Management Discussion and Analysis

Results for the year ended 31 December 2023

For the purpose of the management discussion and analysis, the Group's results for the year ended 31 December 2023 are compared with results for the year ended 31 December 2022.

Year ended 31 December	2023 US$ million	2022 US$ million	Change % Fav/(Unfav)
Revenue	**4,346.5**	**3,254.2**	**34%**
Operating expenses	(2,814.1)	(1,682.6)	(67%)
Exploration expenses	(49.6)	(30.8)	(61%)
Administration expenses	(12.9)	(16.0)	19%
Net other (expense)/income	(8.0)	10.6	(175%)
EBITDA	**1,461.9**	**1,535.4**	**(5%)**
Depreciation and amortisation expenses	(930.2)	(790.1)	(18%)
EBIT	**531.7**	**745.3**	**(29%)**
Net finance costs	(342.1)	(284.8)	(20%)
Profit before income tax	189.6	460.5	(59%)
Income tax expense	(67.5)	(217.0)	69%
Profit for the year	**122.1**	**243.5**	**(50%)**
Attributable to:			
Equity holders of the Company	9.0	172.4	(95%)
Non-controlling interests	113.1	71.1	59%

Profit attributable to equity holders of the Company

MMG's profit of US$122.1 million for the year ended 31 December 2023 includes profit attributable to equity holders of US$9.0 million and profit attributable to non-controlling interests of US$113.1 million. This compares to a profit attributable to equity holders of US$172.4 million and profit attributable to non-controlling interests of US$71.1 million for the year ended 31 December 2022. Amounts attributable to non-controlling interests relates to the 37.5% interest in Las Bambas not owned by the Company.

The following table provides a reconciliation of reported profit after tax attributable to equity holders.

Year ended 31 December	2023 US$ million	2022 US$ million	Change % Fav/(Unfav)
Profit after tax – Las Bambas 62.5% interest	188.6	118.4	59%
(Loss)/profit after tax – other continuing operations	(55.9)	154.6	(136%)
Exploration expenses	(49.6)	(30.8)	(61%)
Administration expenses	(12.9)	(16.0)	19%
Net finance costs (excluding Las Bambas)	(98.5)	(81.7)	(21%)
Other	37.3	27.9	34%
Profit for the year attributable to equity holders	**9.0**	**172.4**	**(95%)**

Management Discussion and Analysis Continued

Overview of operating results

The Group's continuing operations comprise Las Bambas, Kinsevere, Dugald River and Rosebery. Exploration, corporate activities and other subsidiaries are classified as 'Other'.

	Revenue			EBITDA		
Year ended 31 December	2023 US$ million	2022 US$ million	Change % Fav/(Unfav)	2023 US$ million	2022 US$ million	Change % Fav/(Unfav)
Las Bambas	3,417.3	2,086.8	64%	1,396.7	1,121.9	24%
Kinsevere	354.6	421.5	(16%)	(32.0)	131.7	(124%)
Dugald River	331.2	484.3	(32%)	33.8	210.2	(84%)
Rosebery	240.0	259.9	(8%)	77.8	98.6	(21%)
Other	3.4	1.7	100%	(14.4)	(27.0)	47%
Total	**4,346.5**	**3,254.2**	**34%**	**1,461.9**	**1,535.4**	**(5%)**

The following discussion and analysis of the financial information and results should be read in conjunction with the financial statements.

Revenue increased by US$1,092.3 million (34%) to US$4,346.5 million compared to 2022 due to higher sales volumes (US$1,292.9 million), partly offset by lower commodity prices (US$200.6 million).

Sales volumes increased by US$1,292.9 million compared to 2022 driven by higher sales of copper concentrate (US$1,332.0 million) and molybdenum concentrate (US$33.3 million) at Las Bambas due to stable logistics since March 2023 compared to 173 days of road blockages throughout 2022. This was partly offset by lower copper cathode sales volumes at Kinsevere (US$43.6 million) in line with lower production due to declining oxide feed grades and lower ore milled caused by an unstable power supply from the national grid. Dugald River zinc and lead concentrate sales volumes were also lower (US$39.4 million), as a result of a 34-day suspension due to the tragic incident in February.

Unfavourable commodity price variances of US$200.6 million were driven by lower prices for zinc (US$159.2 million) and copper (US$117.6 million), partly offset by higher prices for gold (US$28.3 million), silver (US$25.5 million) and molybdenum (US$23.3 million). Price variances also include mark-to-market adjustments on open sales contracts and the impacts of commodity hedging.

Revenue by commodity Year ended 31 December	2023 US$ million	2022 US$ million	Change % Fav/(Unfav)
Copper	3,304.2	2,227.7	48%
Zinc	359.4	547.1	(34%)
Lead	67.9	72.9	(7%)
Gold	233.5	151.5	54%
Silver	205.7	135.8	51%
Molybdenum	175.8	119.2	47%
Total	**4,346.5**	**3,254.2**	**34%**

Management Discussion and Analysis
Continued

Price

Average LME base metals prices for zinc, copper and lead were lower in the year ended 31 December 2023 compared to the prior corresponding period. The averages for molybdenum, gold and silver were higher.

Average LME cash price[1] Year ended 31 December	2023	2022	Change % Fav/(Unfav)
Copper (US$/tonne)	8,483	8,815	(4%)
Zinc (US$/tonne)	2,649	3,485	(24%)
Lead (US$/tonne)	2,137	2,153	(1%)
Gold (US$/ounce)	1,943	1,801	8%
Silver (US$/ounce)	23.39	21.75	8%
Molybdenum (US$/tonne)	53,231	41,411	29%

1 Sources: zinc, lead, and copper: LME cash settlement price; Molybdenum: Platts; gold and silver: LBMA. LME (London Metal Exchange) data is used in this report under licence from LME; LME has no involvement and accepts no responsibility to any third party in connection with the data; and onward distribution of the data by third parties is not permitted.

Sales volumes

Payable metal in products sold Year ended 31 December	2023	2022	Change % Fav/(Unfav)
Copper (tonnes)	419,584	272,132	54%
Zinc (tonnes)	176,292	185,606	(5%)
Lead (tonnes)	34,389	36,461	(6%)
Gold (ounces)	121,316	89,049	36%
Silver (ounces)	8,926,822	6,707,204	33%
Molybdenum (tonnes)	4,037	3,156	28%

Payable metal in products sold Year ended 31 December 2023	Copper tonnes	Zinc tonnes	Lead tonnes	Gold ounces	Silver ounces	Molybdenum tonnes
Las Bambas	374,743	-	-	94,925	5,361,326	4,037
Kinsevere	43,710	-	-	-	-	-
Dugald River	-	128,628	17,535	-	1,358,919	-
Rosebery	1,131	47,664	16,854	26,391	2,206,577	-
Total	**419,584**	**176,292**	**34,389**	**121,316**	**8,926,822**	**4,037**

Payable metal in products sold Year ended 31 December 2022	Copper tonnes	Zinc tonnes	Lead tonnes	Gold ounces	Silver ounces	Molybdenum tonnes
Las Bambas	221,918	-	-	62,901	3,293,364	3,156
Kinsevere	49,048	-	-	-	-	-
Dugald River	-	140,980	19,116	-	1,342,406	-
Rosebery	1,166	44,626	17,345	26,148	2,071,434	-
Total	**272,132**	**185,606**	**36,461**	**89,049**	**6,707,204**	**3,156**

Management Discussion and Analysis Continued

Operating expenses include expenses of operating sites, excluding depreciation and amortisation. Site expenses include mining and processing expenses, changes in inventories, royalty expenses, selling expenses and other operating expenses.

Total operating expenses increased by US$1,131.5 million (67%) in 2023. This increase was primarily driven by unfavourable stock movement (US$787.4 million) resulting from the drawdown of Las Bambas copper concentrate stockpiles, compared to a build-up in 2022. Additionally, higher production expenses (US$273.1 million) were mainly attributable to higher costs at Las Bambas (US$214.5 million) in line with higher material mined and milled volumes and higher copper concentrate transported. Furthermore, there was higher consumption of third-party ores (US$47.3 million) at Kinsevere to offset the reduced oxide ore mined during the transition to mining sulphide ores.

Further detail is set out below in the mine analysis section.

Exploration expenses increased by US$18.8 million (61%) to US$49.6 million in 2023. Expenditure at Las Bambas (US$8.1 million) was higher with drilling focused on various locations within the Ferrobamba pit, including Ferrobamba Deeps, Ferrobamba South, Ferrobamba East, and West Plant targets. Higher costs at Rosebery (US$7.2 million) were due to the accelerated diamond drilling program to support life extension. At Kinsevere, exploration expenses were higher by US$3.5 million driven by resource testing at Sokoroshe II and Nambulwa satellite deposits.

Administrative expenses decreased by US$3.1 million (19%) to US$12.9 million in 2023 mainly due to the weaker Australian dollar (US$3.5 million).

Net other expenses increased by US$18.6 million (175%) compared to a net other income of US$10.6 million in 2022. This was mainly attributable to foreign exchange losses in 2023 (US$3.5 million) in contrast to foreign exchange gains in 2022 (US$6.6 million).

Depreciation and amortisation expenses increased by US$140.1 million (18%) to US$930.2 million compared to 2022. The increase was primarily attributable to higher mining and milling volumes at Las Bambas (US$134.3 million).

Net finance costs increased by US$57.3 million (20%) to US$342.1 million compared to 2022. The increase was mainly due to higher net interest costs driven by a rising interest rate environment (US$67.0 million), higher discount unwind on mine rehabilitation provisions (US$9.5 million) and a refund of interest from SUNAT (US$9.5M million) in 2022. This is partly offset by lower debt balances (US$18.2 million) and higher interest income ($9.3 million) due to increased rates for funds on deposit.

Income tax expense decreased by US$149.5 million, reflecting the decrease in the Group's underlying profit before income tax from the prior year. Underlying income tax expense for 2023 of US$67.5 million reflects the impacts of non-creditable withholding tax expenses in Peru of US$47.3 million (2022: US$35.8 million) and the reversal of prior year tax provisions of US$38.7 million due to the completion of tax audits.

Mine Analysis

Las Bambas

Location

Peru

Products

Copper concentrate
Molybdenum concentrate

Cu Mo

Revenue (US$ million)

$3,417.3

Ore milled (tonnes)

52,871,670

Copper in concentrate produced (tonnes)

302,033

Ownership

MMG Limited	62.5%
Guoxin International Investment Co. Ltd.	22.5%
Citic Metal Co. Ltd.	15.0%


MMG

Mine Analysis: Las Bambas
Continued

Year ended 31 December	2023	2022	Change % Fav/(Unfav)
Production			
Ore mined (tonnes)	46,429,483	43,178,984	8%
Ore milled (tonnes)	52,871,670	44,043,203	20%
Waste movement (tonnes)	122,908,814	116,206,593	6%
Copper in copper concentrate (tonnes)	302,033	254,836	19%
Payable metal in product sold			
Copper (tonnes)	374,743	221,918	69%
Gold (ounces)	94,925	62,901	51%
Silver (ounces)	5,361,326	3,293,364	63%
Molybdenum (tonnes)	4,037	3,156	28%

Year ended 31 December	2023 US$ million	2022 US$ million	Change% Fav/(Unfav)
Revenue	**3,417.3**	**2,086.8**	**64%**
Operating expenses			
Production expenses			
Mining	(490.4)	(401.2)	(22%)
Processing	(316.3)	(261.5)	(21%)
Other	(474.0)	(403.5)	(17%)
Total production expenses	**(1,280.7)**	**(1,066.2)**	**(20%)**
Freight (transportation)	(96.2)	(86.1)	(12%)
Royalties	(104.5)	(59.4)	(76%)
Other[1]	(532.3)	263.4	(302%)
Total operating expenses	**(2,013.7)**	**(948.3)**	**(112%)**
Other expenses	(6.9)	(16.6)	58%
EBITDA	**1,396.7**	**1,121.9**	**24%**
Depreciation and amortisation expenses	(800.0)	(665.7)	(20%)
EBIT	**596.7**	**456.2**	**31%**
EBITDA margin	**41%**	**54%**	

1 Other operating expenses include changes in inventories, corporate recharges and other costs of operations.

Mine Analysis: Las Bambas
Continued

Las Bambas produced 302,033 tonnes of copper in 2023, which was 47,197 tonnes (19%) higher than 2022 largely due to uninterrupted operations in 2023 that allowed 20% more ore to be processed compared to a production shutdown of more than 50 days in the second quarter of 2022.

Copper sales volumes were 69% higher compared to 2022 due to stable logistics since March 2023 compared to 173 days of road blockages throughout 2022. Copper concentrate sales of 1.1 million tonnes of concentrate (374,743 tonnes of payable metal) for the year 2023 marks as the second-highest level since the commissioning of the mine. As a result of the stability, on-site concentrate inventory was reduced to the minimal level of around 1,000 tonnes of copper in concentrate at the end of 2023, compared to approximately 85,000 tonnes at the beginning of the year.

Revenue of US$3,417.3 million was US$1,330.5 million (64%) higher than 2022 due to higher sales volumes for copper (US$1,236.8 million), gold (US$53.8 million), silver (US$41.4 million) and molybdenum (US$33.3 million) and higher sales prices for molybdenum (US$23.3 million). This was partly offset by lower copper prices (US$94.6 million).

Total production expenses of US$1,280.7 million were US$214.5 million or 20% above 2022. This was mainly driven by higher material mined and milled volumes (US$77.2 million), lower deferred mine capitalisation costs (US$67.6 million), higher copper concentrate transported (US$56.8 million) and increased maintenance works previously deferred (US$50.2 million). Production expenses were also higher due to increased execution of social programs ($22.5 million). This was partly offset by lower unit prices for diesel (US$21.1 million), explosives (US$14.1 million) and grinding media (US$5.5 million).

EBIT was further impacted by unfavourable stock movement of US$787.4 million due to a drawdown of concentrate inventory (US$468.3 million) in 2023, compared to a build-up (US$235.6 million) in 2022 and a higher drawdown of ore stockpiles (US$80.7 million). Royalty expenses were also higher by US$45.1 million reflecting higher revenue.

Depreciation and amortisation expenses were higher than 2022 by US$134.3 million (20%) due to higher mining and milling volumes.

The C1 costs of US$1.60/lb for 2023 were below our guidance range of US$1.65 – US$1.75/lb, although they were higher than the 2022 C1 costs of US$1.53/lb. The higher C1 unit costs in 2023 are attributed to higher production costs and the absence of care and maintenance cost exclusions for the period of the shutdown in 2022 (US$97.4 million), partly offset by increased copper production and higher by-product credits from molybdenum, gold and silver.

2024 Outlook

Full-year production for 2024 is expected to be between 280,000 and 320,000 tonnes of copper in concentrate. This is largely in line with 2023 but is subject to the timing of the development of Chalcobamba.

Las Bambas C1 costs in 2024 are expected to be in the range of US$1.60 – US$1.80/lb, representing an increase compared to 2023 primarily due to higher ore mined and milled volumes and lower by-product credits related to lower molybdenum price assumptions.

Mine Analysis

Kinsevere

Location

Democratic Republic of Congo

Product

Copper cathode
Cobalt hydroxide

Cu Co

Revenue (US$ million)

$354.6

Ownership

MMG Limited **100.0%**

Ore milled (tonnes)

2,107,223

Copper cathode produced (tonnes)

44,068

Mine Analysis: Kinsevere
Continued

Year ended 31 December	2023	2022	Change % Fav/(Unfav)
Production			
Ore mined (tonnes)	1,726,145	3,100,273	(44%)
Ore milled (tonnes)	2,107,223	2,348,699	(10%)
Waste movement (tonnes)	32,646,890	7,087,508	361%
Copper cathode (tonnes)	44,068	49,070	(10%)
Cobalt (tonnes)	105	-	-
Payable metal in product sold			
Copper (tonnes)[1]	43,710	49,048	(11%)

Year ended 31 December	2023 US$ million	2022 US$ million	Change % Fav/(Unfav)
Revenue	354.6	421.5	(16%)
Operating expenses			
Production expenses			
Mining	(18.7)	(62.5)	70%
Processing	(188.0)	(118.7)	(58%)
Other	(90.8)	(74.3)	(22%)
Total production expenses	**(297.5)**	**(255.5)**	**(16%)**
Freight (transportation)	(7.3)	(5.0)	(46%)
Royalties	(17.8)	(23.6)	25%
Other[2]	(32.2)	(10.2)	(216%)
Total operating expenses	**(354.8)**	**(294.3)**	**(21%)**
Other (expenses)/income	(31.8)	4.5	(807%)
EBITDA	**(32.0)**	**131.7**	**(124%)**
Depreciation and amortisation expenses	(27.5)	(27.8)	1%
EBIT	**(59.5)**	**103.9**	**(157%)**
EBITDA margin	**(9%)**	**31%**	

1 Kinsevere sold copper includes copper cathode and copper scrap.

2 Other operating expenses include changes in inventories, corporate recharges and other costs of operations.

Mine Analysis: Kinsevere Continued

Kinsevere produced 44,068 tonnes of copper cathode, which is a decrease of 10% compared to 2022. The lower cathode production was primarily attributed to a decrease in ore milled throughput (2,107,223 tonnes vs. 2,348,699 tonnes) caused by an unstable power supply from the national grid alongside lower ore feed grade.

Kinsevere revenue decreased by US$66.9 million (16%) to US$354.6 million compared to 2022 due to lower copper sales volumes in line with lower production (US$43.6 million) and lower copper prices (US$23.3 million).

Total production expenses increased by US$42.0 million or 16% compared to 2022. This was mainly driven by higher consumption of third-party ores (US$47.3 million) to offset the reduced oxide ore mined volume, and higher sulphuric acid consumption (US$12.3 million). Net mining costs decreased by US$43.8 million, primarily due to a rise in capitalised mining costs (US$115.3 million), which is associated with increased waste stripping activities as the operation transitions from mining oxide ores to mining sulphide ores. This more than offset the increased gross mining costs (US$72.8 million) as a result of a full year of mining operations in 2023 including the commencement of mining at Sokoroshe II.

Other operating expenses were higher than 2022 by US$22.0 million driven by unfavourable stock movement (US$12.1 million) due to the higher net drawdown of ore stockpiles.

Other expenses were higher than 2022 by US$36.3 million driven by foreign exchange losses in 2023 (US$17.9 million) and a release of legacy provisions in 2022 relating to the 2012 Kinsevere acquisition (US$14.1 million).

C1 costs for 2023 were US$3.29/lb, higher than the US$2.55/lb in 2022 driven by lower production, and higher processing cost caused by higher consumption of third-party ores and higher consumption of sulphuric acid.

2024 Outlook

Kinsevere copper cathode production for 2024 is expected to be in the range of 39,000 and 44,000 tonnes. This range reflects the declining supply of oxide ore due to the transition from the mining of oxide ores to the mining of sulphide ores. The supply from Sokoroshe II is expected to increase in 2024 to compensate for the reduced oxide ore mined from the Kinsevere main pit.

C1 costs in 2024 are expected to be in the range of US$2.80 – US$3.15/lb. This represents an improvement from 2023 due to by-product credits from cobalt production and an increase in the supply of ore mined from Sokoroshe II to reduce the reliance on third-party ore. Looking ahead to 2025 and beyond, the combination of higher copper production and cobalt by-product credits is expected to significantly lower the mine's C1 costs.

Mine Analysis

Dugald River

Location

Australia

Product

Zinc concentrate
Lead concentrate

Zn Pb

Revenue (US$ million)

$331.2

Ore milled (tonnes)

1,660,104

Zinc in zinc concentrate produced (tonnes)

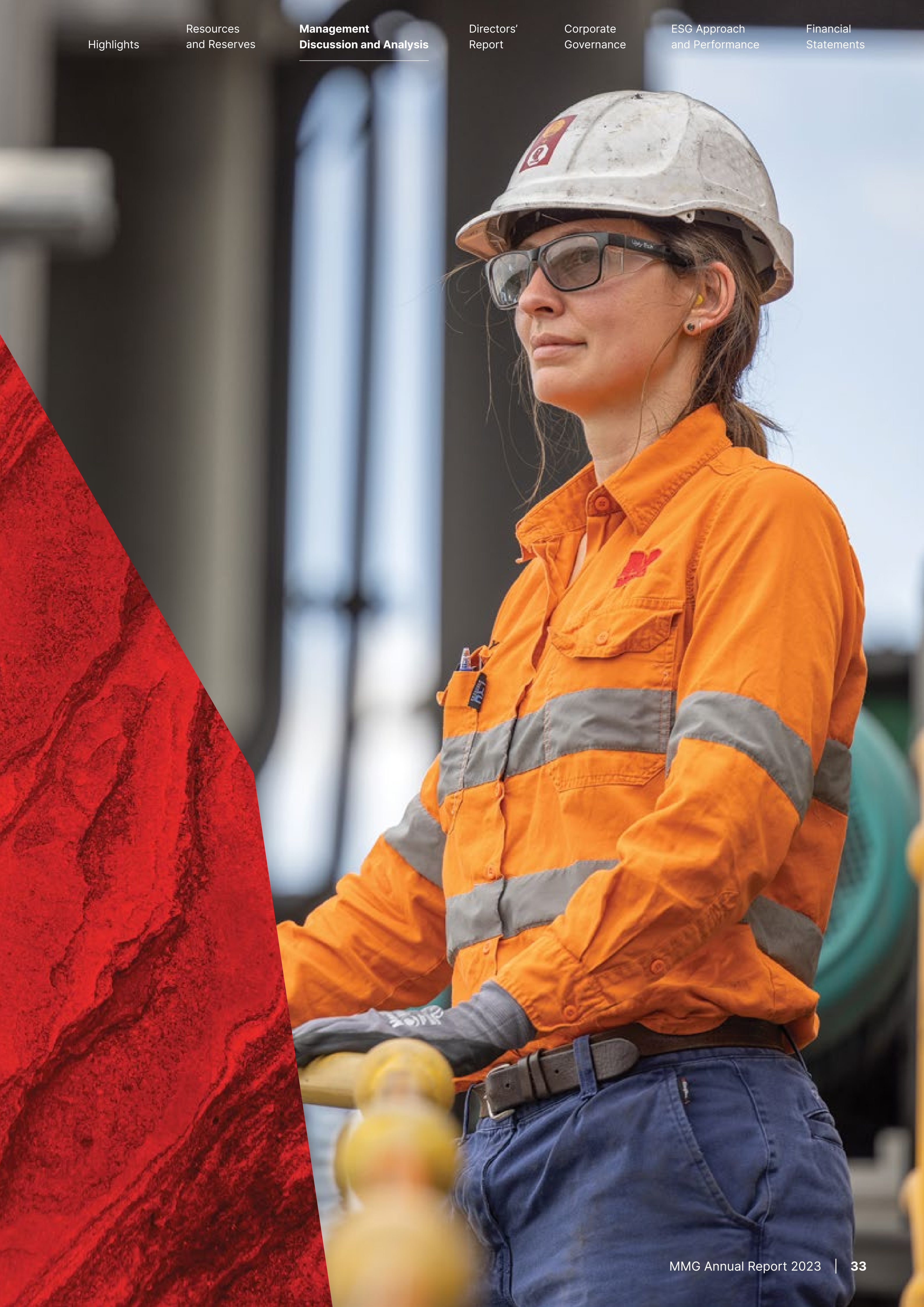
151,844

Lead in lead concentrate produced (tonnes)

19,907

Ownership

● MMG Limited **100.0%**



Mine Analysis: Dugald River
Continued

Year ended 31 December	2023	2022	Change % Fav/(Unfav)
Production			
Ore mined (tonnes)	1,650,517	1,873,332	(12%)
Ore milled (tonnes)	1,660,104	1,844,212	(10%)
Zinc in zinc concentrate (tonnes)	151,844	173,395	(12%)
Lead in lead concentrate (tonnes)	19,907	20,869	(5%)
Payable metal in product sold			
Zinc (tonnes)	128,628	140,980	(9%)
Lead (tonnes)	17,535	19,116	(8%)
Silver (ounces)	1,358,919	1,342,406	1%

Year ended 31 December	2023 US$ million	2022 US$ million	Change % Fav/(Unfav)
Revenue	**331.2**	**484.3**	**(32%)**
Operating expenses			
Production expenses			
Mining	(115.4)	(111.6)	(3%)
Processing	(66.1)	(68.6)	4%
Other	(65.7)	(69.3)	5%
Total production expenses	**(247.2)**	**(249.5)**	**1%**
Freight (transportation)	(16.6)	(18.2)	9%
Royalties	(14.9)	(20.7)	28%
Other[1]	(15.4)	10.9	(241%)
Total operating expenses	**(294.1)**	**(277.5)**	**(6%)**
Other (expenses)/income	(3.3)	3.4	(197%)
EBITDA	**33.8**	**210.2**	**(84%)**
Depreciation and amortisation expenses	(53.1)	(57.7)	8%
EBIT	**(19.3)**	**152.5**	**(113%)**
EBITDA margin	**10%**	**43%**	

1 Other operating expenses include changes in inventories, corporate recharges and other costs of operations.

Mine Analysis: Dugald River Continued

Dugald River produced 151,844 tonnes of zinc in zinc concentrate in 2023, which was 12% lower than 2022 as operations were suspended for 34 days after the fatal incident at the mine on 15 February 2023. Zinc metal production was also impacted by lower ore feed grades associated with the mining sequence, partially offset by record-high annual zinc recovery rates of 90.0% compared to 89.3% in 2022 driven by ongoing plant optimisation.

Revenue decreased by US$153.1 million to US$331.2 million due to lower zinc prices (US$117.2 million), a 9% drop in zinc sales volumes (US$36.6 million) and an 8% drop in lead sales volumes (US$3.2 million) in line with lower production. This was partly offset by higher silver prices (US$2.5 million).

Total production expenses decreased by US$2.3 million compared to 2022, primarily attributed to the favourable impact of the weaker Australian dollar (US$10.5 million) and lower costs (US$6.1 million) due to the suspension of operations. This reduction was partly offset by increased energy costs with higher gas prices (US$18.3 million) partly offset by savings from solar power (US$9.6 million), as well as unfavourable mining costs (US$4.1 million) due to increased development metres.

EBIT was additionally affected by unfavourable stock movement of US$26.2 million due to a net drawdown of concentrate inventory and ore stockpiles in 2023, as opposed to a net build-up in 2022. This was partly offset by lower royalties (US$5.8 million) in line with a decrease in revenue.

Dugald River's zinc C1 costs were US$0.93/lb in 2023, higher than the US$0.84/lb in 2022 but outperforming the revised guidance of US$1.05 – US$1.20/lb. The higher C1 costs were largely attributable to lower production volumes.

2024 Outlook

Dugald River zinc production for 2024 is expected to be in the range of 175,000 and 190,000 tonnes of zinc in zinc concentrate. This is a substantial improvement over 2023 reflecting the anticipated stable operations and continuous operational improvements compared to the suspension of operations in the first quarter of 2023.

C1 costs in 2024 are expected to be in the range of US$0.70 – US$0.85/lb due to the increased production as well as lower anticipated zinc treatment charges.

Mine Analysis

Rosebery

Location

Australia

Product
Zinc concentrate
Lead concentrate
Precious Metals Concentrate
Gold Doré

Zn Pb Au Ag

Revenue (US$ million)

$240.0

Ore milled (tonnes)

918,074

Zinc in zinc concentrate produced (tonnes)

51,626

Ownership

MMG Limited 100.0%

Mine Analysis: Rosebery
Continued

Year ended 31 December	2023	2022	Change % Fav/(Unfav)
Production			
Ore mined (tonnes)	922,275	886,118	4%
Ore milled (tonnes)	918,074	896,861	2%
Zinc in zinc concentrate (tonnes)	51,626	51,156	1%
Lead in lead concentrate (tonnes)	19,147	18,077	6%
Copper in precious metals concentrate (tonnes)	1,163	1,147	1%
Gold (ounces)	30,096	26,709	13%
Silver (ounces)	2,583,418	2,178,998	19%
Payable metal in product sold			
Copper (tonnes)	1,131	1,166	(3%)
Zinc (tonnes)	47,664	44,626	7%
Lead (tonnes)	16,854	17,345	(3%)
Gold (ounces)	26,391	26,148	1%
Silver (ounces)	2,206,577	2,071,434	7%

Year ended 31 December	2023 US$ million	2022 US$ million	Change % Fav/(Unfav)
Revenue	**240.0**	**259.9**	**(8%)**
Operating expenses			
Production expenses			
Mining	(78.2)	(70.5)	(11%)
Processing	(33.0)	(31.0)	(6%)
Other	(29.8)	(26.7)	(12%)
Total production expenses	**(141.0)**	**(128.2)**	**(10%)**
Freight (transportation)	(7.8)	(10.1)	23%
Royalties	(3.7)	(12.8)	71%
Other[1]	(4.0)	(10.2)	61%
Total operating expenses	**(156.5)**	**(161.3)**	**3%**
Other expenses	(5.7)	-	(100%)
EBITDA	**77.8**	**98.6**	**(21%)**
Depreciation and amortisation expenses	(56.8)	(46.9)	(21%)
EBIT	**21.0**	**51.7**	**(59%)**
EBITDA margin	**32%**	**38%**	

1 Other operating expenses include changes in inventories, corporate recharges and other costs of operations.

Mine Analysis: Rosebery Continued

Rosebery produced 51,626 tonnes of zinc in zinc concentrate and 19,147 tonnes of lead in lead concentrate in 2023. This represented a 1% and 6% increase respectively compared to 2022. The volume of ore mined was 4% higher compared to 2022, primarily due to mining sequence and improved workforce availability, despite lost production in January resulting from the bushfire incident.

Precious metal production for 2023 totalled 30,096 ounces of gold and 2,583,418 ounces of silver. This represents an increase of 13% and 19% respectively compared to 2022, reflecting higher grades for both gold and silver.

Revenue decreased by US$19.9 million (8%) to US$240.0 million due to lower prices for zinc (US$42.0 million), lead (US$1.8 million), and copper (US$1.0 million), this was partly offset by higher zinc sales volumes (US$8.8 million), higher precious metal prices (US$14.1 million) and higher precious metal sales volumes (US$3.1 million).

Total production expenses increased by US$12.8 million (10%) compared to 2022 mainly due to higher mining costs (US$11.8 million) driven by increased ore mined, higher backfill volumes and higher intensity of ground support in seismically active areas of the mine. Processing costs were also higher by US$3.5 million driven by higher ore milled volumes. This is partly offset by impact of the weaker Australian dollar (US$6.1 million).

Royalties were favourable by US$9.1 million reflecting lower sales revenue and profit as well as an adjustment that was made to the prior year's royalty return.

Rosebery's C1 costs were US$0.26/lb in 2023, in line with 2022, as higher production expenses were offset by higher by-product credits.

2024 Outlook

Rosebery zinc production for 2024 is expected to be in the range of 50,000 to 60,000 tonnes of zinc in zinc concentrate, an improvement on 2023 mainly due to higher expected zinc grades. Including the contribution of by-product metals, zinc equivalent production for 2024 is expected to be in the range of 115,000 to 130,000 tonnes.

C1 costs for 2024 are expected to be in the range of US$0.10 – US$0.25/lb. This is an improvement on 2023 due to higher anticipated production levels and lower zinc treatment charges.

Management Discussion and Analysis
Continued

Cash flow analysis

Net cash flow

Year ended 31 December	2023 US$ million	2022 US$ million	Change % Fav/(Unfav)
Net operating cash flows	1,849.9	832.1	122%
Net investing cash flows	(790.0)	(538.7)	(47%)
Net financing cash flows	(985.1)	(1,176.5)	16%
Net cash inflows/(outflows)	**74.8**	**(883.1)**	**108%**

Net operating cash inflows increased by US$1,017.8 million (122%) to US$1,849.9 million driven by favourable working capital movements (US$828.2 million) with a copper concentrate inventory drawdown at Las Bambas compared to a build-up in 2022. Lower tax payments in Peru (US$160.9 million) and the DRC (US$29.5 million) also contributed positively.

Net investing cash outflows increased by US$251.3 million (47%) to US$790.0 million. This was driven by higher capital expenditure at Kinsevere (US$251.5 million) attributable to expenditure on the Kinsevere Expansion Project.

Net financing cash outflows were favourable by US$191.4 million (16%) compared to 2022. This was due to a US$500.0 million early payment on the Las Bambas Project facility in 2022 and cash received on early closure of the Interest Rate Swap (US$96.0 million). This was partly offset by a net repayment on working capital facilities (US$150.0 million) in 2023 compared to a net drawdown ($150.0 million) in 2022, and higher net finance costs paid (US$81.8 million).

Financial resources and liquidity

	31 December 2023 US$ million	31 December 2022 US$ million	Change US$ million
Total assets	11,900.8	12,535.5	(634.7)
Total liabilities	(7,588.8)	(8,307.0)	718.2
Total equity	**4,312.0**	**4,228.5**	**83.5**

Total equity increased by US$83.5 million to US$4,312.0 million as at 31 December 2023.

Management Discussion and Analysis Continued

The gearing ratio for the Group is defined as net debt (total borrowings excluding finance charge prepayments, less cash, and cash equivalents) divided by the aggregate of net debt and total equity as set out in the following table:

MMG Group	31 December 2023 US$ million	31 December 2022 US$ million
Total borrowings (excluding prepaid finance charges)[1]	4,748.1	5,456.9
Less: cash and cash equivalents	(447.0)	(372.2)
Net debt	**4,301.1**	**5,084.7**
Total equity	4,312.0	4,228.5
Net debt +Total equity	**8,613.1**	**9,313.2**
Gearing ratio	**0.50**	**0.55**

1 Borrowings at an MMG Group level reflect 100% of the borrowings of the Las Bambas Joint Venture Group. Las Bambas Joint Venture Group borrowings as at 31 December 2023 were US$2,016.8 million (31 December 2022: US$3,025.6 million) and Las Bambas Joint Venture Group cash and cash equivalents as at 31 December 2023 were US$399.2 million (31 December 2022: US$171.8 million). For the purpose of calculating the gearing ratio, Las Bambas Joint Venture Group's borrowings have not been reduced to reflect the MMG Group's 62.5% equity interest. This is consistent with the basis of the preparation of MMG's financial statements.

Available debt facilities

As at the date of the financial statements are authorised to be issue, the Group (excluding the Las Bambas Joint Venture Group) had available in its undrawn debt facilities an amount of US$3,350 million (31 December 2022: US$300.0 million). These include:

1. A new US$1,000.0 million RCF from Top Create was undrawn and available. It will expire in December 2026;
2. A new US$200.0 million RCF from China Construction Bank ("CCB") of which US$50.0 million was undrawn and available. It will expire in January 2027;
3. A new US$300.0 million Term Loan Facility from Top Create supporting KEP project was undrawn and available. It will expire in December 2030; and
4. A new US$2,000.0 million shareholder term loan facility with Top Create to support the acquisition of the Cuprous Capital Ltd ("CCL") and its subsidiaries was undrawn and available.

As at the date of the financial statements are authorised to be issue, the Las Bambas Joint Venture Group had available in its undrawn debt facilities of US$975.0 million (31 December 2022: US$800.0 million). These include:

1. A US$350.0 million RCF from Album Enterprises was undrawn and available. This facility was successfully extended for 1 year and will expire in August 2024;
2. A new US$275.0 million RCF from BOC was undrawn and available. This facility will expire in April 2026;
3. A new US$150.0 million RCF from ICBC made up from three tranches of US$50.0 million each was undrawn and available. This facility will expire in March, May and June 2026;
4. A new US$100.0 million RCF from CCB was undrawn and available. This facility will expire in February 2027; and
5. A new US$100.0 million RCF from BOCOM was undrawn and available. This facility will expire in August 2026;

Note: The US$800.0 million revolving credit facility available at 31 December 2022 provided by China Development Bank, Bank of China, Bank of Communications and The Export-Import Bank of China for operation and general corporate purposes was cancelled in September 2023.

The Group's certain available external debt facilities are subject to covenant compliance requirements. The Group was not in breach of covenant requirements in respect of the Group's borrowings at 31 December 2023. Certain financial covenants are measured with reference to the financial performance of the Group or its subsidiaries, and may be influenced by future operational performance.

Management Discussion and Analysis
Continued

Placing of new shares under general mandate

On 8 June 2021, the Company undertook a share placement with an issue of 565.0 million shares at a price of HK$4.15 per share ("the Placement"). The net proceeds, after deducting share issue costs of US$3.1 million, was US$299.0 million.

At 31 December 2023, the Company has no amount of proceeds brought forward from the placement (31 December 2022: US$85.0 million). The Company has applied 49.8% (31 December 2022: 29.9%) of the net proceeds to the KEP project; and 50.2% (31 December 2022: 70.1%) for the replenishment of working capital and general corporate purposes to support the Company's strategy.

Development projects

The Chalcobamba project, as part of the next phase of development at Las Bambas, is located around three kilometres from the current processing plant. In March 2022, the Peru Ministry of Energy and Mines granted regulatory approval for the development of the Chalcobamba pit and associated infrastructure.

MMG remains committed to working closely with the Government of Peru and community members for transparent and constructive dialogue. Discussions with the Huancuire community have advanced with the signing of five contracts with community companies and these companies have now commenced early works at Chalcobamba. The Las Bambas team is working with the Huancuire community towards enduring agreements for the development of the Chalcobamba deposit.

The project is significant for the economy of Peru and will support additional social contributions and financial and business opportunities for local and regional communities. It will underpin an annual production increase to a range of 350,000 to 400,000 tonnes over the medium term.

In addition to the Chalcobamba project, successful deep drilling below the current Ferrobamba pit has defined the depth extension and continuity of skarn and porphyry mineralisation beneath the 2022 Ore Reserve pit design. These positive drill results confirmed the potential for a large tonnage of copper (at 0.4% to 0.6%), molybdenum (at 200 to 500 ppm), silver (2g/t to 4g/t) and gold (0.04g/t to 0.08g/t) grade deposit may exist at Ferrobamba Deeps. Ongoing studies are being conducted based on these positive results, and further drilling is planned for 2024 to evaluate the mineralisation and determine potential mining methods, including expansion of the open pit and/or an underground development.

Kinsevere Expansion Project, which includes the transition to the mining and processing of sulphide ore and the commencement of cobalt production, remains on track. The cobalt plant was commissioned in the fourth quarter of 2023 with cobalt hydroxide produced, containing 105 tonnes of cobalt. The new tailing storage facility was commissioned to support the cobalt plant ramp-up.

The construction of the sulphide processing system continued with the majority of civil work completed in the fourth quarter. The site started receiving long-lead equipment and material. Mechanical and structural installation has also commenced. Progress has been made at the jaw crusher, coarse ore stockpile, SAG mill, flotation cells, thickeners and concentrator storage, as well as the main body of the roaster plant.

Moving forward, the focus will be on the ramp-up of the cobalt plant and completing the installation of the concentrator and the roaster, gas cleaning and acid plant (RGA) as well as operational readiness-related work.

This next phase of Kinsevere development will extend Kinsevere's mine life to at least 2035 and, once fully ramped up, will result in total annual production of approximately 80,000 tonnes of copper cathode and 4,000-6,000 tonnes of cobalt in cobalt hydroxide. The first production of copper cathode from sulphides is expected in the second half of 2024, and a full ramp-up is expected in 2025.

Management Discussion and Analysis
Continued

Rosebery mine life extension is being supported by an accelerated exploration program. Project Legacy, initiated in 2023, is designed with the objective of extending the mine life through an accelerated diamond drilling program. This drilling program, which includes both underground and surface drilling, has already resulted in several intersections. The current orebody knowledge demonstrates that extensions to the Rosebery orebody are possible with new targets emerging in the field. Several targets show significant intercepts and growth potential. Project Legacy is set to continue the accelerated drilling strategy in 2024, with a primary focus on exploring key targets.

The Rosebery mine continues to engage with the Minister and the Department of Climate Change, Energy, the Environment and Water (DCCEEW) and provide all required information and documentation while awaiting the Minister's decision on the proposed preliminary works at South Marionoak. Concurrently the mine is continuing to investigate potential options for safe and viable short-term capacity increases at existing tailings storage facilities. Finding a sustainable tailings storage solution that supports the Rosebery mine life extension remains a key priority for our operation and we will continue to proactively explore all feasible options.

There were no other major development projects noted during the year ended 31 December 2023.

Contracts and commitments

Throughout the year 2023, a total of 745 contracts have been reviewed either through market engagements or in-contract renegotiations. The approximate annual operational or capital values addressed by these activities comes to US$1,047.6 million.

Significant contracting activities were conducted across all operational sites to ensure the security of supply for critical inputs and other necessary requirements. This was essential to support the scheduled execution of projects, the continuity of our operations, and the effective management of potential disruption risks.

Las Bambas

New and revised agreements were finalised to optimise production and development options for Las Bambas. These agreements include contracts for a consolidated head contractor for projects, which encompasses studies, engineering services and construction supervision. Additionally, contracts were finalised for activities such as projects construction (including an EPC contract for the new truck shop, construction of phase 6 of the tailings storage facility and tailings deposition improvement), new fuel supply, mining services such as blasting and drilling services, equipment maintenance, catering and camp services, personal transportation, health and medical services, road maintenance, customs and freight forwarding, plant shutdown services, major component repair, as well as components, spares and other consumables. Significant efforts were made to ensure the safety and continuity of supply during blockades in the first quarter of the year in order to support continued operations.

Kinsevere

Several new and revised agreements were finalised for activities such as deployment of a fleet management system, tailing storage facility-related works, procurement of generator sets and slope monitoring equipment. Parts of the contract packages for the Kinsevere Expansion Project, which were signed in 2022, were completed in 2023. These completed packages include construction of the cobalt plant package, the third tailing storage facility (TSF3) package and the Sokoroshe II mine infrastructure package. The equipment and materials required for the RGA (Roaster, Gas Cleaning, and Acid) plant and the concentration plant are being delivered to the site, with the construction of these components set to continue throughout 2024.

Management Discussion and Analysis Continued

Dugald River

New and revised agreements were finalised to support the optimisation of production performance and operation, particularly in consideration for the owner-operator transition for production mining. These agreements include multiple contracts for the purchase of mobile equipment, related maintenance support, and necessary amendments to contracted development mining services. A number of logistics agreements related to the outbound transport of concentrate were executed and will be further optimised with additional contracts in early 2024. Additionally, contracts were finalised for a number of bulk chemicals used in the processing plant.

Ongoing activity has involved the review of long-term energy options. In 2023, around one third of the power requirement transitioned to solar, and a number of gas contracts were entered into for 2024 to continue firming power supply. Sustainable long-term power options are under review to drive cost reduction and increase the adoption of renewable energy sources.

Rosebery

New and revised agreements were finalised for various significant goods and services across the operation. These agreements cover ground support materials and services, various groundwater monitoring/environment testing services and various mobile equipment items, including Rosebery's first diesel-electric loader, following trials earlier in the year.

Group

New and revised agreements have been finalised for various goods and services, including IT-related goods and services as well as a number of professional services consultancy agreements covering marketing, assurance, risk and audit, finance and reporting, and HR (Human Resources).

People

As at 31 December 2023, the Group employed a total of 4,542 full-time equivalent employees (2022: 4,296) in its continuing operations (excluding contractors and casual employees) with the majority of employees based in Australia, Peru, the DRC, China and Laos.

Total employee benefits expenses for the Group's operations for the year ended 31 December 2023, including Directors' emoluments, totalled US$365.7 million (2022: US$321.9 million). The increase was mainly due to the insourcing of mining activities at Dugald River and the commencement of the Kinsevere Expansion Project in the DRC.

The Group has remuneration policies that align with market practice and remunerates its employees based on the accountabilities of their role, their performance, market practice, legislative requirements and the performance of the Group. Employee benefits include market-competitive fixed remuneration, performance-related incentives, a limited company equity scheme and, in specific cases, insurance and medical support. A range of targeted training and development programs are provided to employees across the Group that are designed to improve individual capability and enhance employee and Group performance.

Exploration activities

Las Bambas

Extensive drilling activities were conducted at various locations within the Ferrobamba pit. Specifically, drilling at Ferrobamba Deeps continued, situated directly beneath the current Ferrobamba Ore Reserve pit.

Ongoing studies and further drilling are planned for 2024 to evaluate the mineralisation and determine potential mining methods including expansion of the open pit and / or an underground development at Ferrobamba Deeps.

Management Discussion and Analysis
Continued

Additionally, drilling activities were carried out at Ferrobamba South, Ferrobamba East, and West Plant targets, focusing primarily on near-surface skarn and porphyry copper mineralisation. At Ferrobamba South, drilling specifically targeted the extension of mineralisation along the southern edge of the Ferrobamba pit and the depth extension of Ferrobamba Deeps. Similarly, at Ferrobamba East, the objective was to explore the extension of mineralisation east of the current open pit. At the West Plant project, drilling activities concentrated on identifying polymetallic intermediate sulfidation veins located west of the processing plant.

Kinsevere

The 2023 exploration program focused on resource testing drilling and resource delineation drilling at the Kinsevere mine site and satellite projects.

At Kinsevere the drilling concentrated on the Saddle and Mashi extension targets. On the Nambulwa tenement, drilling activities concentrated on the Kimbwe-Kafubu target. Additional prospect testing occurred at Wasumbu and Kamafesa oxide copper targets.

Furthermore, the geological model for Saddle area in Kinsevere was completed in preparation for resource estimation, and the construction of the geological model for the northwest-extension of the Kinsevere mine is in progress.

Dugald River

The 2023 surface exploration drilling campaign for Extended Dugald River (EDR) focused on extending the Dugald River lode at depth, with a total of eight drill holes aimed at extending and improving geological confidence in the central and south extents of the Dugald River lode. Additionally, an exploration program targeting Cu-Au-Co included a scout hole drilled into the M2 target to test a magnetic anomaly from the sub-audio magnetic (SAM) geophysical survey completed in the third quarter 2023. Another long (+650m) underground diamond drill hole tested geochemical and geophysical anomalies interpreted from the 2023 down-hole electro-magnetic (DHEM) survey at Target Z.

Rosebery

Project Legacy, initiated in January 2023, is designed with the objective of extending the mine life through an accelerated diamond drilling program. This program employs 5 underground rigs and 3 surface rigs to carry out exploration drilling around the known Rosebery orebody. The in-mine drilling has focussed on areas outside the current mining focus in the lower mine such as T Lens, U Downdip, Lower V Lens, Lower H Lens, AB South and AB North.

Further drilling concentrated to the north of the lower mine such as Z Lens. Surface and underground drilling was also conducted to the west of the Rosebery Fault into the Oak prospect. In 2024, other targets will also be tested as part of this exploration.

Furthermore, surface drilling in the late fourth quarter focussed on growth potential at the historical Jupiter and Hercules mines, which are located 4km and 8km south of Rosebery, respectively.

Project Legacy is set to continue the accelerated drilling program in 2024, with a primary focus on exploring key targets.

Management Discussion and Analysis
Continued

Project	Hole type	Meterage (metres)	Number of holes	Average length (metres)
Americas				
Las Bambas	Diamond (Ferrobamba Deeps)	36,831	57	646
	Diamond (Ferrobamba South)	11,453	14	818
	Diamond (Ferrobamba East)	1,983	4	496
	Diamond (West Plant)	2,228	4	557
Africa				
Kinsevere	Diamond (SOK II Regional)	4,636	28	166
	Diamond (Nambulwa - Wasumbu)	1,195	6	199
	Diamond (Kamafesa)	601	4	150
	Diamond (Kinsevere Hill SE Extension)	440	2	220
	Diamond (Mashi Extension)	4,584	15	306
	Diamond (Nambulwa - Kimbwe Kafubu)	7,031	34	207
	Diamond (Kinsevere Saddle)	4,976	18	276
Australia				
Dugald River	Diamond EDR Near-Mine growth	10,172	8	1,272
	Diamond Cu-Au-Co exploration	1,275	2	638
Rosebery	Diamond – surface exploration	31,938	72	444
	Diamond – underground exploration	52,525	201	261
Total		**171,868**	**469**	**366**

Material acquisitions and disposals

On 21 November 2023, MMG announced that it entered into a Share Purchase Agreement with Cuprous Capital Ltd on 20 November 2023 to acquire the Khoemacau Mine in Botswana for US$1,875,000,000. The Khoemacau Mine is a large, long life copper mine located in north-west Botswana, in the emerging Kalahari Copperbelt. The Khoemacau Mine's 4,040 km^2 tenement package hosts the 10th largest African copper Mineral Resource by total contained copper metal and is one of the largest copper sedimentary systems in the world outside of the Central African Copperbelt.

The Company has received written Shareholders' approval in respect of the acquisition from China Minmetals H.K. (Holdings) Limited, which holds approximately 67.55% of the total issued Shares of the Company, in accordance with Rule 14.44 of the Listing Rules. Accordingly, no general meeting will be convened by the Company to approve the acquisition. The Company will despatch the circular in relation to the acquisition to the Shareholders on or before 31 May 2024.

The acquisition is subject to the fulfillment or waiver of certain conditions and may or may not proceed to completion. On 22 December 2023, Khoemacau Copper Mining (Pty) Ltd, a subsidiary of Cuprous Capital Ltd, received approval from the Minister of Minerals and Energy of Botswana in respect of the transfer of a controlling interest in the project licenses and prospecting licenses associated with the Khoemacau Copper Mine, brought about by the acquisition.

The Company has obtained unconditional approvals of the acquisition from the Competition and Consumer Authority of Botswana and the State Administration for Market Regulation of the PRC on 30 January 2024 and 25 December 2023 respectively and the relevant conditions have been satisfied.

Management Discussion and Analysis
Continued

Subject to the terms of the Agreement, MMG and Cuprous Capital Ltd have agreed to work towards Completion in the first quarter of 2024.

Events after the reporting date

Other than the matters outlined below, there have been no matters that have occurred subsequent to the reporting date, which have significantly affected, or may significantly affect, the Group's operations, results or state of affairs in future years.

- On 20 November 2023, the Group entered into a Share Purchase Agreement with Cupric Canyon Capital L.P., The Ferreira Family Trust, Resource Capital Fund VII L.P., and the Missouri Local Government Employees' Retirement System (Sellers). The Group has conditionally agreed to purchase the entire issued share capital of CCL from the Sellers at a purchase price of US$1,875.0 million.
- As at the date of this report, the acquisition had been approved by the Minister of Minerals and Energy of Botswana; the Competition and Consumer Authority of Botswana; the State Administration for Market Regulation of the People's Republic of China (PRC) and the requisite majority of the relevant Shareholders as required under the Listing Rules; and
- The group obtained new RCFs of US$300.0 million from CCB of which US$150.0 million is undrawn.

Financial and other risk management

Financial risk factors

The Group's activities expose it to a variety of financial risks, including commodity price risk, interest rate risk, foreign exchange risk, credit risk, liquidity risk and risk arising from the interest benchmark reform. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. The Group can use derivative financial instruments such as interest rate swaps, collar hedges and commodity swaps to manage certain exposures. The Group does not and is prohibited from entering into derivative contracts for speculative purposes.

Financial risk management is carried out by the Group Treasury function under proposals approved by the Board. Group Treasury identifies, evaluates and manages financial risks in close cooperation with the Group's operating units. The Board approves written principles for overall risk management, as well as policies covering specific areas, such as those identified below.

(a) Commodity price risk

The prices of copper, zinc, lead, gold, silver and molybdenum are affected by numerous factors and events that are beyond the control of the Group. These metal prices change on a daily basis and can vary significantly up and down over time. The factors impacting metal prices include both broader macro-economic developments and micro-economic considerations relating more specifically to the particular metal concerned.

During the year ended 31 December 2023, the Group entered into various commodity trades to hedge the sales prices for copper and zinc. The outstanding commodity trades included:

- Zero/low-cost collar hedges:
  - 3,000 tons of copper with put strike price of US$9,000/ton and call strike price of US$9,300/ton;
- Fixed price swap hedges:
  - 24,500 tons of copper with fixed price ranging from US$8,607/ton to US$8,672/ton;
- Above hedges settlement ranged from January to April 2024.

Management Discussion and Analysis
Continued

A change in commodity prices during the year can result in favourable or unfavourable financial impact for the Group.

The following table contains details of the hedging instrument used in the Group's hedging strategy:

	Term	Carrying amount of hedging instrument US$ million	Favourable/(Unfavourable) changes in fair value used for measuring ineffectiveness: Hedging instrument US$ million	Favourable/(Unfavourable) changes in fair value used for measuring ineffectiveness: Hedged item US$ million	Settled portion of hedging instrument realised gains/ (losses) US$ million	Hedging gain/(loss) recognised in cash flow hedge reserve US$ million	Cost of hedging reserve US$ million
Cash flow hedges:							
At 31 December 2023							
Derivative financial assets/(liabilities)	March 2023 to December 2023	-	-	-	10.8	-	-
At 31 December 2022							
Derivative financial assets/(liabilities)	March 2022 to December 2022	-	-	-	47.0	-	-

The following table details the sensitivity of the Group's financial assets balance to movements in commodity prices. Financial assets arising from revenue on provisionally priced sales are recognised at the estimated fair value of the total consideration of the receivable and subsequently remeasured at each reporting date. At the reporting date, if the commodity prices increased/(decreased) by 10% and taking into account the commodity hedges, with all other variables held constant, the Group's post-tax profit would have changed as set out below:

	2023		2022	
Commodity	**Commodity price movement**	**Increase in profit US$ million**	**Commodity price movement**	**(Decrease)/ increase in profit US$ million**
Copper	+10%	11.2	+10%	(21.5)
Zinc	+10%	7.2	+10%	0.3
Total		**18.4**		**(21.2)**

Commodity	Commodity price movement	Decrease in profit US$ million	Commodity price movement	Increase in profit US$ million
Copper	-10%	(10.9)	-10%	21.8
Zinc	-10%	(7.2)	-10%	-
Total		**(18.1)**		**21.8**

Management Discussion and Analysis
Continued

(b) Interest rate risk

The Group is exposed to interest rate risk primarily through interest bearing borrowings and investment of surplus cash holdings. Deposits and borrowings at variable rates expose the Group to cash flow interest rate risk. Deposits and borrowings at fixed rates expose the Group to fair value interest rate risk.

The Group regularly monitors its interest rate risk to ensure there are no undue exposures to significant interest rate movements. Any decision to hedge interest rate risk is assessed periodically in light of the overall Group's exposure, the prevailing interest rate market and any funding counterparty requirements. Regular reporting of the Group's debt and interest rates is provided to the MMG Executive Committee.

The Group is exposed to the risk-free rate of SOFR. The exposures arise on derivative and non-derivative financial assets and liabilities. The Group cash flow hedge relationship was affected by the interest rate benchmark reform. With the IRS closure, the cash flow hedge relationship was discontinued. The current exposures mainly arise on non-derivative financial assets and liabilities.

The following table contains details of the cash flow hedge was affected by the IRS closure:

	At 31 December 2023 and for year ended 31 December 2023		
	Balance in cash flow hedge reserve US$ million	Amount reclassified from the cash flow hedge reserve to profit or loss US$ million	Line item affected in profit or loss because of the reclassification
Discontinued Cash Flow Hedges: Interest Rate Swap	**40.2**	**37.0**	**Financial cost, Income tax expense**

The following table contains details of the hedging instrument used in the Group's hedging strategy as at 31 December 2022:

	Term	Notional amortising amount US$ million	Carrying amount of hedging instrument US$ million	Favourable/(Unfavourable) changes in fair value used for measuring ineffectiveness: Hedging instrument US$ million	Favourable/(Unfavourable) changes in fair value used for measuring ineffectiveness: Hedged item US$ million	Settled portion of hedging instrument realised gains/ (losses) US$ million	Hedging gain recognised in cash flow hedge reserve[1] US$ million	Hedge ineffectiveness recognised in profit or loss US$ million
Cash flow hedges:								
At 31 December 2022								
Derivative financial assets[2]	June 2020 – June 2025	**1,560**	**113.9**	**82.1**	**(82.1)**	**17.9**	**55.8**	**-**

1 The hedging gain recognised in cash flow hedge reserve is the amount after tax.

2 In 2020, the Group has entered into a notional US$2,100 million 5-year amortising interest rate swap with BOC Sydney.

Management Discussion and Analysis
Continued

Interest rate sensitivity analysis

At 31 December 2023 and 2022, if the interest rate had increased/(decreased) by 100 basis points, taking into account the interest rate swap, with all other variables held constant, post-tax profit and other comprehensive income (OCI) would have changed as follows:

	2023		2022			
	+100 basis points	-100 basis points	+100 basis points		-100 basis points	
US$ million	Increase/ (decrease) in profit after tax	(Decrease)/ increase in profit after tax	Increase/ (decrease) in profit after tax	Increase in OCI	(Decrease)/ increase in profit after tax	Decrease in OCI
Financial assets						
Cash and cash equivalents	3.0	(3.0)	2.5	-	(2.5)	-
Financial liabilities						
Borrowings (taking into account the impact of the interest rate swap)	(17.6)	17.6	(9.7)	13.6	9.7	(13.6)
Total	**(14.6)**	**14.6**	**(7.2)**	**13.6**	**7.2**	**(13.6)**

(c) Foreign exchange risk

The Group operates internationally and is exposed to foreign currency exchange risk. The Group's reporting currency and functional currency of the majority of subsidiaries within the Group is US dollars. The majority of revenue received by the Group is in US dollars. The Group's foreign currency exchange risk arises predominantly from the currency of the countries in which the Group's operations are located. Any decision to hedge foreign currency risk is assessed periodically in light of the Group's exposure, the prevailing foreign currency market and any funding counterparty requirements.

The following table shows the foreign currency risk arising from the monetary assets and liabilities, which are shown by foreign currency of the Group.

US$ million	US$	PEN	A$	HK$	Others	Total
At 31 December 2023						
Financial assets						
Cash and cash equivalents	425.3	16.5	0.8	0.4	4.0	**447.0**
Trade receivables	354.8	-	-	-	-	**354.8**
Other receivables	30.9	211.4	6.8	-	0.1	**249.2**
Derivative financial assets	3.1	-	-	-	-	**3.1**
Other financial assets	2.7	-	-	-	-	**2.7**
Financial liabilities						
Trade and other payables	(459.3)	(384.8)	(52.0)	-	(6.8)	**(902.9)**
Borrowings	(4,707.1)	-	-	-	-	**(4,707.1)**
Lease liabilities	(118.8)	(0.2)	(28.6)	-	-	**(147.6)**
	(4,468.4)	**(157.1)**	**(73.0)**	**0.4**	**(2.7)**	**(4,700.8)**

Management Discussion and Analysis Continued

US$ million	US$	PEN	A$	HK$	Others	Total
At 31 December 2022						
Financial assets						
Cash and cash equivalents	346.4	21.2	-	1.8	2.8	**372.2**
Trade receivables	212.7	-	-	-	-	**212.7**
Other receivables	28.0	235.6	6.5	-	-	**270.1**
Derivative financial assets	126.0	-	-	-	-	**126.0**
Other financial assets	1.5	-	-	-		**1.5**
Financial liabilities						
Trade and other payables	(333.2)	(332.6)	(62.1)	-	(25.1)	**(753.0)**
Borrowings	(5,412.6)	-	-	-	-	**(5,412.6)**
Lease liabilities	(114.0)	(0.2)	(24.5)	-	-	**(138.7)**
Derivative financial liabilities	(0.3)	-	-	-	-	**(0.3)**
	(5,145.5)	**(76.0)**	**(80.1)**	**1.8**	**(22.3)**	**(5,322.1)**

Based on the Group's net monetary assets and financial liabilities at 31 December 2023 and 2022, a movement of the US dollar against the principal non-functional currencies as illustrated in the table below, with all other variables held constant, would cause changes in post-tax profit as follows:

	2023		2022	
	Weakening of US dollar	Strengthening of US dollar	Weakening of US dollar	Strengthening of US dollar
US$ million	Decrease in profit after tax	Increase in profit after tax	Decrease in profit after tax	Increasein profit after tax
10% movement in Australian dollar (2022: 10%)	(5.1)	5.1	(5.6)	5.6
10% movement in Peruvian sol (2022: 10%)	(10.7)	10.7	(5.2)	5.2
Total	**(15.8)**	**15.8**	**(10.8)**	**10.8**

(d) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group is exposed to counterparty credit risk through sales of metal products on normal terms of trade, through deposits of cash and settlement risk on foreign exchange transactions. While the most significant exposure to credit risk is through sales of metal products on normal terms of trade, the majority of sales for mining operations were made under contractual arrangements whereby provisional payment is received promptly after delivery and the balance within 30 to 120 days from delivery. 100% of the balance is aged less than 6 months based on invoice date. The carrying amount of the Group's trade receivables at FVTPL best represents their respective maximum exposure to credit risk. The Group holds no collateral over any of these balances.

Investments in cash, short-term deposits and similar assets are with approved counterparty banks. Counterparties are assessed prior to, during and after the conclusion of transactions to ensure exposure to credit risk is limited to acceptable levels. There has been no change in the estimation techniques or significant assumptions made during the year ended 31 December 2023 in assessing the ECL for these financial assets. The limits are set to minimise the concentration of risks and therefore mitigate the potential for financial loss through counterparty failure. Impairment is provided for where the credit risk is perceived to exceed the acceptable levels and there are concerns on recoverability of the relevant assets. The management of the Group considers cash and cash equivalents that are deposited with financial institutions with high credit rating to be low credit risk financial assets.

Management Discussion and Analysis
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Other receivables include balances related to various matters including other taxes, indemnities. These balances are assessed at the reporting date considering contractual and non-contractual legal rights to receive such amounts as well as the expectation of recoverability based on expert third party advice and management assessment based on all available information. There are no significant increases in credit risk for these balances since their initial recognition and the Group provided impairment based on a 12 month ECL. For the years ended 31 December 2023 and 2022, the Group assessed the ECL for these balances and considered no significant impact to the consolidated financial statements.

The Group's most significant customers are CMN, CITIC Metal Peru Investment Limited (CITIC Metal), and Trafigura Pte Ltd (Trafigura). Revenue earned from these customers as a percentage of total revenue was:

	2023	2022
CMN	46.6%	34.5%
CITIC Metal	20.2%	16.2%
Trafigura	8.2%	14.0%

The Group's largest debtor at 31 December 2023 was CMN with a balance of US$159.1 million (2022: US$102.6 million) and the five largest debtors accounted for 77.6% (2022: 84.0%) of the Group's trade receivables. Credit risk arising from sales to large concentrate customers is managed by contracts that stipulate a provisional payment of at least 90% of the estimated value of each sale. For most sales a second provisional payment is received within 60 days of the vessel arriving at the port of discharge. Final payment is recorded after completion of the quotation period and assaying.

The credit risk by geographic region was:

	At 31 December	
US$ million	2023	2022
Asia	264.7	154.0
Europe	78.6	31.2
Australia	11.0	6.4
Other	0.5	21.1
	354.8	**212.7**

Management Discussion and Analysis
Continued

(e) Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting obligations associated with financial liabilities.

Management utilises short and long-term cash flow forecasts and other consolidated financial information to ensure that appropriate liquidity buffers are maintained to support the Group's activities.

The table below analyses the Group's financial assets and liabilities into relevant maturity groupings based on the remaining period at the reporting date to the contractual maturity date. The amounts disclosed in each maturity grouping are the contractual undiscounted cash flows for financial instruments.

US$ million	Within 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years	Total	Total carrying value
At 31 December 2023						
Financial assets						
Cash and cash equivalents	447.0	-	-	-	**447.0**	**447.0**
Trade receivables	354.8	-	-	-	**354.8**	**354.8**
Other receivables	93.4	150.7	5.1	-	**249.2**	**249.2**
Derivative financial assets	3.1	-	-	-	**3.1**	**3.1**
Other financial assets	2.7	-	-	-	**2.7**	**2.7**
Financial liabilities						
Trade and other payables	(616.4)	(286.5)	-	-	**(902.9)**	**(902.9)**
Borrowings (including interest)	(1,599.6)	(1,285.1)	(1,899.6)	(824.3)	**(5,608.6)**	**(4,707.1)**
Lease liabilities (including interest)	(33.9)	(32.6)	(66.0)	(73.7)	**(206.2)**	**(147.6)**
	(1,348.9)	**(1,453.5)**	**(1,960.5)**	**(898.0)**	**(5,660.9)**	**(4,700.8)**
At 31 December 2022						
Financial assets						
Cash and cash equivalents	372.2	-	-	-	**372.2**	**372.2**
Trade receivables	212.7	-	-	-	**212.7**	**212.7**
Other receivables	114.7	145.5	9.9	-	**270.1**	**270.1**
Derivative financial assets	75.0	51.0	-	-	**126.0**	**126.0**
Other financial assets	1.5	-	-	-	**1.5**	**1.5**
Financial liabilities						
Trade and other payables	(535.5)	(217.5)	-	-	**(753.0)**	**(753.0)**
Derivative financial liabilities	(0.3)	-	-	-	**(0.3)**	**(0.3)**
Borrowings (including interest)	(1,510.1)	(1,357.8)	(2,530.6)	(1,090.5)	**(6,489.0)**	**(5,412.6)**
Lease liabilities (including interest)	(32.7)	(25.4)	(59.6)	(85.4)	**(203.1)**	**(138.7)**
	(1,302.5)	**(1,404.2)**	**(2,580.3)**	**(1,175.9)**	**(6,462.9)**	**(5,322.1)**

Management Discussion and Analysis
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Country and community risks

The Group conducts all of its operations outside of Hong Kong and, as such, it is exposed to various levels of political, economic and other risks and uncertainties. These risks and uncertainties vary from country to country. Material risks include, but are not limited to, regime or policy change, fluctuation in currency exchange rates, changes to licensing regimes and amendments to concessions, licences, permits and contracts, changing political conditions and governmental regulations and community disruptions. Changes in any aspects above and in the country where the Group operates may adversely affect the Group's operations and profitability. The decline in growth and macroeconomic activity in many developing nations has resulted in governments seeking alternative means of increasing their income, including increases to corporate tax, VAT and royalty rates, coupled with increased audit and compliance activity.

The DRC Government during 2018 made changes to the 2002 Mining Code and Mining Regulations. These changes were enacted (2018 Mining Code) and continue to result in an increased tax burden on mining companies; In Peru, over the past decades, Las Bambas has experienced heightened political instability with succession of regimes with differing political policies. As the community disruptions and political situation are expected to evolve in the near future, the Group will continue to work closely with the relevant authorities and community groups to minimise the potential risk of social instability and disruptions to the Las Bambas operations.

Some of the countries in which the Group operates carry higher levels of sovereign risk. Political and administrative changes and reforms in law, regulations or taxation may impact sovereign risk. Political and administrative systems can be slow or uncertain and may result in risks to the Group including the ability to obtain tax refunds in a timely manner. The Group has processes in place to monitor any impact on the Group and implement responses to such changes.

Contingent liabilities

Bank guarantees

Certain bank guarantees have been provided in connection with the operations of certain subsidiaries of the Company primarily associated with the terms of mining leases, mining concessions, exploration licences or key contracting arrangements. At the end of the reporting period, no material claims have been made under these guarantees. The amount of these guarantees may vary from time to time depending upon the requirements of the relevant regulatory authorities. At 31 December 2023, these guarantees amounted to US$310.5 million (2022: US$297.5 million).

Contingent liabilities - tax related contingencies

The Group has operations in multiple countries, each with its own taxation regime. The nature of the Group's activities requires it to comply with various taxation obligations including corporation tax, royalties, withholding taxes, transfer pricing arrangements with related parties, resource and production-based taxes, environmental taxes and employment related taxes. Application of tax laws and interpretation of tax laws may require judgement to assess risk and estimate outcomes, particularly in relation to the application of income taxes and withholding tax to the Group's cross-border operations and transactions. The evaluation of tax risks considers both assessments received and potential sources of challenge from tax authorities. Additionally, the Group is currently subject to a range of audits and reviews by taxation authorities in Australia, Peru, Zambia and the DRC. No disclosure of an estimate of financial effect of the subject matter has been made in the consolidated financial statements as, in the opinion of the management, such disclosure may seriously prejudice the position of the Group in dealing with these matters.

Management Discussion and Analysis
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Tax matters with uncertain outcomes arise in the normal course of business and occur due to changes in tax law, changes in interpretation of tax law, periodic challenges and disagreements with tax authorities, and legal proceedings. The status of proceedings for such uncertain tax matters will impact the ability to determine the potential exposure, and in some cases, it may not be possible to determine a range of possible outcomes, including timing of resolution or determining a reliable estimate of the potential exposure.

Peru – Withholding Taxes (2014, 2015, 2016 and 2017)

Included within such uncertain tax matters are audits of the 2014, 2015, 2016 and 2017 tax periods for MLB in relation to withholding taxes on interest and fees paid under certain loans, which were provided to MLB pursuant to facility agreements entered into among MLB and a consortium of Chinese banks in connection with the acquisition of the Las Bambas mine in 2014. MLB received assessment notices from the Peruvian tax authority (National Superintendence of Tax Administration of Peru or "SUNAT"), which advised that, in its opinion, MLB and the Chinese banks are related parties and thus a 30% withholding tax rate ought to be imposed rather than the 4.99% applied. The assessments of omitted tax plus penalties and interest as at 31 December 2023 totalled PEN2,069.5 million (approximately US$551.8 million) (31 December 2022: PEN2,015.1 million (approximately US$527.5 million)).

In relation to these assessments, having received external legal and tax advice, the Group has formed the view that the Company and its controlled entities are not related parties to Chinese banks under Peruvian tax law. Additionally, the Peruvian tax law was amended (with effect from October 2017) to provide expressly that parties are not related by being under state ownership for the purposes of withholding taxes. Las Bambas has appealed the assessments issued by SUNAT in the Peru Tax Court and the pronouncement is pending. In parallel, MLB filed an Amparo lawsuit to request a Constitutional Court the nullity of withholding tax Assessments due to the violation of MLB's constitutional rights in the issuance of SUNAT Assessments. Where MLB is not successful in rebutting or appealing such challenge(s), this could result in significant additional tax liabilities.

Peru –Income Taxes (2016 and 2017)

- *Peru –2016 Income Tax*

  In January 2023, Las Bambas received assessment notices from SUNAT in connection with the 2016 income tax audit (2016 Income Tax Assessment). The assessment denied the deductions for all interest on borrowings expensed during the 2016 tax year. This included the loans from Chinese banks where SUNAT denied the interest deductions on the basis that the borrowings were from related parties and that the alleged related party debt should be included in calculating Las Bambas' related party 'debt to equity' ratio (the 'thin capitalisation' threshold) which would then be breached. SUNAT also alleged that interest payable on the shareholder loan from MMG Swiss Finance A.G. is non-deductible, due to the application of the "Causality Principle" (i.e., the loan has no relevance to the income-producing activities of Las Bambas). Further, SUNAT separately alleged that the accounting treatment of the merger of Peruvian entities (subsequent to the acquisition of Las Bambas in 2014) should have resulted in a negative equity adjustment which would result in Las Bambas having no equity for the purposes of calculating its thin capitalisation allowance. The Assessment issued by SUNAT for tax, interest and penalties for the income tax year 2016 totalled PEN651.0 million (approximately US$173.0 million) as at 31 December 2023.

  On 27 July 2023, SUNAT confirmed that it had considered Las Bambas' appeal against the Assessment and concluded that the Assessment remains correct and valid. Las Bambas will appeal to the Peru Tax Court.

- *Peru –2017 Income Tax*

  In August 2023, Las Bambas received assessment notices from SUNAT in connection with the 2017 income tax audit (2017 Income Tax Assessment). Similar to the 2016 Income Tax Assessment, SUNAT has continued to challenge Las Bambas' treatment of interest expense in the 2017 tax year on the same basis as that

Management Discussion and Analysis
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described above. Further, SUNAT has not recognised previous years' tax losses, including 2014, 2015 and 2016 development costs (US$710 million). The Assessment for tax, interest and penalties for the income tax year 2017 totalled PEN 3,610.4 million (approximately US$961.0 million) as at 30 November 2023. However, on 30 November 2023 SUNAT issued Resolution No. 4070140000905 and declared the nullity of tax debt. An updated Assessment for 2017 was received on 13 December 2023 and notified a tax debt of PEN 3,460.2 million (approximately US$924.0 million).

Regarding the above SUNAT interpretations, management strongly disagrees and is of the view that SUNAT has disregarded all available evidence and independent opinions on the accounting treatment, submitted by Las Bambas for consideration during the 2016 and 2017 income tax assessment process. Further, in not recognising prior years' tax losses, SUNAT has failed to acknowledge the Tax Court decisions in respect of development costs for the 2012 and 2013 years which were ruled in MLB's favour. The risk remains that this treatment will also be applied for future income tax years.

Las Bambas has notified the Peru Government of a dispute pursuant to the Peru-Netherlands Bilateral Investment Treaty (Treaty) and the Peru Government has confirmed its inability to resolve the dispute by way of commercial negotiation. Las Bambas is currently evaluating its legal options to seek damages from the Government of Peru for a number of breaches of the Treaty.

Considering the Las Bambas' proposed appeals and advice from the Las Bambas' tax and legal advisers, the Group did not recognise a liability in its consolidated financial statements for any assessed amount. If Las Bambas is unsuccessful in its challenge on the SUNAT assessments, this could result in significant liabilities being recognised.

Charges on assets

As at 31 December 2023, approximately US$2,016.8 million (31 December 2022: US$2,653.6 million) from China Development Bank, Industrial and Commercial Bank of China Limited, BOC Sydney and The Export-Import Bank of China was secured by share security over the entire share capital of MMG South America Management Company Limited and each of its subsidiaries including MLB, a debenture over the assets of MMG South America Management Company Limited, an assets pledge agreement and production unit mortgage in respect of all of the assets of MLB, assignments of shareholder loans between MMG South America Management Company Limited and its subsidiaries and security agreements over bank accounts of MLB.

Future prospects

MMG's vision is to create a leading international mining company for a low-carbon future. We mine to create wealth for our people, host communities and shareholders with an ambition to grow and diversify our resources, production and value, by leveraging Chinese and international expertise. Our strong relationship with China draws upon the strength of the world's largest commodities consumer and provides a deep understanding of markets and access to its sources of funding.

The Company is focused on maximising the value of our existing assets by increasing our safety performance, improving competitiveness, containing costs, continually improving productivity, building successful relationships with our host communities and governments and growing our resource base. We are actively pursuing our next phase of disciplined growth.

In South America, Las Bambas' copper production in 2024 is expected to be in the range of 280,000 and 320,000 tonnes. MMG expects to produce between 39,000 and 44,000 tonnes of copper cathode at Kinsevere, and between 225,000 and 250,000 tonnes of zinc at its Dugald River and Rosebery operations in 2024.

Management Discussion and Analysis
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Las Bambas

Las Bambas annual production is expected to reach 350,000-400,000 tonnes in the medium term with the extended contribution from the Chalcobamba project. Early works at Chalcobamba have now commenced and the Las Bambas team is working toward enduring agreements for the development of the Chalcobamba deposit with the Huancuire community. The continued development of Las Bambas is significant for the economy of Peru and will support additional social contributions and financial and business opportunities for local and regional communities.

Australia

In Australia, Dugald River remains committed to safe, greener and sustainable production to deliver annual ore mined throughput of 2,000,000 tonnes in the future years. This will pave the way for targeted zinc equivalent production to remain at around 200,000 tonnes annually. MMG will build on the already operational long-term solar offtake agreement to pursue more green, reliable and cost-effective energy solutions, including supporting CopperString 2032, which aims to connect Queensland's North West Minerals Province to the National Electricity Grid.

At Rosebery, an accelerated resource extension and near mine exploration drilling program is currently in progress to support a mine life extension. MMG remains committed to extending the operating life of this important asset, proactively investigating all feasible options to secure a sustainable tailings storage solution.

Kinsevere

In the DRC, MMG continues to progress the next phase of Kinsevere Expansion Project, namely the transition to the mining and processing of sulphide ores. This project will extend Kinsevere's mine life to at least 2035 and increase copper production back to around 80,000 tonnes of copper cathode per annum and 4,000 to 6,000 tonnes of cobalt in cobalt hydroxide. The cobalt plant was commissioned in the fourth quarter of 2023, and the first production of cobalt hydroxide was achieved. The new tailing storage facility was commissioned to support the cobalt plant ramp-up. The first copper cathode from sulphides is expected in the second half of 2024, and a full ramp-up is expected in 2025. MMG will continue to invest in regional exploration programs focusing on proving up discoveries within an operating radius of the Kinsevere mine.

Capital expenditure plan in 2024

Total capital expenditure in 2024 is expected to be between US$800 million and US$900 million. US$400-450 million is attributable to Las Bambas, including the expansion of the Las Bambas tailings dam facility, Ferrobamba pit infrastructure and Chalcobamba execution. At Kinsevere, capital expenditure related to the Kinsevere Expansion Project is expected to be US$250-300 million. Should MMG successfully complete the acquisition of the Khoemacau asset, additional capital expenditure will be required in 2024.

MMG will continue to focus on the next phase of growth. Currently, the company has no future plans for material investments or capital assets sanctioned by the Board, other than those detailed in this report or announced to the market.