

# QUARTERLY REPORT

## December 2023



- **FY24 Group copper equivalent production guidance reduced by 3%<sup>1</sup>, reflecting revised guidance for Brazil Alumina, Mozal Aluminium and molybdenum output from Sierra Gorda.**
- **H1 FY24 Operating unit costs expected to be in line or below FY24 guidance for the majority of our operations.**
- **We are well positioned to capture the benefit of improved market conditions through expected production growth of 7%<sup>2</sup> in H2 FY24 and our ongoing focus on cost efficiencies.**
- Achieved record half year aluminium production, as Hillside Aluminium maintained its strong performance and Brazil Aluminium delivered an 8% increase in quarterly production.
- Cannington payable zinc equivalent production<sup>3</sup> increased by 13% in the December 2023 half year, as we mined a higher-grade sequence of stopes during the quarter.
- Cerro Matoso payable nickel production improved by 20% in the quarter, following the completion of planned maintenance and a temporary reduction in third-party gas supply in the prior quarter.
- Sierra Gorda payable copper equivalent<sup>4</sup> production decreased by 14% in the December 2023 half year, due to lower planned copper grades, and a temporary outage of the molybdenum plant.
- Illawarra Metallurgical Coal production decreased by 39% in the December 2023 half year, as we completed two planned longwall moves. FY24 guidance is unchanged with volumes remaining weighted to the second half.
- Manganese production decreased by 5% in the December 2023 half year, as lower yields impacted secondary production at Australia Manganese, and South Africa Manganese completed planned maintenance.
- Alumina production was largely unchanged as Worsley Alumina completed planned calciner maintenance, while we have lowered FY24 production guidance for Brazil Alumina by 7% due to third-party power outages and maintenance.
- FY24 production guidance for Mozal Aluminium lowered by 12%, as we reduced pots in operation to enable the smelter's recovery plan to be safely executed and deliver a sustained improvement in process stability.
- We continued our investment in critical path infrastructure for the Hermosa project and remain on track to make a final investment decision for the Taylor zinc-lead-silver deposit in the March 2024 quarter.

**South32 Chief Executive Officer, Graham Kerr:** "In the December 2023 quarter, our production results were mixed. Highlights for the quarter included a 20 per cent increase in zinc and nickel and a 7 per cent increase in silver. We also delivered record aluminium production for the half, as Hillside Aluminium maintained its strong performance and Brazil Aluminium continued to ramp up. However, production from Brazil Alumina, Mozal Aluminium and molybdenum output from Sierra Gorda was below plan, with flow on impacts to annual production guidance.

"With some of our commodities facing headwinds in the half, we continued to focus on delivering cost efficiencies and expect first half Operating unit costs to be below or in line with guidance for the majority of our operations.

"As we enter the second half, strengthening market conditions for many of our commodities, our planned 7 per cent production growth and ongoing cost management focus, position us well to capture higher margins.

"We continued to invest to increase our exposure to commodities critical to a low-carbon future. At our Hermosa project, we progressed critical path infrastructure and remain on track to make a final investment decision for the Taylor zinc-lead-silver deposit in the March 2024 quarter. Sierra Gorda also continued work on the fourth grinding line expansion project, which has the potential to sustainably increase copper production."

### Production summary

South32 share	1H23	1H24	HoH	2Q23	1Q24	2Q24	QoQ
Alumina production (kt)	2,613	<b>2,574</b>	(1%)	1,356	1,290	<b>1,284</b>	(0%)
Aluminium production (kt)	568	<b>575</b>	1%	289	288	<b>287</b>	(0%)
Payable copper production (kt)	37.9	<b>31.6</b>	(17%)	18.9	16.0	<b>15.6</b>	(3%)
Payable silver production (koz)	5,812	<b>6,999</b>	20%	3,064	3,375	<b>3,624</b>	7%
Payable lead production (kt)	52.4	<b>58.8</b>	12%	27.8	28.5	<b>30.3</b>	6%
Payable zinc production (kt)	30.4	<b>29.0</b>	(5%)	16.4	13.2	<b>15.8</b>	20%
Payable nickel production (kt)	20.4	<b>18.3</b>	(10%)	10.8	8.3	<b>10.0</b>	20%
Metallurgical coal production (kt)	2,753	<b>1,787</b>	(35%)	1,483	1,043	<b>744</b>	(29%)
Manganese ore production (kwmt)	2,937	<b>2,790</b>	(5%)	1,477	1,518	<b>1,272</b>	(16%)

Unless otherwise noted: percentage variance relates to performance during the half year ended December 2023 compared with the half year ended December 2022 (HoH), or the December 2023 quarter compared with the September 2023 quarter (QoQ); production and sales volumes are reported on an attributable basis.

## CORPORATE UPDATE

- Supporting our commitment to deliver improved safety performance, we continued to implement our multi-year Safety Improvement Program. This program includes significant investment in safety leadership through our 'Lead Safely Every Day' training, which continued to be deployed across our frontline leadership during the quarter.
- We progressed a Group-wide review focused on delivering a reduction in expenditure in FY24 and FY25 through cost efficiencies and capital prioritisation. We expect to provide further detail on this as part of our updated Operating unit cost and capital expenditure guidance with our H1 FY24 financial results announcement.
- We expect to record a build in working capital of ~US\$275M in H1 FY24. Trade receivables increased due to the timing of sales, and our high value aluminium inventory remained temporarily elevated as port congestion at Richards Bay impacted the timing of shipments from Hillside Aluminium. We expect to complete additional shipments from Hillside Aluminium and drawdown our aluminium inventory to normalised levels during the March 2024 quarter.
- We received net distributions<sup>5</sup> of US\$60M (South32 share) from our equity accounted investments (EAI) in H1 FY24 (US\$42M from our manganese business and US\$18M from Sierra Gorda), which reflected lower commodity prices and investment in projects to improve productivity and grow future production volumes.
- We allocated US\$375M to safe and reliable, and improvement and life extension, capital expenditure<sup>6</sup> (excluding EAI) in H1 FY24. This included our planned investment to support Illawarra Metallurgical Coal's transition to a more efficient single longwall configuration at the Appin mine from FY25 and additional ventilation capacity to enable mining in Appin's Area 7 until at least 2039<sup>7</sup>.
- We returned US\$145M in fully-franked ordinary dividends in respect of H2 FY23 during the December 2023 quarter.
- We also returned US\$35M via our on-market share buy-back in H1 FY24, purchasing a further 16M shares at an average price of A\$3.37. To 31 December 2023, our US\$2.4B capital management program was 96% complete with US\$98M remaining to be returned ahead of its extension or expiry on 1 March 2024<sup>8</sup>.
- We made Group tax payments of US\$96M (excluding EAI) in H1 FY24 as cash tax normalised following one-off portfolio related tax payments in the prior period.
- During the December 2023 quarter, we received an indemnity payment of US\$48M from the vendors of our Sierra Gorda acquisition, following Chilean Mining Tax reforms that were enacted in August 2023. This amount was recognised as a receivable in our FY23 financial accounts.
- Our Underlying effective tax rate (ETR) largely reflects the corporate tax rates and royalty related taxes of the jurisdictions in which we operate<sup>9</sup> and our geographical earnings mix, including our manganese and Sierra Gorda EAI on a proportional consolidated basis (including royalty related taxes for Australia Manganese<sup>10</sup> and Sierra Gorda<sup>11</sup>). The impact of permanent differences can have a disproportionate effect on our Underlying ETR when profit margins are compressed, or losses are incurred in specific jurisdictions. For this reason, an Underlying ETR of approximately 60% to 65% is now expected for H1 FY24.
- We expect to report H1 FY24 Group Underlying net finance costs of ~US\$120M, reflecting the Group's balance sheet position during the period.

## DEVELOPMENT AND EXPLORATION UPDATE

### Hermosa project

- We invested US\$188M of growth capital expenditure in H1 FY24 as we progressed construction of key infrastructure for our Taylor zinc-lead-silver and Clark battery-grade manganese deposits.
- The second water treatment plant was commissioned and made operational and a further two dewatering wells were completed. Dewatering is a critical path item that will enable access to both the Taylor and Clark deposits.
- We progressed the feasibility study and independent peer review for the Taylor deposit which remain on track to support a final investment decision in the March 2024 quarter.
- The FAST-41<sup>12</sup> federal permitting process progressed to the next stage, with the US Forest Service issuing a completeness determination for our mine plan of operations for both the Taylor and Clark deposits.
- We directed US\$14M to capitalised exploration in H1 FY24, commencing a first time exploration drilling program at the Flux prospect<sup>13</sup>, a priority target in our highly prospective regional land package.

### Greenfield exploration

- We invested US\$19M in our greenfield exploration opportunities in H1 FY24 with multiple exploration programs targeting base metals currently underway in Australia, USA, Canada, Argentina, and Ireland.
- We also invested US\$8M to increase our interest in Aldebaran Resources Inc. (Aldebaran Resources) to 14.8%. Aldebaran Resources has an earn-in to acquire an 80% interest in the Altar copper project in San Juan, Argentina.

### Other exploration

- We invested US\$34M (US\$27M capitalised) in exploration programs at our existing operations and development options in H1 FY24, including US\$14M at the Hermosa project (noted above, all capitalised), and US\$6M for our Sierra Gorda EAI (all capitalised).

## PRODUCTION SUMMARY

Production guidance (South32 share)	FY23	1H24	FY24e <sup>(a)</sup>	Comments
Worsley Alumina				
Alumina production (kt)	3,839	1,934	4,000	Guidance unchanged
Brazil Alumina (non-operated)				
Alumina production (kt)	1,262	640	↓ 1,300	Guidance reduced by 7% (from 1,400kt) due to third-party power outages and maintenance
Brazil Aluminium (non-operated)				
Aluminium production (kt)	69	50	100	Guidance unchanged
Hillside Aluminium <sup>14</sup>				
Aluminium production (kt)	719	359	720	Guidance unchanged
Mozal Aluminium <sup>14</sup>				
Aluminium production (kt)	345	166	↓ 320	Guidance reduced by 12% (from 365kt) as we reduced pots in operation to enable a sustained improvement in process stability
Sierra Gorda (non-operated)				
Payable copper equivalent production <sup>4</sup> (kt)	86.5	38.6	↓ 78.7	Molybdenum guidance reduced to 0.8kt (from 2.5kt) due to an unplanned molybdenum plant outage and low recoveries
Payable copper production (kt)	70.7	31.6	67.0	
Payable molybdenum production (kt)	1.2	0.5	↓ 0.8	
Payable gold production (koz)	28.8	13.4	22.5	
Payable silver production (koz)	630	295	550	
Cannington				
Payable zinc equivalent production <sup>3</sup> (kt)	259.6	147.2	287.2	Guidance unchanged
Payable silver production (koz)	11,183	6,704	12,500	
Payable lead production (kt)	101.7	58.8	115.0	
Payable zinc production (kt)	59.2	29.0	62.0	
Cerro Matoso				
Payable nickel production (kt)	40.8	18.3	40.5	Guidance unchanged with higher nickel grades expected H2 FY24
Illawarra Metallurgical Coal				
Total coal production (kt)	6,520	2,045	5,000	Guidance unchanged with volumes weighted to H2 FY24 due to planned longwall moves
Metallurgical coal production (kt)	5,497	1,787	4,400	
Energy coal production (kt)	1,023	258	600	
Australia Manganese				
Manganese ore production (kwmt)	3,545	1,679	3,400	Guidance unchanged, subject to potential wet season impacts
South Africa Manganese				
Manganese ore production (kwmt)	2,108	1,111	2,000	Guidance unchanged, subject to demand and our continued use of higher cost trucking

a. The denotation (e) refers to an estimate or forecast year.

## MARKETING UPDATE

Commodity prices were broadly lower in the December 2023 half year reflecting a moderation in demand and sentiment.

The average realised prices achieved for our commodities are summarised below. Outstanding concentrate sales were revalued at 31 December 2023 with the final price of these to be determined in the June 2024 half year.

Realised prices <sup>15</sup>	1H23	2H23	1H24	1H24 vs 1H23	1H24 vs 2H23
<b>Worsley Alumina</b>					
Alumina (US\$/t)	354	360	344	(3%)	(4%)
<b>Brazil Alumina (non-operated)<sup>(a)</sup></b>					
Alumina (US\$/t)	364	374	362	(1%)	(3%)
<b>Brazil Aluminium (non-operated)<sup>(a)</sup></b>					
Aluminium (US\$/t)	2,423	2,464	2,275	(6%)	(8%)
<b>Hillside Aluminium</b>					
Aluminium (US\$/t)	2,555	2,518	2,318	(9%)	(8%)
<b>Mozal Aluminium</b>					
Aluminium (US\$/t)	2,723	2,573	2,377	(13%)	(8%)
<b>Sierra Gorda (non-operated)<sup>16(a)</sup></b>					
Payable copper (US\$/lb)	3.41	3.63	3.56	4%	(2%)
Payable molybdenum (US\$/lb)	20.78	22.11	20.82	0%	(6%)
Payable gold (US\$/oz)	1,688	1,971	1,957	16%	(1%)
Payable silver (US\$/oz)	17.4	27.2	23.3	34%	(14%)
<b>Cannington<sup>16</sup></b>					
Payable silver (US\$/oz)	20.1	22.1	22.5	12%	2%
Payable lead (US\$/t)	2,008	1,824	1,979	(1%)	8%
Payable zinc (US\$/t)	2,436	1,895	2,085	(14%)	10%
<b>Cerro Matoso<sup>17</sup></b>					
Payable nickel (US\$/lb)	9.05	6.54	6.00	(34%)	(8%)
<b>Illawarra Metallurgical Coal</b>					
Metallurgical coal (US\$/t)	268	289	276	3%	(4%)
Energy coal (US\$/t)	164	122	101	(38%)	(17%)
<b>Australia Manganese<sup>18</sup></b>					
Manganese ore (US\$/dmtu, FOB)	4.57	4.62	3.79	(17%)	(18%)
<b>South Africa Manganese<sup>18</sup></b>					
Manganese ore (US\$/dmtu, FOB)	3.57	3.59	3.03	(15%)	(16%)

a. While Brazil Alumina and Brazil Aluminium are non-operated, South32 owns the marketing rights for our share of production. While Sierra Gorda is also non-operated, the Joint Venture is responsible for marketing our share of production.

## OPERATING UNIT COST UPDATE

We expect to report H1 FY24 Operating unit costs in line or below current FY24 guidance for the majority of our operations, with the benefit of cost efficiencies and lower raw material input prices. Looking forward, we remain focused on driving operating performance and further efficiencies to mitigate cost pressures. Further, Operating unit costs in H2 FY24 are expected to benefit from a planned 7% increase in Group production volumes<sup>2</sup>.

The below commentary reflects our current expectations for H1 FY24 Operating unit costs. We will report H1 FY24 Operating unit costs and provide updated FY24 guidance with our H1 FY24 financial results announcement.

Operating unit cost <sup>(a)</sup>		
	Current Guidance FY24e <sup>(b)(c)</sup>	H1 FY24 Operating unit costs commentary
<b>Worsley Alumina</b>		
(US\$/t)	290	Expected to be ~10% below current FY24 guidance, due to lower caustic soda prices and labour costs.
<b>Brazil Alumina (non-operated)</b>		
	Not provided	Expected to be ~12.5% below H2 FY23 Operating unit costs (US\$372/t), due to higher volumes, and lower caustic soda and energy prices.
<b>Brazil Aluminium (non-operated)</b>		
	Not provided	Expected to be ~7.5% above H2 FY23 Operating unit costs (US\$3,747/t), due to lower sales volumes, ahead of further export sales in H2 FY24.
<b>Hillside Aluminium</b>		
	Not provided	The cost profile of our South African aluminium smelters is heavily influenced by the South African rand, and the price of raw materials and energy. H1 FY24 Operating unit costs for Hillside Aluminium and Mozal Aluminium are expected to be marginally higher (1-2%) than H2 FY23 (US\$2,092/t and US\$2,433/t, respectively). Operating unit costs at Mozal Aluminium are expected to remain elevated in H2 FY24 due to higher pots out of service.
<b>Mozal Aluminium</b>		
<b>Sierra Gorda (non-operated)</b>		
(US\$/t) <sup>(d)</sup>	16.0	Expected to be ~17.5% above current FY24 guidance, due to higher maintenance costs, and a planned one-off workforce payment.
<b>Cannington</b>		
(US\$/t) <sup>(d)</sup>	155	Expected to be ~2.5% below current FY24 guidance.
<b>Cerro Matoso</b>		
(US\$/lb)	5.30	Expected to be ~5% above current FY24 guidance, due to lower volumes, more than offsetting lower price-linked royalties.
<b>Illawarra Metallurgical Coal</b>		
(US\$/t)	140	Expected to be ~20% above current FY24 guidance, due to the volume impact of planned longwall moves completed in H1 FY24. Annual production volumes remain weighted to H2 FY24.
<b>Australia Manganese (FOB)</b>		
(US\$/dmu)	2.15	Expected to be in line with current FY24 guidance.
<b>South Africa Manganese (FOB)</b>		
(US\$/dmu)	2.60	Expected to be in line with current FY24 guidance.

- Operating unit cost is Revenue less Underlying EBITDA, excluding third party sales, divided by sales volumes.
- FY24e Operating unit cost guidance includes royalties (where appropriate) and commodity price and foreign exchange rate forward curves or our internal expectations (refer to footnote 19).
- The denotation (e) refers to an estimate or forecast year.
- US dollar per tonne of ore processed. Periodic movements in finished product inventory may impact Operating unit costs.

## WORSLEY ALUMINA (86% SHARE)

South32 share	1H23	1H24	HoH	2Q23	1Q24	2Q24	2Q24 vs 2Q23	2Q24 vs 1Q24
Alumina production (kt)	1,922	<b>1,934</b>	1%	1,002	972	<b>962</b>	(4%)	(1%)
Alumina sales (kt)	1,861	<b>1,898</b>	2%	976	913	<b>985</b>	1%	8%

Worsley Alumina saleable production increased by 1% (or 12kt) to 1,934kt in the December 2023 half year. FY24 production guidance remains unchanged at 4,000kt with the refinery expected to deliver at nameplate production rates (4.6Mt, 100% basis) following planned calciner maintenance in the March 2024 quarter.

## BRAZIL ALUMINA (36% SHARE, NON-OPERATED)

South32 share	1H23	1H24	HoH	2Q23	1Q24	2Q24	2Q24 vs 2Q23	2Q24 vs 1Q24
Alumina production (kt)	691	<b>640</b>	(7%)	354	318	<b>322</b>	(9%)	1%
Alumina sales (kt)	678	<b>647</b>	(5%)	365	272	<b>375</b>	3%	38%

Brazil Alumina saleable production decreased by 7% (or 51kt) to 640kt in the December 2023 half year. Following the recovery from the prior period's port infrastructure outages, the refinery was impacted by third-party power outages and unplanned maintenance. Due to these impacts and additional required maintenance, we have reduced FY24 production guidance by 7% to 1,300kt and FY25 production guidance by 5% to 1,350kt.

Sales increased by 38% in the December 2023 quarter with a carry-over shipment from the prior quarter supporting a drawdown in inventory.



## BRAZIL ALUMINIUM (40% SHARE, NON-OPERATED)

South32 share	1H23	1H24	HoH	2Q23	1Q24	2Q24	2Q24 vs 2Q23	2Q24 vs 1Q24
Aluminium production (kt)	24	50	108%	15	24	26	73%	8%
Aluminium sales (kt)	19	40	111%	16	8	32	100%	300%

Brazil Aluminium saleable production increased by 26kt to 50kt in the December 2023 half year as the smelter continued to ramp up all three potlines. FY24 production guidance remains unchanged at 100kt.

Sales increased by 24kt to 32kt in the December 2023 quarter as we completed our first export shipment of low-carbon aluminium from the smelter, supporting a significant drawdown in inventory at the end of the period.

## HILLSIDE ALUMINIUM (100% SHARE)

South32 share	1H23	1H24	HoH	2Q23	1Q24	2Q24	2Q24 vs 2Q23	2Q24 vs 1Q24
Aluminium production (kt)	362	359	(1%)	183	180	179	(2%)	(1%)
Aluminium sales (kt)	337	327	(3%)	175	170	157	(10%)	(8%)

Hillside Aluminium saleable production decreased by 1% (or 3kt) to 359kt in the December 2023 half year as the smelter continued to test its maximum technical capacity, despite the impact of elevated load-shedding. FY24 production guidance remains unchanged at 720kt<sup>14</sup>.

Sales decreased by 8% in the December 2023 quarter as three shipments totalling approximately 40kt were delayed to January 2024 due to port congestion at Richards Bay. We expect to drawdown inventory to normalised levels during the March 2024 quarter.

## MOZAL ALUMINIUM (63.7% SHARE)

South32 share	1H23	1H24	HoH	2Q23	1Q24	2Q24	2Q24 vs 2Q23	2Q24 vs 1Q24
Aluminium production (kt)	182	166	(9%)	90	84	82	(9%)	(2%)
Aluminium sales (kt)	177	167	(6%)	90	77	90	0%	17%

Mozal Aluminium saleable production decreased by 9% (or 16kt) to 166kt in the December 2023 half year, as the smelter continued to implement its recovery plan following the fatal safety incident in the prior period, while managing the impact of elevated load-shedding.

The smelter progressed upgrades to the girder infrastructure during the December 2023 quarter, which resulted in an unplanned reduction in crane availability. We took the decision to reduce the number of pots in operation to enable the recovery plan to be safely executed and complete work designed to deliver a sustained improvement in process stability. As a result, approximately 73 pots (~13% of the total) were out of operation at the end of quarter, with these pots expected to be progressively returned to operation during the 2024 calendar year. FY24 production guidance has been reduced by 12% to 320kt<sup>14</sup> to reflect the lower number of pots in operation. FY25 production guidance is currently unchanged at 372kt<sup>14</sup>.

During the December 2023 quarter, approximately 60% of production was below specification material, which attracts product discounts compared to our other LME-linked aluminium sales. Metal quality is expected to progressively improve to LME-grade quality during the June 2024 half year.

## SIERRA GORDA (45% SHARE)

South32 share	1H23	1H24	HoH	2Q23	1Q24	2Q24	2Q24 vs 2Q23	2Q24 vs 1Q24
Payable copper equivalent production <sup>4</sup> (kt)	44.8	<b>38.6</b>	(14%)	22.3	20.3	<b>18.3</b>	(18%)	(10%)
Payable copper production (kt)	37.9	<b>31.6</b>	(17%)	18.9	16.0	<b>15.6</b>	(17%)	(3%)
Payable copper sales (kt)	38.4	<b>32.5</b>	(15%)	19.2	15.3	<b>17.2</b>	(10%)	12%

Sierra Gorda payable copper production decreased by 17% (or 6.3kt) to 31.6kt in the December 2023 half year as higher throughput delivered by the plant de-bottlenecking project, was more than offset by lower planned grades.

Payable molybdenum production decreased by 0.3kt to 0.1kt in the December 2023 quarter due to an unplanned outage of the molybdenum plant and low recoveries. The operation has commenced work to restore production, with higher output expected in the June 2024 quarter. As a result, FY24 molybdenum production guidance has been reduced to 0.8kt (from 2.5kt).

Sierra Gorda progressed the feasibility study for the fourth grinding line expansion during the December 2023 quarter. The feasibility study remains on track to support a planned final investment decision in the June 2024 half year.

## CANNINGTON (100% SHARE)

South32 share	1H23	1H24	HoH	2Q23	1Q24	2Q24	2Q24 vs 2Q23	2Q24 vs 1Q24
Payable zinc equivalent production <sup>3</sup> (kt)	130.8	<b>147.2</b>	13%	69.7	70.3	<b>76.9</b>	10%	9%
Payable silver production (koz)	5,474	<b>6,704</b>	22%	2,906	3,230	<b>3,474</b>	20%	8%
Payable silver sales (koz)	5,083	<b>6,529</b>	28%	3,379	2,873	<b>3,656</b>	8%	27%
Payable lead production (kt)	52.4	<b>58.8</b>	12%	27.8	28.5	<b>30.3</b>	9%	6%
Payable lead sales (kt)	51.3	<b>56.6</b>	10%	32.6	25.6	<b>31.0</b>	(5%)	21%
Payable zinc production (kt)	30.4	<b>29.0</b>	(5%)	16.4	13.2	<b>15.8</b>	(4%)	20%
Payable zinc sales (kt)	27.5	<b>28.3</b>	3%	12.6	13.9	<b>14.4</b>	14%	4%

Cannington payable zinc equivalent production<sup>3</sup> increased by 13% (or 16.4kt) to 147.2kt in the December 2023 half year as the mine plan moved through a sequence of higher-grade stopes in the quarter. FY24 production guidance remains unchanged at 287.2kt payable zinc equivalent production (silver 12,500koz, lead 115.0kt and zinc 62.0kt).



## CERRO MATOSO (99.9% SHARE)

South32 share	1H23	1H24	HoH	2Q23	1Q24	2Q24	2Q24 vs 2Q23	2Q24 vs 1Q24
Payable nickel production (kt)	20.4	<b>18.3</b>	(10%)	10.8	8.3	<b>10.0</b>	(7%)	20%
Payable nickel sales (kt)	19.8	<b>18.0</b>	(9%)	10.8	8.5	<b>9.5</b>	(12%)	12%

Cerro Matoso payable nickel production decreased by 10% (or 2.1kt) to 18.3kt in the December 2023 half year. Production improved by 20% (or 1.7kt) in the December 2023 quarter following the completion of planned maintenance and a temporary reduction in third-party gas supply in the prior quarter. FY24 production guidance remains unchanged at 40.5kt, with higher nickel grades expected in the June 2024 half year.

Price realisations for our ferronickel product reflected a discount of ~29% to the LME Nickel Index<sup>19</sup>, as structural changes in the nickel market continued to place pressure on both nickel prices and discounts for our ferronickel product. Along with the Group-wide cost review, we have commenced a strategic review of Cerro Matoso to evaluate options to enhance the operation's competitive position.

## ILLAWARRA METALLURGICAL COAL (100% SHARE)

South32 share	1H23	1H24	HoH	2Q23	1Q24	2Q24	2Q24 vs 2Q23	2Q24 vs 1Q24
Total coal production (kt)	3,331	<b>2,045</b>	(39%)	1,736	1,168	<b>877</b>	(49%)	(25%)
Total coal sales <sup>21</sup> (kt)	3,185	<b>2,096</b>	(34%)	1,795	1,196	<b>900</b>	(50%)	(25%)
Metallurgical coal production (kt)	2,753	<b>1,787</b>	(35%)	1,483	1,043	<b>744</b>	(50%)	(29%)
Metallurgical coal sales (kt)	2,678	<b>1,759</b>	(34%)	1,485	996	<b>763</b>	(49%)	(23%)
Energy coal production (kt)	578	<b>258</b>	(55%)	253	125	<b>133</b>	(47%)	6%
Energy coal sales (kt)	507	<b>337</b>	(34%)	310	200	<b>137</b>	(56%)	(32%)

Illawarra Metallurgical Coal saleable production decreased by 39% (or 1,286kt) to 2,045kt in the December 2023 half year as the operation completed two planned longwall moves, including a planned extended outage at the Dendrobium mine. A new four year industrial agreement covering deputies at the Appin mine was finalised in the December 2023 quarter.

FY24 production guidance remains unchanged at 5.0Mt with volumes remaining weighted to the June 2024 half year, reflecting the shorter duration of the two remaining longwall moves to be completed during the June 2024 quarter.

## AUSTRALIA MANGANESE (60% SHARE)

South32 share	1H23	1H24	HoH	2Q23	1Q24	2Q24	2Q24 vs 2Q23	2Q24 vs 1Q24
Manganese ore production (kwmt)	1,844	<b>1,679</b>	(9%)	946	890	<b>789</b>	(17%)	(11%)
Manganese ore sales (kwmt)	1,652	<b>1,864</b>	13%	873	940	<b>924</b>	6%	(2%)

Australia Manganese saleable production decreased by 9% (or 165kwmt) to 1,679kwmt in the December 2023 half year, as PC02 output declined due to lower yields, contributing 7% of total production (H1 FY23: 10%). FY24 production guidance remains unchanged at 3,400kwmt with the operation expected to continue to achieve strong primary output and return the PC02 circuit to nameplate production rates during the June 2024 quarter.

Sales increased by 13% in the December 2023 half year as improved road haulage capacity and alternative shipping solutions supported a planned drawdown in inventory. Our average realised price for manganese ore sales was a discount of approximately 5% to the high grade 44% manganese lump ore index<sup>22</sup> on a M-1 basis (FY23: 6% discount), reflecting lower planned ore grades, as well as price realisations for our PC02 product.

## SOUTH AFRICA MANGANESE (ORE 54.6% SHARE)

South32 share	1H23	1H24	HoH	2Q23	1Q24	2Q24	2Q24 vs 2Q23	2Q24 vs 1Q24
Manganese ore production (kwmt)	1,093	<b>1,111</b>	2%	531	628	<b>483</b>	(9%)	(23%)
Manganese ore sales (kwmt)	1,032	<b>1,082</b>	5%	559	518	<b>564</b>	1%	9%

South Africa Manganese saleable production increased by 2% (or 18kwmt) to 1,111kwmt in the December 2023 half year, while production decreased by 23% (or 145kwmt) in the December 2023 quarter as we completed a planned maintenance shut at our Mamatwan mine. FY24 production guidance remains unchanged at 2,000kwmt.

Sales increased by 9% in the December 2023 quarter with a carry-over shipment from the prior quarter. Our realised price for manganese ore sales was a premium of approximately 5% to the medium grade 37% manganese lump ore index<sup>23</sup> on a M-1 basis (FY23: 6% premium) as we continued to optimise our sales mix.

# NOTES

1. Group payable copper equivalent production based on revised FY24 production guidance, calculated by applying FY23 realised prices for all operations.
2. Group payable copper equivalent production in H2 FY24e, compared to H1 FY24, calculated by applying FY23 realised prices for all operations.
3. Payable zinc equivalent production (kt) was calculated by aggregating revenues from payable silver, lead and zinc, and dividing the total Revenue by the price of zinc. FY23 realised prices for zinc (US\$2,151/t), lead (US\$1,919/t) and silver (US\$21.1/oz) have been used for FY23, H1 FY24 and FY24e.
4. Payable copper equivalent production (kt) was calculated by aggregating revenues from copper, molybdenum, gold and silver, and dividing the total Revenue by the price of copper. FY23 realised prices for copper (US\$3.51/lb), molybdenum (US\$21.28/lb), gold (US\$1,821/oz) and silver (US\$21.9/oz) have been used for FY23, H1 FY24 and FY24e.
5. Net distributions from our material equity accounted investments (EAI) (manganese and Sierra Gorda) includes dividends and net repayments/drawdowns of shareholder loans, which are unaudited and should not be considered as an indication of or alternative to an IFRS measure of profitability, financial performance or liquidity.
6. Group safe and reliable capital expenditure and improvement and life extension capital expenditure (excluding EAI's). FY24 guidance is US\$690M.
7. The information in this announcement that relates to the Production Target for Appin (up to 2039) of Illawarra Metallurgical Coal is based on 21% Proved and 79% Probable Coal Reserves from Bulli (Appin). Production Target cautionary statement – The Coal Reserves estimates underpinning the Production Target have been prepared by Competent Persons and reported in accordance with the JORC Code. The Coal Resources and Coal Reserves estimates are available to view in South32's FY23 Annual Report (<http://www.south32.net>) published on 8 September 2023. The stated Production Target is based on South32's current expectations of future results or events and should not be solely relied upon by investors when making investment decisions. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met.
8. Since inception, US\$1.7B has been allocated to the on-market share buy-back (795M shares at an average price of A\$3.05 per share) and US\$525M returned in the form of special dividends.
9. The corporate tax rates of the geographies where the Group operates include: Australia 30%, South Africa 27%, Colombia 35%, Mozambique 0%, Brazil 34%, and Chile 27%. The Mozambique operations are subject to a royalty on revenues instead of income tax.
10. Australia Manganese is subject to a royalty related tax equal to 20% of adjusted EBIT which is included in Underlying tax expense.
11. Sierra Gorda is subject to a royalty related tax based on the amount of copper sold and the mining operating margin, the rate is between 5% and 14% for annual sales over 50kt of refined copper. This royalty is included in Underlying tax expense.
12. Refer to market release "Hermosa Project Update" dated 8 May 2023. In May 2023, our Hermosa project was confirmed by the US Federal Permitting Improvement Steering Council, an independent federal agency, as the first mining project added to the FAST-41 process.
13. Flux Exploration Target: The information in this announcement that relates to the Exploration Target for Flux is extracted from the announcement entitled (South32 Strategy and Business Update) published on 18 May 2021 and is available to view on [www.south32.net](http://www.south32.net). The information was prepared by D Bertuch, Competent Person in accordance with the requirements of the JORC Code. South32 confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. South32 confirms that the form and context in which the Competent Person's findings are presented have not been materially changed from the original market announcement.
14. Production guidance for Hillside Aluminium and Mozal Aluminium does not assume any load-shedding impact on production.
15. Realised prices are unaudited. Volumes and prices do not include any third party trading that may be undertaken independently of equity production. Realised sales price is calculated as sales Revenue divided by sales volume unless otherwise stated.
16. Realised prices for Sierra Gorda and Cannington are net of treatment and refining charges.
17. Realised nickel sales prices are inclusive of by-products.
18. Realised ore prices are calculated as external sales Revenue less freight and marketing costs, divided by external sales volume.
19. FY24 Operating unit cost guidance includes royalties (where appropriate) and the influence of exchange rates, and includes various assumptions for FY24, including: an alumina price of US\$349/t; an average blended coal price of US\$210/t for Illawarra Metallurgical Coal; a manganese ore price of US\$4.85/dmtu for 44% manganese product; a nickel price of US\$8.90/lb; a silver price of US\$24.5/troy oz; a lead price of US\$2,131/t (gross of treatment and refining charges); a zinc price of US\$2,446/t (gross of treatment and refining charges); a copper price of US\$3.87/lb (gross of treatment and refining charges); a molybdenum price of US\$22.5/lb (gross of treatment and refining charges); a gold price of US\$1,984/troy oz; an AUD:USD exchange rate of 0.65; a USD:ZAR exchange rate of 18.98; a USD:COP exchange rate of 4,033; USD:CLP exchange rate of 876; and a reference price for caustic soda; which reflect forward markets as at July 2023 or our internal expectations.
20. Our realised price for nickel sales during the December 2023 half year was US\$6.00/lb, which represented a ~29% discount to the average LME Nickel index price of US\$8.49/lb.
21. Illawarra Metallurgical Coal sales are adjusted for moisture and will not reconcile directly to Illawarra Metallurgical Coal production.
22. The sales volume weighted average of the Metal Bulletin 44% manganese lump ore index (CIF Tianjin, China) on the basis of a one-month lag to published pricing (Month minus one or "M-1") was US\$4.40/dmtu in the December 2023 half year.
23. The sales volume weighted average of the Metal Bulletin 37% manganese lump ore index (FOB Port Elizabeth, South Africa) on the basis of a M-1 basis was US\$2.89/dmtu in the December 2023 half year.

The following abbreviations have been used throughout this report: US\$ million (US\$M); US\$ billion (US\$B); grams per tonne (g/t); tonnes (t); thousand tonnes (kt); thousand tonnes per annum (ktpa); million tonnes (Mt); million tonnes per annum (Mtpa); ounces (oz); thousand ounces (koz); million ounces (Moz); thousand wet metric tonnes (kwmt); million wet metric tonnes (Mwmt); million wet metric tonnes per annum (Mwmt pa); dry metric tonne unit (dmtu); thousand dry metric tonnes (kdmt).

Figures in *italics* indicate that an adjustment has been made since the figures were previously reported. The denotation (e) refers to an estimate or forecast year.

## OPERATING PERFORMANCE

South32 share	1H23	1H24	2Q23	3Q23	4Q23	1Q24	2Q24
<b>Worsley Alumina (86% share)</b>							
Alumina hydrate production (kt)	1,955	<b>1,934</b>	998	921	957	973	<b>961</b>
Alumina production (kt)	1,922	<b>1,934</b>	1,002	905	1,012	972	<b>962</b>
Alumina sales (kt)	1,861	<b>1,898</b>	976	845	1,111	913	<b>985</b>
<b>Brazil Alumina (36% share)</b>							
Alumina production (kt)	691	<b>640</b>	354	334	237	318	<b>322</b>
Alumina sales (kt)	678	<b>647</b>	365	317	242	272	<b>375</b>
<b>Brazil Aluminium (40% share)</b>							
Aluminium production (kt)	24	<b>50</b>	15	22	24	24	<b>26</b>
Aluminium sales (kt)	19	<b>40</b>	16	23	26	8	<b>32</b>
<b>Hillside Aluminium (100% share)</b>							
Aluminium production (kt)	362	<b>359</b>	183	177	180	180	<b>179</b>
Aluminium sales (kt)	337	<b>327</b>	175	197	185	170	<b>157</b>
<b>Mozal Aluminium (63.7% share)</b>							
Aluminium production (kt)	182	<b>166</b>	90	81	82	84	<b>82</b>
Aluminium sales (kt)	177	<b>167</b>	90	43	114	77	<b>90</b>
<b>Sierra Gorda (45% share)</b>							
Ore mined (Mt)	15.4	<b>11.9</b>	6.6	5.1	5.5	5.9	<b>6.0</b>
Ore processed (Mt)	10.7	<b>10.9</b>	5.3	5.1	5.4	5.5	<b>5.4</b>
Copper ore grade processed (% Cu)	0.45	<b>0.37</b>	0.44	0.40	0.40	0.37	<b>0.38</b>
Payable copper equivalent production <sup>4</sup> (kt)	44.8	<b>38.6</b>	22.3	19.2	22.5	20.3	<b>18.3</b>
Payable copper production (kt)	37.9	<b>31.6</b>	18.9	15.5	17.3	16.0	<b>15.6</b>
Payable copper sales (kt)	38.4	<b>32.5</b>	19.2	15.4	18.0	15.3	<b>17.2</b>
Payable molybdenum production (kt)	0.4	<b>0.5</b>	0.2	0.3	0.5	0.4	<b>0.1</b>
Payable molybdenum sales (kt)	0.8	<b>0.7</b>	0.5	0.2	0.3	0.4	<b>0.3</b>
Payable gold production (koz)	15.3	<b>13.4</b>	7.5	6.2	7.3	6.3	<b>7.1</b>
Payable gold sales (koz)	15.4	<b>13.8</b>	7.7	6.4	7.3	6.3	<b>7.5</b>
Payable silver production (koz)	338	<b>295</b>	158	138	154	145	<b>150</b>
Payable silver sales (koz)	345	<b>300</b>	166	137	157	140	<b>160</b>

South32 share	1H23	1H24	2Q23	3Q23	4Q23	1Q24	2Q24
<b>Cannington (100% share)</b>							
Ore mined (kwmt)	1,123	<b>1,150</b>	484	469	631	551	<b>599</b>
Ore processed (kdmt)	1,142	<b>1,139</b>	624	452	562	562	<b>577</b>
Silver ore grade processed (g/t, Ag)	175	<b>211</b>	171	191	210	206	<b>216</b>
Lead ore grade processed (% , Pb)	5.5	<b>6.0</b>	5.4	5.5	5.8	5.8	<b>6.2</b>
Zinc ore grade processed (% , Zn)	3.6	<b>3.4</b>	3.6	3.8	4.0	3.2	<b>3.6</b>
Payable zinc equivalent production <sup>3</sup> (kt)	130.8	<b>147.2</b>	69.7	54.3	74.5	70.3	<b>76.9</b>
Payable silver production (koz)	5,474	<b>6,704</b>	2,906	2,341	3,368	3,230	<b>3,474</b>
Payable silver sales (koz)	5,083	<b>6,529</b>	3,379	2,412	3,244	2,873	<b>3,656</b>
Payable lead production (kt)	52.4	<b>58.8</b>	27.8	21.0	28.3	28.5	<b>30.3</b>
Payable lead sales (kt)	51.3	<b>56.6</b>	32.6	21.7	26.0	25.6	<b>31.0</b>
Payable zinc production (kt)	30.4	<b>29.0</b>	16.4	12.6	16.2	13.2	<b>15.8</b>
Payable zinc sales (kt)	27.5	<b>28.3</b>	12.6	8.8	21.8	13.9	<b>14.4</b>
<b>Cerro Matoso (99.9% share)</b>							
Ore mined (kwmt)	2,752	<b>2,183</b>	1,420	1,189	1,619	940	<b>1,243</b>
Ore processed (kdmt)	1,392	<b>1,317</b>	726	713	702	594	<b>723</b>
Ore grade processed (% , Ni)	1.64	<b>1.55</b>	1.65	1.58	1.62	1.57	<b>1.53</b>
Payable nickel production (kt)	20.4	<b>18.3</b>	10.8	10.2	10.2	8.3	<b>10.0</b>
Payable nickel sales (kt)	19.8	<b>18.0</b>	10.8	10.6	10.4	8.5	<b>9.5</b>
<b>Illawarra Metallurgical Coal (100% share)</b>							
Total coal production (kt)	3,331	<b>2,045</b>	1,736	1,436	1,753	1,168	<b>877</b>
Total coal sales <sup>21</sup> (kt)	3,185	<b>2,096</b>	1,795	1,477	1,697	1,196	<b>900</b>
Metallurgical coal production (kt)	2,753	<b>1,787</b>	1,483	1,240	1,504	1,043	<b>744</b>
Metallurgical coal sales (kt)	2,678	<b>1,759</b>	1,485	1,195	1,529	996	<b>763</b>
Energy coal production (kt)	578	<b>258</b>	253	196	249	125	<b>133</b>
Energy coal sales (kt)	507	<b>337</b>	310	282	168	200	<b>137</b>
<b>Australia Manganese (60% share)</b>							
Manganese ore production (kwmt)	1,844	<b>1,679</b>	946	832	869	890	<b>789</b>
Manganese ore sales (kwmt)	1,652	<b>1,864</b>	873	743	866	940	<b>924</b>
Ore grade sold (% , Mn)	44.2	<b>42.6</b>	44.1	44.0	43.1	42.9	<b>42.2</b>
<b>South Africa Manganese (54.6% share)</b>							
Manganese ore production (kwmt)	1,093	<b>1,111</b>	531	429	586	628	<b>483</b>
Manganese ore sales (kwmt)	1,032	<b>1,082</b>	559	492	541	518	<b>564</b>
Ore grade sold (% , Mn)	39.2	<b>38.7</b>	39.8	38.8	39.4	39.0	<b>38.4</b>

### Forward-looking statements

This release contains forward-looking statements, including statements about trends in commodity prices and currency exchange rates; demand for commodities; production forecasts; plans, strategies and objectives of management; capital costs and scheduling; operating costs; anticipated productive lives of projects, mines and facilities; and provisions and contingent liabilities. These forward-looking statements reflect expectations at the date of this release, however they are not guarantees or predictions of future performance. They involve known and unknown risks, uncertainties and other factors, many of which are beyond our control, and which may cause actual results to differ materially from those expressed in the statements contained in this release. Readers are cautioned not to put undue reliance on forward-looking statements. Except as required by applicable laws or regulations, the South32 Group does not undertake to publicly update or review any forward-looking statements, whether as a result of new information or future events. Past performance cannot be relied on as a guide to future performance. South32 cautions against reliance on any forward-looking statements or guidance.

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JSE Sponsor: The Standard Bank of South Africa Limited  
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