<b>4.5</b>	<b>6.4</b>	<b>6.4</b>
		Inferred	4.0	3.6	0.5	0.5	4.0	3.6	0.5	0.5
<b>Total Measured + Indicated</b>			<b>1,868.8</b>	<b>0.8</b>	<b>48.3</b>	<b>51.7</b>	<b>1,950.7</b>	<b>0.8</b>	<b>49.0</b>	<b>52.9</b>
<b>Grand total</b>			<b>2,142.4</b>	<b>0.9</b>	<b>60.1</b>	<b>63.9</b>	<b>2,233.6</b>	<b>0.9</b>	<b>65.2</b>	<b>69.4</b>
LITHIUM <sup>3</sup>			Tonnes (Mt)	Li (%)	LCE (kt)	LCE 100% (kt)	Tonnes (Mt)	Li (%)	LCE (kt)	LCE 100% (kt)
Europe	Development	Measured	0.5	0.47	13.5	15.8	1.1	0.55	33.3	125.3
		Indicated	3.3	0.48	86.1	101.4	2.4	0.48	62.0	232.9
		<b>Measured + Indicated</b>	<b>3.9</b>	<b>0.48</b>	<b>99.6</b>	<b>117.2</b>	<b>3.6</b>	<b>0.50</b>	<b>95.3</b>	<b>358.2</b>
		Inferred	2.8	0.38	57.1	67.3	0.4	0.42	9.8	36.9
Americas	Exploration	Measured	2.7	0.17	24.8	356.8	2.8	0.17	25.4	356.8
		Indicated	6.1	0.16	50.4	725.2	6.3	0.16	51.6	725.2
		<b>Measured + Indicated</b>	<b>8.8</b>	<b>0.16</b>	<b>75.2</b>	<b>1,082.0</b>	<b>9.0</b>	<b>0.16</b>	<b>77.0</b>	<b>1,082.0</b>
		Inferred	1.4	0.16	11.6	166.8	1.4	0.16	11.9	166.8
<b>Total Measured + Indicated</b>			<b>12.7</b>	<b>0.26</b>	<b>174.8</b>	<b>1,199.2</b>	<b>12.6</b>	<b>0.26</b>	<b>172.3</b>	<b>1,440.2</b>
<b>Grand total</b>			<b>16.9</b>	<b>0.27</b>	<b>243.5</b>	<b>1,433.3</b>	<b>14.4</b>	<b>0.25</b>	<b>194.0</b>	<b>1,643.9</b>
URANIUM			Tonnes (Mt)	Grade (kg/t)	U <sub>3</sub> O <sub>8</sub> (Mlb)	U <sub>3</sub> O <sub>8</sub> 100% (Mlb)	Tonnes (Mt)	Grade (kg/t)	U <sub>3</sub> O <sub>8</sub> (Mlb)	U <sub>3</sub> O <sub>8</sub> 100% (Mlb)
Southern Africa	Exploration	Measured	158.0	0.1	40.4	50.5	159.5	0.1	40.5	50.6
		Indicated	49.1	0.2	26.1	28.5	47.5	0.2	25.9	28.3
		<b>Measured + Indicated</b>	<b>207.0</b>	<b>0.1</b>	<b>66.5</b>	<b>79.0</b>	<b>207.0</b>	<b>0.1</b>	<b>66.4</b>	<b>78.8</b>
		Inferred	0.04	1.1	0.1	0.1	0.04	1.1	0.1	0.1
<b>Grand total</b>			<b>207.1</b>	<b>0.1</b>	<b>66.6</b>	<b>79.1</b>	<b>207.1</b>	<b>0.1</b>	<b>66.5</b>	<b>78.9</b>
COPPER			Tonnes (Mt)	Grade (%)	Copper (Mlb)	Copper 100% (Mlb)	Tonnes (Mt)	Grade (%)	Copper (Mlb)	Copper 100% (Mlb)
Americas	Exploration	Measured	656.7	0.4	6,179.2	6,558.0	661.4	0.4	6,200.9	6,559.5
		Indicated	614.2	0.4	5,477.1	6,320.5	622.2	0.4	5,544.1	6,368.7
		<b>Measured + Indicated</b>	<b>1,270.9</b>	<b>0.4</b>	<b>11,656.3</b>	<b>12,878.5</b>	<b>1,283.6</b>	<b>0.4</b>	<b>11,745.0</b>	<b>12,928.2</b>
		Inferred	202.7	0.4	1,812.1	2,098.4	206.1	0.4	1,856.9	2,150.3
<b>Grand total</b>			<b>1,473.6</b>	<b>0.4</b>	<b>13,468.4</b>	<b>14,976.9</b>	<b>1,489.7</b>	<b>0.4</b>	<b>13,601.8</b>	<b>15,078.5</b>
ZINC			Tonnes (Mt)	Zinc (%)	Zinc (Mlb)	Zinc 100% (Mlb)	Tonnes (Mt)	Zinc (%)	Zinc (Mlb)	Zinc 100% (Mlb)
Exploration	Australia New Century	Measured	0.2	4.8	21.0	105.8	0.2	4.8	21.2	105.8
		Indicated	1.8	5.7	221.0	1,111.1	1.8	5.7	222.1	1,111.1
		<b>Measured + Indicated</b>	<b>2.0</b>	<b>5.6</b>	<b>242.1</b>	<b>1,217.0</b>	<b>2.0</b>	<b>5.6</b>	<b>243.3</b>	<b>1,217.0</b>
		Inferred	0.5	6.5	65.8	330.7	0.5	6.5	66.1	330.7
<b>Grand total</b>			<b>2.4</b>	<b>5.8</b>	<b>307.8</b>	<b>1,547.6</b>	<b>2.4</b>	<b>5.8</b>	<b>309.4</b>	<b>1,547.6</b>



## MINERAL RESOURCES AND MINERAL RESERVES: A SUMMARY continued

## Mineral Reserves

PGM			31 Dec 2022				31 Dec 2021			
			Tonnes (Mt)	Grade (g/t)	PGM (Moz)	PGM 100% (Moz)	Tonnes (Mt)	Grade (g/t)	PGM (Moz)	PGM 100% (Moz)
Americas <sup>1</sup>	Operation	Proved	10.0	13.5	4.3	4.3	8.2	15.4	4.1	4.1
		Probable	50.3	13.6	22.0	22.0	60.1	12.0	23.2	23.2
		<b>Proved + Probable</b>	<b>60.2</b>	<b>13.6</b>	<b>26.3</b>	<b>26.3</b>	<b>68.3</b>	<b>12.4</b>	<b>27.3</b>	<b>27.3</b>
Southern Africa <sup>2</sup>	Operation	Proved	128.9	3.5	14.7	21.4	124.6	3.5	14.2	20.0
		Probable	151.2	3.4	16.7	21.6	171.0	3.3	18.0	23.1
		<b>Proved + Probable</b>	<b>280.0</b>	<b>3.5</b>	<b>31.4</b>	<b>43.0</b>	<b>295.6</b>	<b>3.4</b>	<b>32.2</b>	<b>43.2</b>
<b>Grand total Proved + Probable</b>			<b>340.3</b>	<b>5.3</b>	<b>57.7</b>	<b>69.3</b>	<b>363.9</b>	<b>5.1</b>	<b>59.4</b>	<b>70.5</b>

GOLD			Tonnes	Grade	Gold	Gold 100%	Tonnes	Grade	Gold	Gold 100%
			(Mt)	(g/t)	(Moz)	(Moz)	(Mt)	(g/t)	(Moz)	(Moz)
Southern Africa	Operation	Proved	227.8	0.9	6.6	8.7	149.6	1.4	6.8	8.0
		Probable	124.6	0.9	3.7	4.5	154.8	0.7	3.7	5.0
		<b>Proved + Probable</b>	<b>352.4</b>	<b>0.9</b>	<b>10.3</b>	<b>13.2</b>	<b>304.4</b>	<b>1.1</b>	<b>10.4</b>	<b>13.0</b>
Development	Development	Proved	—	—	—	—	—	—	—	—
		Probable	20.5	4.0	2.7	2.7	20.6	3.9	2.6	2.6
		<b>Proved + Probable</b>	<b>20.5</b>	<b>4.0</b>	<b>2.7</b>	<b>2.7</b>	<b>20.6</b>	<b>3.9</b>	<b>2.6</b>	<b>2.6</b>
<b>Grand total Proved + Probable</b>			<b>373.0</b>	<b>1.1</b>	<b>12.9</b>	<b>15.9</b>	<b>325.0</b>	<b>1.2</b>	<b>13.0</b>	<b>15.6</b>

LITHIUM			Tonnes	Li	LCE	LCE 100%	Tonnes	Li	LCE	LCE 100%
			(Mt)	(%)	(kt)	(kt)	(Mt)	(%)	(kt)	(kt)
Europe <sup>3</sup>	Development	Proved	3.3	0.48	85.4	100.5	—	—	—	—
		Probable	4.9	0.42	108.2	127.3	—	—	—	—
<b>Grand total Proved + Probable</b>			<b>8.2</b>	<b>0.44</b>	<b>193.6</b>	<b>227.9</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

ZINC			Tonnes	Grade	Zinc	Zinc 100%	Tonnes	Grade	Zinc	Zinc 100%
			(Mt)	(%)	(Mlb)	(Mlb)	(Mt)	(%)	(Mlb)	(Mlb)
Australia	Operation	Proved	6.8	3.0	445.5	2,239.9	9.9	3.0	649.2	3,247.4
		Probable	—	—	—	—	—	—	—	—
<b>Grand total Proved + Probable</b>			<b>6.8</b>	<b>3.0</b>	<b>445.5</b>	<b>2,239.9</b>	<b>9.9</b>	<b>3.0</b>	<b>649.2</b>	<b>3,247.4</b>

Note: Mineral Resources and Mineral Reserves are attributable, based on legal equity interest, and metal content is additionally stated on a 100% basis. Details on attributable interests can be found in the Mineral Resource and Mineral Reserves Report 2022.

<sup>1</sup> For the US PGM operations, PGM is represented by the 2E (Pt and Pd)

<sup>2</sup> For the SA PGM operations, PGM is represented by the 4E (Pt, Pd, Rh and Au)

<sup>3</sup> For the Lithium Mineral Resources, LCE content was calculated by multiplying the Li (%) content by a factor of 5.323. Lithium Hydroxide Monohydrate (LiOH.H<sub>2</sub>O) can be derived from LCE by dividing by a factor of 0.88