

# MANAGEMENT DISCUSSION AND ANALYSIS

## Results for the Year Ended 31 December 2021

For the purpose of the management discussion and analysis, the Group's results for the year ended 31 December 2021 are compared with results for the year ended 31 December 2020.

Year Ended 31 December	2021 US\$ Million	2020 US\$ Million	Change% Fav/(Unfav)
Revenue	4,255.0	3,033.7	40%
Operating Expenses	(1,587.3)	(1,590.6)	0%
Exploration Expenses	(21.3)	(19.1)	(12%)
Administration Expenses	(20.8)	(20.5)	(1%)
Net Other Income/(Expenses)	99.8	(23.8)	519%
<b>EBITDA</b>	<b>2,725.4</b>	<b>1,379.7</b>	<b>98%</b>
Depreciation and Amortisation Expenses	(898.0)	(927.8)	3%
<b>EBIT</b>	<b>1,827.4</b>	<b>451.9</b>	<b>304%</b>
Net Finance Costs	(323.6)	(399.5)	19%
<b>Profit Before Income Tax</b>	<b>1,503.8</b>	<b>52.4</b>	<b>2,770%</b>
Income Tax Expense	(583.3)	(46.8)	(1,146%)
<b>Profit After Income Tax for the Year</b>	<b>920.5</b>	<b>5.6</b>	<b>16,338%</b>
<b>Attributable to:</b>			
Equity Holders of the Company	667.1	(64.7)	1,131%
Non-Controlling Interests	253.4	70.3	260%

## PROFIT ATTRIBUTABLE TO EQUITY HOLDERS OF THE COMPANY

MMG's profit of US\$920.5 million for the year ended 31 December 2021 includes profit attributable to equity holders of US\$667.1 million and profit attributable to non-controlling interests of US\$253.4 million. This compares to a loss attributable to equity holders of US\$64.7 million and a profit attributable to non-controlling interests of US\$70.3 million for the year ended

31 December 2020. Amounts attributable to non-controlling interests relate 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	2021 US\$ Million	2020 US\$ Million	Change% Fav/(Unfav)
Profit After Tax — Las Bambas 62.5% Interest	422.3	117.1	261%
Profit After Tax — Other Continuing Expenses	232.4	15.3	14,190%
Exploration Expenses	(21.3)	(19.1)	(12%)
Administration Expenses	(20.8)	(20.5)	(1%)
Net Finance Costs (excluding Las Bambas)	(94.7)	(99.5)	5%
Other	149.2	(58.0)	357%
<b>Profit/(Loss) for the Year Attributable to Equity Holders</b>	<b>667.1</b>	<b>(64.7)</b>	<b>1,131%</b>

# 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'.

Year Ended 31 December	Revenue			EBITDA		
	2021 US\$ Million	2020 US\$ Million	Change% Fav/(Unfav)	2021 US\$ Million	2020 US\$ Million	Change% Fav/(Unfav)
Las Bambas	2,965.2	1,999.8	48%	2,047.3	1,117.5	83%
Kinsevere	437.3	418.9	4%	137.6	68.3	101%
Dugald River	482.9	331.3	46%	212.7	100.0	113%
Rosebery	365.2	280.7	30%	203.3	130.3	56%
Other	4.4	3.0	47%	124.5	(36.4)	442%
<b>Total</b>	<b>4,255.0</b>	<b>3,033.7</b>	<b>40%</b>	<b>2,725.4</b>	<b>1,379.7</b>	<b>98%</b>

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

**Revenue** increased by US\$1,221.3 million (40%) to US\$4,255.0 million compared to 2020 mainly due to higher realised commodity prices (US\$1,553.7 million), partly offset by lower sales volumes (US\$332.4 million).

Favourable commodity price variances of US\$1,553.7 million were driven by higher realised prices for copper (US\$1,197.8 million), zinc (US\$214.0 million), molybdenum (US\$88.5 million), silver (US\$29.2 million) and lead (US\$21.4 million).

Sales volumes decreased by US\$332.4 million compared to 2020 driven by lower sales of copper concentrate at Las Bambas (US\$223.4 million) as a result of a series of community blockades and lower copper cathode sales at Kinsevere (US\$137.7 million) attributable to lower production as plant feed was reliant on lower grade feed from stockpiles and third-party ores. At Dugald River, lead sales volumes were lower by US\$15.4 million. This was partly offset by higher molybdenum sales (US\$39.7 million) at Las Bambas in line with increased production.

Revenue by Commodity Year Ended 31 December	2021 US\$ Million	2020 US\$ Million	Change% Fav/(Unfav)
Copper	3,050.4	2,178.6	40%
Zinc	575.8	369.9	56%
Lead	89.3	70.1	27%
Gold	174.4	190.9	(9%)
Silver	194.0	181.4	7%
Molybdenum	171.1	42.8	300%
<b>Total</b>	<b>4,255.0</b>	<b>3,033.7</b>	<b>40%</b>

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## PRICE

Average LME base metals prices were higher in the year ended 31 December 2021 compared to the prior corresponding period for all metals.

Average LME Cash Price Year Ended 31 December	2021	2020	Change% Fav/(Unfav)
Copper (US\$/tonne)	9,315	6,169	51%
Zinc (US\$/tonne)	3,005	2,265	33%
Lead (US\$/tonne)	2,205	1,824	21%
Gold (US\$/ounce)	1,800	1,770	2%
Silver (US\$/ounce)	25.17	20.51	23%
Molybdenum (US\$/tonne)	34,930	19,163	82%

## SALES VOLUMES

Payable Metal in Product Sold Year Ended 31 December	2021	2020	Change% Fav/(Unfav)
Copper (tonnes)	322,008	377,852	(15%)
Zinc (tonnes)	213,554	216,535	(1%)
Lead (tonnes)	43,808	45,088	(3%)
Gold (ounces)	97,209	109,336	(11%)
Silver (ounces)	7,621,998	8,418,940	(9%)
Molybdenum (tonnes)	4,935	2,609	89%

Payable Metal in Product Sold Year Ended 31 December 2021	Copper Tonnes	Zinc Tonnes	Lead Tonnes	Gold Ounces	Silver Ounces	Molybdenum Tonnes
Las Bambas	272,299	-	-	59,673	3,581,185	4,935
Kinsevere	48,096	-	-	-	-	-
Dugald River	-	153,992	18,988	-	1,184,179	-
Rosebery	1,613	59,562	24,820	37,537	2,856,635	-
Total	322,008	213,554	43,808	97,210	7,621,999	4,935

Payable Metal in Product Sold Year Ended 31 December 2020	Copper Tonnes	Zinc Tonnes	Lead Tonnes	Gold Ounces	Silver Ounces	Molybdenum Tonnes
Las Bambas	304,266	-	-	72,860	4,092,872	2,609
Kinsevere	72,024	-	-	-	-	-
Dugald River	-	152,573	23,301	-	1,583,186	-
Rosebery	1,562	63,962	21,787	36,476	2,742,882	-
Total	377,852	216,535	45,088	109,336	8,418,940	2,609

# 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 of US\$1,587.3 million were largely in line with 2020. Operating expenses were impacted by favourable stock movement at Las Bambas (US\$155.7 million) mainly driven by a lower net drawdown of finished goods reflecting lower copper concentrate sales volumes and lower mining costs at Kinsevere (US\$43.3 million) as a result of the suspension of mining activities since the last quarter of 2020.

This was offset by higher employee incentives costs (US\$65.9 million) mainly driven by the employee profit sharing arrangement in Peru and higher royalties across the group (US\$39.4 million). Operating costs at Las Bambas were also impacted by increased spending on health, security and community programs (US\$29.2 million) and higher store and consumable expenses (US\$35.4 million) due to higher maintenance costs incurred for the drilling and hauling fleet and increased consumption of reagents and grinding media, in line with increased mill throughput. At the Australian operations, costs were impacted by unfavourable exchange rates (US\$26.7 million).

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

**Exploration expenses** increased by US\$2.2 million (12%) to US\$21.3 million in 2021 due to higher expenditure at Las Bambas with drilling focused at the Chalcobamba Southwest Zone and Ferrobamba Deep.

**Administrative expenses** of US\$20.8 million were in line with 2020. Lower restructuring expenses associated with head office transformation initiatives in 2020 (US\$4.8 million) were offset by higher STI expenses (US\$2.9 million) and the impact of the stronger Australian Dollar (US\$1.8 million).

**Net other income/(expenses)** increased by US\$123.6 million (519%) mainly due to the gain recognised on the reduction in the Century Bank Guarantee (US\$136.3 million) and lower foreign exchange losses (2021: US\$10.1 million, 2020: US\$35.1 million). This was partly offset by an increase in the provision in relation to the VAT 2011/2012 matter in Peru (US\$ 15.5 million).

**Depreciation and amortisation expenses** decreased by US\$29.8 million (3%) to US\$898.0 million in 2021. The decrease was due to lower depreciation expenses at Kinsevere (US\$88.1 million) following the suspension in mining activity. This was partly offset by higher depreciation expenses at Las Bambas (US\$37.3 million) attributable higher mining and milling volumes and higher depreciation expenses at Rosebery (US\$28.9 million) due to the accelerated depreciation of assets with limited useful lives.

**Net finance costs** decreased by US\$75.9 million (19%) to US\$323.6 million compared to 2020. The decrease was mainly due to lower debt balances (US\$47.3 million) and lower LIBOR rates compared to 2020 (US\$23.6 million).

**Income tax expense** increased by US\$536.5 million, reflecting the increase in the Group's underlying profit before income tax from the prior year. The effective tax rate for 2021 was 38.8%, with a prima facie income tax rate from operations of 32%, which was impacted by the non-creditable withholding tax expenses (2.4%), increase in tax provisions (6.2%), non-assessable income from Century guarantee liability reduction (-2.7%) and other non-deductible items.



# MINE ANALYSIS

## 2021 OVERVIEW

REVENUE (US\$ million):

**\$2,965.2**

ORE MILLED (tonnes)

**48,476,799**

COPPER IN CONCENTRATE  
PRODUCED (tonnes)

**290,097**

PRODUCTS:

COPPER CONCENTRATE  
MOLYBDENUM CONCENTRATE

OWNERSHIP: 62.5% MMG

22.5% GUOXIN INTERNATIONAL  
INVESTMENT CO. LTD.

15.0% CITIC METAL CO. LTD.

# LAS BAMBAS

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## Mine Analysis — Las Bambas

Year Ended 31 December	2021	2020	Change% Fav/(Unfav)
<b>Production</b>			
Ore Mined (tonnes)	59,878,802	57,999,845	3%
Ore Milled (tonnes)	48,476,799	45,184,395	7%
Waste Movement (tonnes)	135,003,377	137,484,467	(2%)
Copper in Copper Concentrate (tonnes)	290,097	311,020	(7%)
<b>Payable Metal in Product Sold</b>			
Copper (tonnes)	272,299	304,266	(11%)
Gold (ounces)	59,673	72,860	(18%)
Silver (ounces)	3,581,185	4,092,872	(13%)
Molybdenum (tonnes)	4,935	2,609	89%

Year Ended 31 December	2021 US\$ Million	2020 US\$ Million	Change% Fav/(Unfav)
Revenue	2,965.2	1,999.8	48%
<b>Operating Expenses</b>			
<b>Production Expenses</b>			
Mining	(244.1)	(211.8)	(15%)
Processing	(235.8)	(216.1)	(9%)
Other	(413.7)	(323.5)	(28%)
<b>Total Production Expenses</b>	<b>(893.6)</b>	<b>(751.4)</b>	<b>(19%)</b>
Freight (transportation)	(77.2)	(69.0)	(12%)
Royalties	(89.9)	(62.6)	(44%)
Other <sup>(i)</sup>	185.0	10.7	1,629%
<b>Total Operating Expenses</b>	<b>(875.7)</b>	<b>(872.3)</b>	<b>(0%)</b>
Other Expenses	(42.2)	(10.0)	(322%)
<b>EBITDA</b>	<b>2,047.3</b>	<b>1,117.5</b>	<b>83%</b>
Depreciation and Amortisation Expenses	(732.8)	(695.5)	(5%)
<b>EBIT</b>	<b>1,314.5</b>	<b>422.0</b>	<b>211%</b>
<b>EBITDA Margin</b>	<b>69%</b>	<b>56%</b>	<b>23%</b>

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

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

Las Bambas produced 290,097 tonnes of copper in 2021, 20,923 tonnes (7%) below 2020 due to lower average feed grades and community roadblocks that led to a complete shutdown of the mine in December for approximately two weeks.

Revenue of US\$2,965.2 million was 48% higher than 2020 due to higher realised commodity prices (US\$1,148.8 million) and higher molybdenum sales volumes (US\$39.7 million). This was partly offset by lower copper sales volumes (US\$223.4 million). MMG entered into a series of commodity hedges during 2021 to manage commodity price risk and protect the strong free cash flow in the year. The majority of instruments have a collar structure that provides a floor price protection and retains some upside exposure.

Copper sales volumes were 11% lower compared to the prior year, primarily due to community roadblocks that caused over 100 days of disruption to concentrate transport in 2021. These roadblocks are the result of community negotiations for business opportunities and additional contributions as well as further commitments from the Peruvian Government. The most recent disruptions bring total days of transport lost since the commencement of operations in early 2016 to over 400 days. While MMG remains committed to pursuing constructive dialogue, the actions of external agents, disproportionate demands on MMG and an inability to reach enduring agreements continue to limit Las Bambas' operations, future investment and economic contribution to regional communities and the Peruvian economy.

As at 31 December 2021, inventory at the mine site was approximately 57,000 tonnes of copper in concentrate. This stockpiled copper concentrate is expected to be drawn down and shipped by the third quarter of 2022, subject to no further prolonged disruptions over this period.

Molybdenum sales volumes were higher by 2,326 tonnes as a result of increased production in 2021 following debottlenecking works that were completed in June 2020 as well as higher feed grades.

Total production expenses of US\$893.6 million was 19% above 2020. Higher mining costs of US\$32.3 million was due to higher total material moved and higher maintenance costs. Diesel costs were also higher due to higher prices and increased consumption. Processing costs increased by US\$19.7 million driven by higher reagent and grinding media consumption in line with higher milling volumes. Production expenses were also impacted by higher employee incentives as Las Bambas enters the first year of employee profit share agreements under Peruvian law. (US\$50.0 million), higher expenditure on development studies (US\$29.9 million) and higher expenditure on health,

security and community programs (US\$29.2 million). Royalty expenses were higher by US\$27.3 million reflecting higher revenue.

The higher production expenses were largely offset by favourable stock movement of US\$155.7 million due to a lower net drawdown of finished goods (US\$185.9 million) reflecting lower copper concentrate sales volumes, partly offset by a lower build-up of ore stockpiles (US\$24.7 million). Operating expenses were also favourably impacted by lower concentrate logistics costs reflecting lower sales volumes (US\$9.6 million). This resulted in total operating expenses of US\$875.7 million being in line with 2020 levels.

C1 costs in 2021 were US\$1.02/lb compared to US\$1.00/lb in 2020. Stable unit costs were a function of the deferral of planned project spending (due to ongoing permitting delays and community disruptions), cost controls and higher by-product credits (particularly Molybdenum) offsetting pressures associated with increased milling volumes, lower grades, higher social costs and higher consumables prices.

## 2022 OUTLOOK

Las Bambas production for 2022 is expected to be in the range of 300,000 to 320,000 tonnes of copper in concentrate, with development of the Chalcobamba open pit and associated waste dumps to be commissioned progressively over the next five months, followed by first production during the second half of 2022.

C1 cost guidance of US\$1.30-1.40/lb for 2022 represents a significant increase on 2021. Higher cost guidance is due to a number of one-off factors and industry cost escalation, including:

- Project development expenses that have been deferred from previous years, including pre-stripping at Chalcobamba;
- the likelihood of an industry standard bonus payment linked to labour contract negotiations scheduled for the first half of 2022;
- lower capitalised mining costs relative to 2021;
- increased material movement and consumables and energy usage as well as higher consumables and energy prices;
- lower budgeted contribution from by-product credits; and
- higher TC/RCs and selling costs.

From 2023 onwards, Las Bambas is expected to benefit from improved unit costs performance as a result of the development of Chalcobamba, investment in the new mine fleet and the third ball mill and higher production rates than the 2020 to 2022 period.



# MINE ANALYSIS

## 2021 OVERVIEW

REVENUE (US\$ million):

**\$437.3**

ORE MILLED (tonnes)

**2,448,517**

COPPER CATHODE  
PRODUCED (tonnes)

**48,017**

PRODUCT: | COPPER CATHODE

OWNERSHIP: 100% MMG



# KINSEVERE



# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## Mine Analysis — Kinsevere

Year Ended 31 December	2021	2020	Change% Fav/(Unfav)
<b>Production</b>			
Ore Mined (tonnes)	20,075	1,925,609	(99%)
Ore Milled (tonnes)	2,448,517	2,448,852	(0%)
Waste Movement (tonnes)	-	8,773,208	(100%)
Copper Cathode (tonnes)	48,017	72,007	(33%)
<b>Payable Metal in Product Sold</b>			
Copper (tonnes)	47,325	70,787	(33%)

Year Ended 31 December	2021 US\$ Million	2020 US\$ Million	Change% Fav/(Unfav)
Revenue	437.3	418.9	4%
<b>Operating Expenses</b>			
<b>Production Expenses</b>			
Mining	(20.1)	(63.4)	68%
Processing	(85.7)	(95.0)	10%
Other	(78.2)	(94.1)	17%
<b>Total Production Expenses</b>	<b>(184.0)</b>	<b>(252.5)</b>	<b>27%</b>
Freight (transportation)	(8.3)	(12.1)	31%
Royalties	(25.9)	(24.9)	(4%)
Other <sup>(i)</sup>	(54.1)	(45.5)	(19%)
<b>Total Operating Expenses</b>	<b>(272.3)</b>	<b>(335.0)</b>	<b>19%</b>
Other Expenses	(27.4)	(15.6)	(76%)
<b>EBITDA</b>	<b>137.6</b>	<b>68.3</b>	<b>102%</b>
Depreciation and Amortisation Expenses	(29.1)	(117.2)	75%
<b>EBIT</b>	<b>108.5</b>	<b>(48.9)</b>	<b>322%</b>
<b>EBITDA Margin</b>	<b>31%</b>	<b>16%</b>	<b>94%</b>

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

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

Kinsevere revenue increased by US\$18.4 million or 4% to US\$437.3 million compared to the 2020. This increase was driven by higher realised copper prices (US\$156.1 million), partly offset by a 33% reduction in copper sales volumes in line with lower production (US\$137.7 million).

Copper cathode production of 48,017 tonnes was 23,990 tonnes (33%) lower than 2020. This was due to mining activities being suspended since the second half of 2020, and plant feed being entirely reliant on medium and low-grade stockpiles and third-party ores. Average plant feed grade was 2.00% in 2021 compared to 3.08% in 2020. Despite lower ore grades, processing plant performance remained strong, with improved recoveries (2021: 96.6%, 2020: 95.4%) due to better acid dissolution of treated ore from the stockpiles.

Total production expenses decreased by US\$68.5 million or 27% compared to 2020. This was mainly driven by lower mining costs (US\$43.3 million). Processing costs were also lower than 2020 by US\$9.3 million due to lower energy consumption in the electrowinning circuit and lower sulfuric acid prices. Other production costs were also lower compared to 2020 (US\$15.9 million) driven by lower COVID-19 related expenses (US\$6.8 million) incurred at the beginning of the pandemic to establish management systems and protocols and lower logistics costs (US\$4.7 million).

Depreciation and amortisation expenses were US\$88.1 million (75%) lower compared to 2020, in line with no mining activities.

During the year ended 31 December 2021, following extended discussions MMG Kinsevere reached agreement with Mining Company Katanga SARL (MCK) to settle legal proceedings against MMG Kinsevere with the process to remove the freezing order of Company assets progressing well. All legal proceedings have been withdrawn.

C1 costs for 2021 were US\$1.95/lb, higher than US\$1.81/lb in 2020. The unfavourable impact of lower copper produced (US\$0.79/lb) was largely offset by lower cash production expenses (US\$0.65/lb).

## 2022 OUTLOOK

Copper cathode production for 2022 is expected to be in the range of 45,000-50,000 tonnes. Mining of the remaining oxide reserves is expected to resume in April 2022, following the wet season. This will improve the average plant feed grade, however, plant feed will continue to be supplemented by the lower grade remaining stockpiles and 3rd party ores, particularly during the first quarter of 2022.

Reflecting the resumption of mining activity during the year, 2022 C1 costs are expected to be between US\$2.50 and US\$2.80/lb.

On 24 March 2022, MMG's board approved the development of the Kinsevere Expansion Project. The total investment amount is expected to be between US\$550 to US\$600 million (including \$180 to \$200 million in 2022) will enable the mining and processing of Kinsevere's sulphide copper and cobalt reserves. Further detail on this project can be located in the Development Projects section of this report.

# MINE ANALYSIS

## 2021 OVERVIEW

REVENUE (US\$ million):

**\$482.9**

ORE MILLED (tonnes)

**1,891,701**

ZINC IN CONCENTRATE  
PRODUCED (tonnes)

**180,313**

PRODUCTS:

ZINC CONCENTRATE  
LEAD CONCENTRATE

OWNERSHIP:

100% MMG

# DUGALD RIVER



# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## Mine Analysis — Dugald River

Year Ended 31 December	2021	2020	Change% Fav/(Unfav)
<b>Production</b>			
Ore Mined (tonnes)	1,862,862	1,982,988	(6%)
Ore Milled (tonnes)	1,891,701	1,958,672	(3%)
Zinc in Zinc Concentrate (tonnes)	180,313	177,704	1%
Lead in Lead Concentrate (tonnes)	20,361	23,847	(15%)
<b>Payable Metal in Product Sold</b>			
Zinc (tonnes)	153,992	152,573	1%
Lead (tonnes)	18,988	23,301	(19%)
Silver (ounces)	1,184,179	1,583,186	(25%)

Year Ended 31 December	2021 US\$ Million	2020 US\$ Million	Change% Fav/(Unfav)
Revenue	482.9	331.3	46%
<b>Operating Expenses</b>			
<b>Production Expenses</b>			
Mining	(91.1)	(81.0)	(12%)
Processing	(73.4)	(60.8)	(21%)
Other	(71.0)	(57.4)	(24%)
<b>Total Production Expenses</b>	<b>(235.5)</b>	<b>(199.2)</b>	<b>(18%)</b>
Freight (transportation)	(12.9)	(12.6)	(2%)
Royalties	(18.6)	(11.3)	(65%)
Other <sup>(i)</sup>	(4.6)	(4.0)	(15%)
<b>Total Operating Expenses</b>	<b>(271.6)</b>	<b>(227.1)</b>	<b>(20%)</b>
Other Expenses	1.4	(4.2)	133%
<b>EBITDA</b>	<b>212.7</b>	<b>100.0</b>	<b>113%</b>
Depreciation and Amortisation Expenses	(59.8)	(59.9)	0%
<b>EBIT</b>	<b>152.9</b>	<b>40.1</b>	<b>281%</b>
<b>EBITDA Margin</b>	<b>44%</b>	<b>30%</b>	<b>47%</b>

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

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

Revenue increased by US\$151.6 million (46%) to US\$482.9 million due to higher realised commodity prices (US\$164.5 million) and higher zinc sales volumes (US\$2.4 million). This was partly offset by lower lead concentrate sales volumes (US\$15.4 million).

Zinc sales volumes were slightly higher in 2021 driven by higher zinc production. Full year zinc production of 180,313 tonnes was a record for the operation and was 1% above the prior year. This is due to improved stope performance, with higher mined ore grade (11.0% vs. 10.6%), and strong plant performance with improved recovery rates (87.9% vs. 86.8%) compared to 2020, which offset influence of lower mined tonnes. On a zinc equivalent basis, Dugald River's production exceeded 200,000 tonnes for the second consecutive year.

Total production expenses were higher by US\$36.3 million compared to 2020 despite lower mining and milling volumes. This was attributable to the unfavourable foreign exchange rate impact with the strengthening of the Australian dollar (US\$16.2 million). Processing costs were higher due to increased water consumption (US\$2.0 million) as a result of higher pastefill volumes and one-off savings in 2020 relating to the on sale of gas (US\$5.4 million). Mining costs were also higher due to increased backfilling costs (US\$3.5 million) and higher hauling costs (US\$1.9 million) with the mine depth increasing. Employee costs in 2021 were higher by US\$7.2 million across all areas due to increased headcount and higher employee incentive payments.

Dugald River's zinc C1 costs were US\$0.67/lb in 2021 compared to US\$0.70/lb in 2020. Lower costs were a reflection of the significant reduction in treatment charges, higher production rates and higher lead prices.

## 2022 OUTLOOK

Production guidance for Dugald River in 2022 is between 170,000 and 190,000 tonnes of zinc in zinc concentrate, C1 costs are expected to be in the range of US\$0.70-0.80/lb. Cash production expenses are expected to increase slightly due to higher prices for energy and consumables. C1 costs also remain sensitive to zinc treatment charges and lead and silver by-product prices. This may provide a tailwind to full year C1 costs if current prices continue to prevail.

Resource conversion and near-mine exploration drilling will continue to support planned early-stage expansion studies.

# MINE ANALYSIS

## 2021 OVERVIEW

REVENUE (US\$ million):

**\$365.2**

ORE MILLED (tonnes)

**1,022,487**

ZINC IN CONCENTRATE  
PRODUCED (tonnes)

**69,454**

PRODUCTS:

ZINC CONCENTRATE  
LEAD CONCENTRATE  
PRECIOUS METALS CONCENTRATE  
GOLD DORÉ

OWNERSHIP: 100% MMG

# ROSEBERY



# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## Mine Analysis — Rosebery

Year Ended 31 December	2021	2020	Change% Fav/(Unfav)
<b>Production</b>			
Ore Mined (tonnes)	1,004,168	991,124	1%
Ore Milled (tonnes)	1,022,487	979,718	4%
Zinc in Zinc Concentrate (tonnes)	69,454	67,393	3%
Lead in Lead Concentrate (tonnes)	25,053	23,272	8%
Copper in Precious Metals Concentrate (tonnes)	1,567	1,537	2%
Gold (ounces)	43,010	43,580	(1%)
Silver (ounces)	3,375,624	3,436,505	(2%)
<b>Payable Metal in Product Sold</b>			
Copper (tonnes)	1,613	1,562	3%
Zinc (tonnes)	59,562	63,962	(7%)
Lead (tonnes)	24,820	21,787	14%
Gold (ounces)	37,537	36,476	3%
Silver (ounces)	2,856,635	2,742,882	4%

Year Ended 31 December	2021 US\$ Million	2020 US\$ Million	Change% Fav/(Unfav)
<b>Revenue</b>	<b>365.2</b>	<b>280.7</b>	<b>30%</b>
<b>Operating Expenses</b>			
<b>Production Expenses</b>			
Mining	(76.5)	(69.2)	(11%)
Processing	(32.5)	(29.7)	(9%)
Other	(27.6)	(23.1)	(19%)
<b>Total Production Expenses</b>	<b>(136.6)</b>	<b>(122.0)</b>	<b>(12%)</b>
Freight (transportation)	(8.9)	(6.5)	(37%)
Royalties	(18.8)	(15.0)	(25%)
Other <sup>(i)</sup>	2.4	(6.4)	138%
<b>Total Operating Expenses</b>	<b>(161.9)</b>	<b>(149.9)</b>	<b>(8%)</b>
Other Expenses	-	(0.5)	100%
<b>EBITDA</b>	<b>203.3</b>	<b>130.3</b>	<b>56%</b>
Depreciation and Amortisation Expenses	(79.7)	(50.8)	(57%)
<b>EBIT</b>	<b>123.6</b>	<b>79.5</b>	<b>55%</b>
<b>EBITDA Margin</b>	<b>56%</b>	<b>46%</b>	<b>22%</b>

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

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

Rosebery produced 69,454 tonnes of zinc and 25,053 tonnes of lead in 2021. This represented a 3% and 8% improvement in zinc and lead production compared to 2020. On a zinc equivalent basis, production was 157,482 tonnes, 11% higher than 2020. Declining ore grades were offset by higher recoveries and increased mining and plant throughput.

Revenue increased by US\$84.5 million (30%) to US\$365.2 million due to higher zinc (US\$60.4 million), lead (US\$11.6 million), silver (US\$8.8 million) and copper prices (US\$4.8 million). Sales volumes were also higher by US\$1.8 million primarily due to higher lead (US\$4.7 million) and precious metals (US\$4.4 million) sales volumes, partly offset by lower zinc sales volumes (US\$7.6 million).

Total production expenses increased by US\$14.6 million (12%) compared to 2020 mainly due to unfavourable exchange rates with the strengthening of the Australian dollar in 2021.

Rosebery's zinc C1 costs were negative (US\$0.34/lb) in 2021 compared to US\$0.01/lb in 2020 reflecting the higher precious metal by-products credits and higher zinc production.

## 2022 OUTLOOK

Rosebery is expected to produce between 55,000 and 65,000 tonnes of zinc in zinc concentrate in 2022 at a C1 cost of US\$0.00 to 0.15/lb. This guidance range reflects longer-term grade declines, lower budgeted by-product credits and higher costs associated with operating at depth as well as increasing energy prices. Similar to Dugald River, full year C1 costs remain highly sensitive to prevailing treatment charges and by-product prices.

Resource extension and near-mine exploration continue, with results indicating further extensions to the resource and mine life. As a result, the Company is currently investigating the potential for short-term capacity increases at existing tailings storage facilities while studying and permitting a proposed site for a new tailings storage facility to support an extended life of mine.

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## Cash Flow Analysis

### NET CASH FLOW

Year Ended 31 December	2021 US\$ Million	2020 US\$ Million
Net Operating Cash Flows	2,551.5	1,358.2
Net Investing Cash Flows	(573.7)	(515.8)
Net Financing Cash Flows	(915.2)	(867.2)
Net Cash Inflows/(Outflows)	1,062.6	(24.8)

**Net operating cash inflows** increased by US\$1,193.3 million (88%) to US\$2,551.5 million driven by higher EBITDA (US\$1,345.7 million) attributable to higher commodity prices, partly offset by lower sales volumes at Las Bambas. Operating cash flows were also favourably impacted by net working capital movements (US\$139.3 million) due to timing of receipt of cash from the December 2020 holding certificate sales. This was partly offset by the SUNAT VAT 2011/2012 payment (US\$170.4 million), a lower net tax refund in Peru (US\$47.4 million) and higher tax payments in the DRC (US\$26.4 million).

**Net investing cash outflows** increased by US\$57.9 million (11%) to US\$573.7 million. This was mainly due to increased capitalised mining costs at Las Bambas of US\$222.6 million, compared to US\$197.4 million in 2020 and higher capital expenditure at Dugald River (US\$21.2 million) mainly due to the installation of an underground refrigeration plant (US\$16.5 million). At Rosebery, capital expenditure increased by US\$18.7 million due to expansion of the existing tailings facilities (US\$7.7 million), higher capitalised mining costs (US\$4.5 million) and higher resource infill drilling costs (US\$3.4 million).

**Net financing cash outflows** increased by US\$48.0 million (6%) compared to 2020 due to net repayments of borrowings of US\$890.3 million (2020: US\$453.3 million) and payment of interest and financing costs of US\$279.0 million (2020: US\$362.6 million). This was partly offset by net proceeds received from the share placement in June 2021 (US\$299.0 million).



# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## Financial Sources and Liquidity

	31 December 2021 US\$ Million	31 December 2020 US\$ Million	Change US\$ Million
Total Assets	13,024.1	12,298.0	726.1
Total Liabilities	(9,096.1)	(9,628.3)	532.2
<b>Total Equity</b>	<b>3,928.0</b>	<b>2,669.7</b>	<b>1,258.3</b>

Total equity increased by US\$1,258.3 million to US\$3,928.0 million as at 31 December 2021, mainly due to the profit for the year of US\$920.5 million and net proceeds from the share placement of US\$299.0 million in June 2021.

The Group's objectives in managing capital are to safeguard its ability to continue as a going concern, support sustainable growth, enhance shareholder value and provide capital for potential acquisitions and investment.

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:

Year Ended 31 December	2021 US\$ Million	2020 US\$ Million
Total Borrowings (excluding Prepaid Finance Charges) <sup>1</sup>	6,348.3	7,238.5
Less: Cash and Cash Equivalents	(1,255.3)	(192.7)
<b>Net Debt</b>	<b>5,093.0</b>	<b>7,045.8</b>
Total Equity	3,928.0	2,669.7
<b>Net Debt + Total Equity</b>	<b>9,021.0</b>	<b>9,715.5</b>
<b>Gearing Ratio</b>	<b>0.56</b>	<b>0.73</b>

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 at 31 December 2021 were US\$3,812.0 million (31 December 2020: US\$4,400.2 million) and Las Bambas Joint Venture Group cash and cash equivalents at 31 December 2021 were US\$836.3 million (31 December 2020: US\$102.2 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 preparation of MMG's financial statements.

Under the terms of relevant debt facilities held by the Group, the gearing ratio for covenant compliance purposes is calculated exclusive of US\$2,261.3 million (31 December 2020: US\$2,261.3 million) of shareholder debt that was

used to fund the MMG Group's equity contribution to the Las Bambas Joint Venture Group. For the purpose of the above, it has, however, been included as borrowings.

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## AVAILABLE DEBT FACILITIES

At 31 December 2021, the Group (excluding the Las Bambas Joint Venture Group) had available to it undrawn debt facilities of US\$560.0 million (31 December 2020: US\$650.0 million). This was represented by:

- (i) US\$300.0 million (2020: US\$300.0 million) that was undrawn and available under a US\$300.0 million revolving credit facility with ICBC maturing in December 2023;
- (ii) US\$80.0 million (2020: US\$80.0 million) that was available under an US\$85.0 million facility with China Development Bank maturing in September 2023; and
- (iii) US\$180.0 million (2020: nil) that was undrawn and available under a new US\$450 million Dugald River project facility with Album Trading Company maturing in June 2022.

At 31 December 2021, the Las Bambas Joint Venture Group had available to it undrawn debt facilities of US\$1,150.0 million (31 December 2020: US\$1,150.0 million). This was represented by:

- (i) US\$175.0 million (2020: US\$175.0 million) that was undrawn and available under a US\$175.0 million revolving credit facility provided by BOC Sydney, for general corporate purposes;

- (ii) US\$175.0 million (2020: US\$175.0 million) that was undrawn and available under a US\$175.0 million revolving credit facility provided by ICBC Luxembourg, for general corporate purposes; and

- (iii) US\$800.0 million (2020: 800.0 million) that was undrawn and available under an US\$800.0 million three years revolving credit facility to support the operation through the COVID-19 pandemic with China Development Bank, Bank of China, Industrial and Commercial Bank of China Limited and The Export-Import Bank of China.

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 2021. 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 and community related disruptions.

## PLACING OF NEW SHARES UNDER GENERAL MANDATE

On 8 June 2021, a total of 565,000,000 new Shares (Placing Shares), representing approximately 6.54% of the total issued share capital of the Company (as enlarged by the issue and allotment of the Placing Shares as at 8 June 2021), were successfully appointed placing agents at the placing price of HK\$4.15 per Placing Share pursuant to the terms of the placing agreement entered into between the Company and the placing agents on 1 June 2021. The Placing Shares were allotted to not less than six placees (who are independent professional, institutional or other investors), who and whose ultimate beneficial owners are third parties independent of the Company and its connected persons.

The placing price represented: (i) a discount of approximately 8.39% to the closing price of HK\$4.53 per Share as quoted on The Stock Exchange of Hong Kong Limited (Stock Exchange) on 31 May 2021, being the last trading day of the Shares prior to the date of the placing agreement (Last Trading Day); (ii) a discount of approximately 10.10% to the average closing price

of approximately HK\$4.62 per Share as quoted on the Stock Exchange for the last five consecutive trading days and including the Last Trading Day; and (iii) a discount of approximately 12.50% to the average closing price of approximately HK\$4.74 per Share as quoted on the Stock Exchange for the last ten consecutive trading days and including the Last Trading Day.

The Placing Shares were allotted and issued under the general mandate granted to the Board at the annual general meeting (AGM) of the Company held on 20 May 2021. The net proceeds from the Placing amounted to approximately HK\$2,321.1 million (equivalent to approximately US\$299.0 million) with a net price per Placing Share of approximately HK\$4.11, will be used for (i) potential future acquisitions or projects; and (ii) replenishment of working capital and general corporate purposes to support the Company's strategy, as detailed in the Company's announcement dated 1 June 2021.

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

Items	Percentage of Total Net Proceeds	Amount (HK\$ in Million)	Expected Time of Usage
Potential Future Acquisitions or Projects	50%	1,160.56	on or before 31 December 2023
Replenishment of Working Capital and General Corporate Purposes	50%	1,160.56	on or before 31 December 2023

As at the date of this report, the net proceeds from the Placing have not been immediately required for these purposes and the Company continues to hold these funds in short-term deposits.

## Development Projects

On 24 March 2022, it was announced that the Las Bambas operation has received regulatory approval from the Peru Ministry of Energy and Mines for the development of the Chalcobamba pit and associated infrastructure, following submission of the Company's original application in February 2019.

The Chalcobamba deposit is located approximately four kilometres north west from the Las Bambas process plant near the community of Huancuire. The operation will be developed by open pit mining with associated waste dumps, to be commissioned progressively over the next five months. Ore will be transported by haul truck for approximately 15 kilometres to the existing crushing and conveying plant located near the Ferrobamba pit. The development of the Chalcobamba deposit is expected to underpin a production increase at Las Bambas to around 380,000 to 400,000 tonnes of copper in concentrate per annum for the medium term.

The Company looks forward to working with the new Government of Peru and the Huancuire community to advance development. The project is significant for the economy of Peru and will support additional social contribution and financial and business opportunities for local and regional communities.

On 24 March 2022, MMG's board approved the development of the Kinsevere Expansion Project. The total investment amount is expected to be between US\$550 million and US\$600 million (including \$180 to \$200 million in 2022) will enable the mining and processing of Kinsevere's sulphide copper and cobalt reserves.

The project will extend the life of the Kinsevere operation for at least 13 years from 2022 and, once fully ramped up, will result in total annual production of approximately 80,000 tonnes of copper cathode and between 4,000-6,000 tonnes of cobalt in cobalt hydroxide. Construction is expected to commence in 2022, with first cobalt production expected in 2023, and first cathode production from the sulphide orebody expected in 2024. Kinsevere will continue to produce copper cathode from the remaining oxide orebody during the construction phase, with annual copper production expected to remain broadly around 2021 levels of approximately 50,000 tonnes over this time.

The higher production rates as well revenue from cobalt by-product credits is expected to result in C1 costs of US\$1.30 – 1.40/lb when at a steady state of operation, around 30% below the average level over the past 3 years, and will move Kinsevere into the bottom half of the global cost curve.

There were no other major development projects noted during the year ended 31 December 2021.



# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## Contracts and Commitments

A total of 685 contracts have been reviewed during 2021 either through market engagements or in-contract renegotiations. The annual operational or capital values addressed by these activities is US\$1,299.09 million.

Significant additional contracting activities were undertaken for all of the Company's operations throughout 2021 to ensure the security of supply for critical inputs and other requirements as necessary to enable continued operations and the management of risks through the ongoing global COVID-19 pandemic as well as other disruptions.

### LAS BAMBAS

New and revised agreements were finalised to support optimising production and development options for Las Bambas, including: contracts for projects construction, mining services, site infrastructure, such as facilities relocation, haul road at the mine site and waste rock dump, supply of grinding media, reagents, and other consumables, additional mobile equipment, major component repair, and contracts for engineering, earthmoving, road maintenance, logistics services, and civil works. Multiple goods and consultancy, studies, and testing services contracts were also finalised in support of the operations. These processes involved engagement with various local communities. Continuous improvement initiatives included contract optimisation and renegotiation with certain suppliers to ensure a sustainable cost base for the business. Significant activity was also undertaken to maintain safety and surety of supply during the COVID-19 pandemic and frequent blockades to support continued operations.

### KINSEVERE

New and revised agreements were finalised with regard to various goods and services focused on supporting the operation and continuous improvement in terms of cost performance, including; security, operations and exploration services contracts, grinding media and contracts for the supply of reagents and commodities. Activity continued regarding surety of supply during the COVID-19 pandemic to support continued operations and also management of increased shipping costs and shipping delays.

### DUGALD RIVER

New and revised agreements were finalised for requirements in support of optimising production performance and operations, including; contracts related to construction of the chiller plant, goods and services requirements for site infrastructure projects, multiple contracts for the supply of reagents and fuel, and other site support services. A major ongoing activity during this period was the review of long-term energy options to drive cost reduction and increase uptake of renewable energy.

### ROSEBERY

New and revised agreements were finalised with regard to various goods and services with a focus on supporting tailings-related activities and maintaining production performance. These included contracts for engineering services and consultancy agreements for project-related requirements; multiple goods agreements for the supply of bulk chemicals, key mining consumables and partial mobile fleet replacement.

### Group (Including Global Geoscience and Discovery Requirements)

New and revised agreements were finalised with regards to various goods and services, including corporate insurance broker service and captive management contracts, market intelligence services contracts, IT-related services and licence agreements, and a number of professional services consultancy agreements (including services for SHEC, including for environmental issues such as GHG emissions analysis, Corporate Affairs, Treasury, Human Resources and Operational Technical Excellence).

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## People

As at 31 December 2021, the Group employed a total of 4,238 full-time equivalent employees (2020:3,958) in its continuing operations (excluding contractors and casual employees) with the majority of employees based in Australia, Peru, the DRC and China.

Total employee benefits expenses for the Group's operations for the year ended 31 December 2021, including Directors' emoluments, totalled US\$306.3 million (2020: US\$247.4 million). The increase was primarily driven by higher profit share payments due to higher profitability at Las Bambas, increased annual salary, and the sign-on bonuses received by the local community members hired in 2021.

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

### AUSTRALIA

#### Dugald River

Surface drilling commenced within the mining lease at Dugald River in the second quarter of 2021 to test the host slate horizons on the periphery of the wireframe and along strike into the Southern Leases of the Dugald River mine for zinc. A secondary aim was to test the copper mineralisation through the hanging wall schists, calc-silicate and slate units. Deep holes tested the lower bounds of the Inferred zinc, lead and silver resource. Lower block A and E are the main zinc target zones where it is predicted the structural relationships are more conducive to wider and higher-grade mineralised zones based on the current measured resource. Additional drilling is planned for 2022 to test the disseminated copper targets along the southern periphery of the known zinc lode, following up on copper intersections from 2021 and the lower extents of the inferred resource along strike from north to south.

Underground resource drilling continued with two rigs drilling to convert areas of indicated to measured resource. Underground resource drilling continues to expand our understanding of the structural complexity of the Dugald River system. A reduction in the Resource tonnes is counter-balanced with marginally higher zinc grades.

#### Rosebery

During 2021, in-mine drilling activities continued to focus on resource conversion and resource extension drilling around U, JRS, V South, H, K and P Lenses. Resource conversion programs performed to expectation. Resource Extension programs are ongoing and results from these extension programs were positive during the reporting period. Additional Resource Extensions programs in the Northern Deeps target focused on Z Lens which is providing results above expectation with further sulphide intercepts received from Marionoak. These programs are targeting additional mineral extensions down-dip and to the north of known mining zones. Interpretations continue with the 2021 results to realise the potential of these zones and other areas on the Mine Lease.

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## AMERICA

### Las Bambas

During 2021 exploration drilling was performed on near-surface, skarn and porphyry copper mineralisation at the Chalcobamba Southwest Zone as well as along the southern margin of the Chalcobamba Deposit. Drilling was also performed at the Jatun Charcas, Ferrobamba South, Ferrobamba East, Ferrobamba Deeps and Chalcobamba Deeps targets. A total of 47 drill holes were completed for 19,039 metres. All core has been logged and assayed. The analytical results for this drilling will be reported on separately.

- Chalcobamba Southwest Zone

Drilling continued at the Chalcobamba Southwest Zone, located immediately southwest of the current Chalcobamba Ore Reserve pit. Fifteen drill holes were completed for a total of 4,632 metres.

- Chalcobamba South

Ten drill holes were completed at Chalcobamba South for a total of 3,431 metres. This drilling is targeting the extension of mineralization along the southern edge of the future Chalcobamba pit.

- Chalcobamba Deeps

Three drill holes were completed at Chalcobamba Deeps for a total of 1,756 metres. This drilling targets the extension of mineralization below the currently defined open pit at Chalcobamba.

- Ferrobamba South

Six drill holes (2,512 meters) were completed at the Ferrobamba South project targeting potential skarn mineralization located along the southern margin of the Ferrobamba intrusive complex.

- Ferrobamba East

One drill hole for 319 meters was completed at the Ferrobamba East project targeting breccias associated with elevated levels of gold, silver, copper, molybdenum, lead and zinc in surface rock and soil samples.

- Ferrobamba Deeps

A total of 6,207 meters of drilling were completed on eleven drill holes at the Ferrobamba Deeps target. The combined DDH and RC drilling is designed to test the depth projection of higher-grade mineralization currently being mined by the open pit. RC pre-collars were used for five of the DDH holes to reduce drill time and cost. The targeted mineralisation could serve to deepen the open pit or provide future ore for UG mining activity. A Proof of Concept Study for potential UG mining at Ferrobamba Deeps is underway and will be completed in 2022.

## AFRICA

### Kinsevere

In 2021, exploration activities continue to focus on the development of the satellite copper deposits within a roughly 50km radius of the Kinsevere Mine ("RAD50") that may be suitable for economic exploitation and processing at the Kinsevere plant. Exploration activities included resource delineation drilling at Sokoroshe II and Mwepu projects, and prospect testing drilling at Shandwe and Tumbwe projects.

Resource models of both Sokoroshe II and Mwepu projects will be updated once all of the assay results are received.



# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

Project	Hole Type	Meterage (metres)	Number of Holes	Average Length (metres)
<b>Australia</b>				
Dugald River	Diamond Surface	18,268	28	652
	Diamond Underground	73,789	390	189
Rosebery	Diamond Surface	4,664	4	1,166
	Diamond Underground	87,093	355	245
<b>Americas</b>				
Las Bambas	Diamond (Chalcobamba SW)	4,632	15	300
	Diamond (Chalcobamba Deeps)	1,756	3	749
	Diamond (Ferrobamba Deeps)	5,027	11	380
	Diamond (Jatun Charcas)	182	1	182
	Diamond (Chalcobamba South)	3,431	10	343
	Diamond (Ferrobamba South)	2,512	6	419
	Diamond (Ferrobamba East)	319	1	319
	Reverse Circulation (Ferrobamba Deeps)	1,180	5	320
<b>Africa</b>				
Kinsevere	Diamond (MWEPU)	2,170	18	121
	Reverse Circulation (SHANDWE)	3,085	37	83
	Diamond (SOKOROSHE II)	2,514	11	229
	Reverse Circulation (TUMBWE)	1,423	14	102
<b>Total Equity</b>		<b>212,045</b>	<b>909</b>	<b>233</b>

## Material Acquisitions and Disposals

The Group made no material acquisition or disposal in the year ended 31 December 2021.

## Events After the Reporting Date

Other than the matters outlined adjacent, 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.

- The Board has approved the progression of Kinsevere Expansion Project ("KEP").

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## 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 and liquidity risk. 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 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 2021, the Group entered into various commodity trades to hedge the sales prices for copper and zinc. This included:

- Zero/low-cost collar hedges:
  - » 10,700 tonnes of zinc with put strike price ranging from US\$2,550/tonne to US\$2,800/tonne and call strike price ranging from US\$3,225/tonne to US\$3,340/tonne which will be settled through January 2022 to March 2022;
  - » 59,400 tonnes of copper at put strike price ranging from US\$9,000/tonne to US\$9,550/ton and call strike price ranging from US\$10,000/tonne to US\$11,200/tonne which will be settled through January 2022 to April 2022.
- Fixed price swap hedges: 8,000 tonnes of copper with fixed price ranging from US\$9,538/tonne to US\$9,662/tonne which will be settled in January 2022.

A change in commodity prices during 2022 can result in favourable or unfavourable financial impact for the Group during 2022.

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

At 31 December 2021	Term	Carrying Amount of Hedging Instrument US\$ Million	Favourable/ (Unfavourable) Changes in Fair Value used for Measuring Ineffectiveness		Settled Portion of Hedging Instrument Realised Losses/ (Gain) US\$ Million	Hedging Gain/(Loss) Recognised in Cash Flow Hedge Reserve US\$ Million	Cost of Hedging Reserve US\$ Million
			Hedging Instrument US\$ Million	Hedged Item US\$ Million			
Cash Flow Hedges							
Derivative Financial Liabilities	January 2021 to March 2021	-	-	-	5.5	-	-
Derivative Financial Assets	June 2021 to December 2021	-	-	-	2.5	-	-

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

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:

Commodity	2021		2020		
	Commodity Price Movement	Increase/(Decrease) in Profit US\$ Million	Commodity Price Movement	Increase/(Decrease) in Profit US\$ Million	Increase in OCI US\$ Million
Copper	+10%	(23.9)	+10%	(11.0)	-
Zinc	+10%	1.1	+10%	2.0	(6.3)
Total		(22.8)		(9.0)	(6.3)

  

Commodity	2021		2020		
	Commodity Price Movement	Increase/(Decrease) in Profit US\$ Million	Commodity Price Movement	Increase/(Decrease) in Profit US\$ Million	Decrease in OCI US\$ Million
Copper	-10%	25.5	-10%	(18.9)	-
Zinc	-10%	(1.7)	-10%	(2.0)	6.3
Total		23.8		(20.9)	6.3

## (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. Details of the Group's cash and cash equivalents and the Group's borrowings are set out in the Financial Statements.

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.

In 2020, MLB entered into a notional US\$2,100 million five-year amortising interest rate swap with respect to the floating six-month LIBOR base rate applicable under its existing project facility, converting the floating rate to a fixed base rate. The main sources of hedge ineffectiveness are considered to be the effects of counterparty credit risks on the hedging instrument, the possibility of LIBOR rates becoming negative and uncertainty associated with benchmark interest rate reform. Further, if LIBOR rates become negative for a period of time, then this corresponding component of the hedging instrument will be ineffective from year two to year five. A floor was purchased on LIBOR at zero for the first year of the hedge instrument.

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

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

At 31 December 2021	Term	Notional Amortising Amount US\$ Million	Carrying Amount of Hedging Instrument US\$ Million	Favourable/(Unfavourable) Changes in Fair Value used for Measuring Ineffectiveness		Settled Portion of Hedging Instrument Realised Losses US\$ Million	Hedging Gain Recognised in Cash Flow Hedge Reserve <sup>2</sup> US\$ Million	Hedge Ineffectiveness Recognised in Profit or Loss US\$ Million
				Hedging Instrument US\$ Million	Hedged Item US\$ Million			
Cash Flow Hedges								
Derivative Financial Assets/(Liabilities) <sup>1</sup>	June 2020 to June 2025	1,860	31.8	42.5	(42.5)	(6.8)	29.0	-

1. In 2020, the Group has entered into a notional US\$2,100 million five-year amortising interest rate swap with BOC Sydney. The purpose of the arrangement is to fix approximately half of the remaining interest rate exposure accompanying the floating interest rate MLB project facility (borrowings of US\$3,754.2 million outstanding at 31 December 2021, maturing in July 2032) from CDB, ICBC, BOC Sydney and The Export-Import Bank of China for a period of five years. The interest rate swap hedge will amortise in line with the MLB project facility and swap the six-month LIBOR exposure for a fixed rate (0.5425% per annum from June 2021 to June 2025).

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

At 31 December 2020	Term	Notional Amortising Amount US\$ Million	Carrying Amount of Hedging Instrument US\$ Million	Favourable/(Unfavourable) Changes in Fair Value used for Measuring Ineffectiveness		Settled Portion of Hedging Instrument Realised Losses US\$ Million	Hedging Gain Recognised in Cash Flow Hedge Reserve US\$ Million	Hedge Ineffectiveness Recognised in Profit or Loss US\$ Million
				Hedging Instrument US\$ Million	Hedged Item US\$ Million			
Cash Flow Hedges								
Derivative Financial Assets/(Liabilities)	June 2020 to June 2025	2,020.0	(10.7)	(10.7)	10.7	(1.4)	(7.3)	-

At 31 December 2021 and 2020, 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/(loss) and other comprehensive income (OCI) would have changed as follows:

US\$ Million	2021				2020			
	+100 Basis Points		-100 Basis Points		+100 Basis Points		-100 Basis Points	
	Increase/ (Decrease) in Profit After Tax	Increase/ (Decrease) in OCI	Increase/ (Decrease) in Profit After Tax	Increase/ (Decrease) in OCI	Increase/ (Decrease) in Profit After Tax	Increase/ (Decrease) in OCI	Increase/ (Decrease) in Profit After Tax	Increase/ (Decrease) in OCI
<b>Financial Assets</b>								
Cash and Cash Equivalents	8.5	-	(8.5)	-	1.3	-	(1.3)	-
<b>Financial Liabilities</b>								
Borrowings (Taking into Account the Impact of the Interest Rate Swap)	(14.8)	26.5	2.9	(24.9)	(19.0)	39.1	(18.5)	(15.9)
<b>Total</b>	<b>(6.3)</b>	<b>26.5</b>	<b>(5.6)</b>	<b>(24.9)</b>	<b>(17.7)</b>	<b>39.1</b>	<b>(19.8)</b>	<b>(15.9)</b>



# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## EFFECT OF BENCHMARK INTEREST RATES REFORM

As noted in the Financial Statements, the Group has adopted the Phase I and Phase II Amendments to HKFRS 9, HKAS 39 and HKFRS 7 Interest Rate Benchmark Reform. Refer to the Financial Statements for details of borrowings which may be impacted by the interest rate benchmark reform.

Additionally, the Group has cash flow hedge relationship (as described above for the interest rate swap) which will also be subject to the interest rate benchmark reform. In respect of the interest rate swap, the amendments provide temporary relief from applying specific hedge accounting requirements to the hedging relationships if it directly gets affected by benchmark interest rates reform. This will prevent hedge accounting from terminating but may result in hedge ineffectiveness. Any hedge ineffectiveness continues to be recorded in the consolidated statement of profit or loss.

Under the amendments, hedge accounting is not discontinued solely because of the interest rate benchmark reform. Hedging relationships (and related

documentation) are required to be amended to reflect modifications to the hedged item, hedging instrument and hedged risk. Amended hedging relationships should meet all qualifying criteria to apply hedge accounting, including effectiveness requirements. The Group currently anticipates that the areas of greatest change will be amendments to the contractual terms of US\$ LIBOR-referenced floating-rate debt and swaps, and updating hedge designations.

The Group is closely monitoring the market and the output from the various industry working groups managing the transition to new benchmark interest rates. This includes announcements made by IBOR regulators (including the Financial Conduct Authority 'FCA' and the US Commodity Futures Trading Commission) regarding the transition from IBOR (including the US\$ LIBOR) to the Sterling Overnight Index Average rate ("SONIA"), the Secured Overnight Financing rate ("SOFR") and the Tokyo Overnight Average rate ("TONA").

Below is the list of derivative and non-derivative financial instrument which will be impacted by IBOR replacement:

Financial Instrument	Type of Instrument	Maturing in	Notional Value US\$ Million	Carrying Value US\$ Million
US\$ Debt Linked to LIBOR <sup>1</sup>	Non-Derivative Liability	Through January 2022 to July 2032	2,169.2	2,169.2
US\$ Debt Linked to LIBOR Designated in Cash Flow Hedge <sup>1</sup>	Non-Derivative Liability	June 2025	1,860.0	1,860.0
Interest Rate Swap Converting LIBOR to Fixed (Cash Flow Hedge)	Derivatives	June 2025	1,860.0	31.8

1. For the US\$ Debt, the fallback clauses are under negotiation with lenders. This relief does not extend to the requirement that the designated interest rate risk component continues to be reliably measurable and if the risk component is no longer reliably measurable, the hedging relationship is discontinued. The Group has determined that US\$ LIBOR interest rate risk components continue to be reliably measurable.

In response to the announcements, the Group has put in place an interest rate benchmark transition programme being led by the Group's Treasury team. Treasury team has commenced the discussions with the internal and external stakeholders to understand the impact of the transition and work involved.

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## RISKS ARISING FROM THE INTEREST RATE BENCHMARK REFORM

The following are the key risks for the Group arising from the transition:

- **Interest rate basis risk:** There are two elements to this risk as outlined below:
  - » If bilateral negotiations with the Group's counterparties are not successfully concluded before the cessation of LIBOR publishing, there are significant uncertainties with regard to the interest rate that may apply. The Group is working closely with counterparties to avoid this from occurring.
  - » Interest rate basis risk can arise if the move to the alternate benchmark rate occurs at different timing for the non-derivative instrument (the project finance facility) and the derivative instrument (the interest rate swap) held to manage the interest risk on the non-derivative. The Group will monitor this risk against its risk management policy which shall allow for temporary mismatches of up to 12 months and transact additional basis interest rate swaps if required.
- **Liquidity risk:** There are differences between the LIBOR and the various alternative benchmark rates which the Group may be adopting. The LIBOR is published for a period (e.g., one month or six months) and includes an inter-bank credit spread, whereas the alternative benchmark rates are typically risk-free overnight rates with no embedded credit spread and published at the

end of the overnight period. These differences can result in uncertainty regarding the floating rate interest payments which will require additional liquidity management. Management of the Group shall ensure sufficient liquidity is available to accommodate any unexpected increases in overnight rates.

- **Accounting risk:** If transition to alternate benchmark rates is finalised in a manner which does not permit the application of reliefs introduced in the Phase 2 amendments, this can lead to discontinuation of hedge accounting relationships (i.e., gains or losses recognised in the other comprehensive income will be re-classified to profit and loss). This can also lead to increased volatility in profit or loss if re-designated hedges are not fully effective and volatility in the profit or loss if non-derivative financial instruments are modified or de-recognised. Management of the Group aims to agree timely changes to the contracts to allow HKFRS 9 reliefs to apply and does not expect to close out derivatives and enter into new ones in respect of the existing hedge relationship.

Below are details of the hedging instruments and the related hedged items that will be subject to transition to alternative benchmark interest rates, by hedge type. The terms of the hedged items listed match those of the corresponding hedging instruments.

Hedge Relationship	Prior to Transition Instrument Type	Maturing in	Notional Value US\$ Million	Carrying Value US\$ Million	Hedged Item	Transition Progress
Cash Flow Hedge	Receive 6-month US\$ LIBOR, pay US dollar fixed interest rate swap	June 2025	1,860.0	31.8	US\$ LIBOR debt	Discussion with counterparty of derivatives are in process.

As noted earlier, the Group will continue to apply the Phase 1 amendments to HKFRS 9/HKAS 39 until the uncertainty arising from the interest rate benchmark reform with respect to the timing and amount of underlying cashflows to which the Group is exposed ends.

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## (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.

Based on the Group's net monetary assets and financial liabilities at 31 December 2021 and 2020, 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:

	2021		2020	
	Weakening of US Dollar	Strengthening of US Dollar	Weakening of US Dollar	Strengthening of US Dollar
	(Decrease)/Increase in Profit After Tax	(Decrease)/Increase in Profit After Tax	(Decrease)/Increase in Profit After Tax	(Decrease)/Increase in Profit After Tax
10% Movement in Australian Dollar (2020: 10%)	(5.7)	5.7	(16.2)	16.2
10% Movement in Peruvian Sol (2020: 10%)	0.7	(0.7)	(10.0)	10.0
<b>Total</b>	<b>(5.0)</b>	<b>5.0</b>	<b>(26.2)</b>	<b>26.2</b>

## (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. The aging analysis of the trade receivables is provided in the Financial Statements, and 100% of the balance is aged less than six months based on invoice date. The carrying amount of the Group's trade receivables at Fair Value Through Profit/(Loss) as disclosed in the Financial Statements 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 2021 in assessing the Expected Credit Loss 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 CONTINUED

Other receivables include balances related to various matters including other taxes, indemnities, restricted cash in relation to MCK case and the last instalment receivable for sale of Sepon. 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 2021 and 2020, 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:

	2021	2020
CMN	38.2%	37.9%
CITIC Metal	16.6%	18.3%
Trafigura	13.2%	14.6%

The Group's largest debtor at 31 December 2021 was Minmetals North-Europe Aktiebolag, with a balance of US\$18.1 million (2020: US\$121.1 million) and the five largest debtors accounted for 96.2% (2020: 85.0%) 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	2021	2020
Asia	28.7	297.5
Europe	20.9	67.9
Australia	1.8	0.6
Other	12.5	3.2
	63.9	369.2

## (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.



# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

US\$ Million	Within 1 Year	Between 1 and 2 Years	Between 2 and 5 Years	Over 5 Years	Total	Total Carrying Value
<b>At 31 December 2021</b>						
<b>Financial Assets</b>						
Cash and Cash Equivalents	1,255.3	-	-	-	1,255.3	1,255.3
Trade Receivables	63.9	-	-	-	63.9	63.9
Other Receivables	150.6	135.6	14.3	-	300.5	300.5
Derivative Financial Assets	0.5	26.7	5.5	-	32.7	32.7
Other Financial Assets	1.8	-	-	-	1.8	1.8
<b>Financial Liabilities</b>						
Trade and Other Payables	(451.0)	(164.8)	-	-	(615.8)	(615.8)
Derivative Financial Liabilities	(4.9)	-	-	-	(4.9)	(4.9)
Borrowings (Including Interest)	(899.6)	(1,610.8)	(3,212.0)	(1,644.1)	(7,366.5)	(6,298.1)
Lease Liabilities (Including Interest)	(30.0)	(24.8)	(49.7)	(98.2)	(202.7)	(131.1)
	<b>86.6</b>	<b>(1,638.1)</b>	<b>(3,241.9)</b>	<b>(1,742.3)</b>	<b>(6,535.7)</b>	<b>(5,395.7)</b>
<b>At 31 December 2020</b>						
<b>Financial Assets</b>						
Cash and Cash Equivalents	192.7	-	-	-	192.7	192.7
Trade Receivables	369.2	-	-	-	369.2	369.2
Other Receivables	139.4	23.4	16.7	5.8	185.3	185.3
Other Financial Assets	1.7	-	-	-	1.7	1.7
<b>Financial Liabilities</b>						
Trade and Other Payables	(470.2)	(112.2)	-	-	(582.4)	(582.4)
Derivative Financial Liabilities	(35.8)	(6.0)	1.7	-	(40.1)	(40.0)
Other Financial Liabilities	-	-	-	(145.4)	(145.4)	(145.4)
Borrowings (Including Interest)	(1,152.6)	(969.2)	(4,418.1)	(1,999.6)	(8,539.5)	(7,179.5)
Lease Liabilities (Including Interest)	(33.0)	(29.7)	(57.0)	(113.4)	(233.1)	(148.7)
	<b>(988.6)</b>	<b>(1,093.7)</b>	<b>(4,456.7)</b>	<b>(2,252.6)</b>	<b>(8,791.6)</b>	<b>(7,347.1)</b>

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## (f) Sovereign risk

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, and changing political conditions and governmental regulations.

Changes in any mining or investment policies or shifts in political attitudes in the jurisdictions in which 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. As the Peru political situation continues to evolve in 2022 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 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 2021, these guarantees amounted to US\$291.5 million (2020: US\$417.7 million). The Group has an A\$100.0 million guarantee (approximately US\$72.5 million) which decreased during the year from A\$230.0 million (approximately US\$176.7 million), revolving bank guarantee facility with BOC Sydney ("BG Facility"), which is guaranteed by CMN. The Company has entered into a counter-indemnity agreement in favour of CMN for the maximum principal amount outstanding under the BG Facility.

As at 31 December 2021, the bank guarantee that the Group was maintaining subsequent to the sale of Century mine in 2017 had been reduced to nil as New Century undertook an equity raise and replaced the bank guarantee which the Group provided by cash backing or other external insurance providers.

### 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 of the Group, such disclosure may seriously prejudice the position of the Group in dealing with these matters.

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

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

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 (2014/15/16)

Included within such uncertain tax matters are audits of the 2014, 2015 and 2016 tax years for MLB in relation to withholding taxes on 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 until the estimate date of Peru Tax Court resolution are PEN224.3 million (approximately US\$58.3 million), PEN613.6 million (approximately US\$159.4 million) and PEN767.5 million (approximately US\$199.3 million) for 2014, 2015 and 2016 tax years respectively.

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. MLB notes that the Peruvian tax law was amended to apply from October 2017 onwards to provide expressly that parties are not related by being under state ownership for the purposes of withholding taxes. MLB has appealed the assessments. SUNAT could bring a similar challenge regarding the rate of withholding tax applied by MLB for the part of the 2017 tax year before the amendment to the Peruvian tax law. Where MLB is not successful in rebutting or appealing such challenge(s), this could result in significant additional tax liabilities.

## PERU – VAT REFUND CLAIMS (2011/12)

Included as an uncertain tax matter is the decision from the Peru Tax Court in relation to SUNAT’s audit of MLB’s VAT refund claims in the 2011 and 2012 years. SUNAT conducted an audit of MLB’s tax affairs of the 2011 and 2012 financial years and challenged certain VAT matters. SUNAT disallowed MLB’s claim, despite MLB providing a substantial amount of documentary evidence to support its position during and after the audit, which MLB is of the opinion it is entitled to do, pursuant to Peruvian law.

For the year ended 31 December 2021, SUNAT collected PEN 685.0 million (approximately US\$171.0 million) from MLB bank account in respect of VAT, penalties and interest. Based on the latest legal advice, there is a high probability of a positive outcome in the judiciary. Hence, the Group recognised the deducted amount as a “non-current receivable” from SUNAT.

The Group continues to proactively cooperate with the relevant taxation authorities and to actively manage these audits and reviews. Where appropriate, the Group has filed appeals with either the relevant tax authority or the relevant tax court. For all such open tax matters that the Group presently has, any ultimate obligation would depend on future resolution of the matters and currently, where applicable, provisions have been raised to recognise potential liabilities.

## CONTINGENT LIABILITIES - OTHER CONTINGENCIES

In 2019, MCK filed a claim against MMG Kinsevere, to compensate MCK for losses allegedly suffered as a result of Kinsevere’s decision to not renew or extend the mining services contract with its associate entity MCK Trucks (then known as NB Mining SA) in 2018 on the basis that MCK was entitled to a “life of mine” agreement with Kinsevere. Court proceedings continued between MMG Kinsevere and MCK in the DRC. MCK also obtained freezing orders in February 2020 over certain assets of Kinsevere, which have been partly enforced over US\$15.0 million cash held in bank accounts in the DRC. A settlement in this matter was agreed in December 2021. Subsequent to such settlement, in January 2022 the DRC Commercial Court ordered the release of the frozen cash funds in DRC bank accounts. Part of the settlement amount has been paid while the remaining balance has been recognised as a provision pending satisfaction of all conditions precedent to the settlement agreement.

# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

## Charges on Assets

As at 31 December 2021, certain borrowings of the Group were secured as follows:

- (a) Approximately US\$3,754.2 million (31 December 2020: US\$4,307.6 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 Co Ltd and each of its subsidiaries including MLB, a debenture over the assets of MMG South America Management Co Ltd, 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 Co Ltd and its subsidiaries and security agreements over bank accounts of MLB.
- (b) Approximately US\$57.8 million (31 December 2020: US\$92.5 million) from ICBC Peru Bank, Banco de Crédito del Peru and Scotiabank Peru was secured by mine fleet equipment procured under asset finance arrangements.

At 31 December 2020, borrowing of US\$342.2 million from China Development Bank and BOC Sydney was substantively secured by the shares and assets of MMG Dugald River Pty Ltd ("MMG Dugald River"). This consists of a charge over the shares in MMG Dugald River, a real property mortgage over all of the interests in land of MMG Dugald River, a general security agreement in respect of all of the assets of MMG Dugald River, and specific security over certain assets owned by MMG Australia Limited relating to the Dugald River project, and a featherweight charge over all of MMG Australia Limited's other assets. This borrowing was guaranteed by CMC. The restrictions on above assets and guarantee provided by CMC were lifted with the borrowing's prepayment during 2021.

## Future Prospects

MMG's vision is to build the world's most respected mining company. We mine to create wealth for our people, host communities and shareholders with an ambition to double the size and value of MMG, and then double again by 2030. MMG has established strong foundations that support future growth and development. The Board is committed to sustaining the successful model that brings together the best fit management team and a strong relationship with China that draws upon the strength of the world's largest commodities consumer, provides deep understanding of markets and access to its sources of funding.

The Company is focused on containing costs, continually improving productivity, growing its resource base and strengthening the balance sheet. This will enable the Company to step into its next phase of disciplined growth.

Las Bambas copper production in 2022 is expected to be around 300,000 to 320,000 tonnes. The continued development of this mine is significant for the economy of Peru and will support additional social contribution and financial and business opportunities for local and regional communities.

MMG expects to produce between 45,000 and 50,000 tonnes of copper cathode at Kinsevere, and between 225,000 and 255,000 tonnes of zinc at its Dugald River and Rosebery operations in 2022.

In the DRC, MMG will now progress the next phase of Kinsevere development, namely the transition to the mining and processing of sulphide ores, following the approval of the project by the Board in March 2022. This project will extend Kinsevere's mine life, 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. Construction will commence in 2022, with first cobalt production expected in 2023, and first cathode production from the sulphide orebody expected in 2024. MMG will continue to invest in regional exploration programs focusing on proving up discoveries within an operating radius of the Kinsevere mine.

In relation to Dugald River, the Company continues to focus on sustained delivery of annual mine throughput of two million tonnes. This will pave the way for targeted zinc equivalent production to remain at around 200,000 tonnes



# MANAGEMENT DISCUSSION AND ANALYSIS CONTINUED

annually. At Rosebery, resource extension and near mine exploration drilling will continue during 2022, with results continuing to indicate further extensions to the resource and mine life. MMG remains committed to extending the operating life of this important asset.

Total capital expenditure in 2022 is expected to be between US\$700.0 million and US\$800.0 million. US\$400.0-500.0 million is attributable to Las Bambas, including the Chalcobamba development, completion of the third ball mill project and expansion of the Las Bambas tailings dam facility. At Kinsevere, capital expenditure plan in 2022 is approximately US\$200.0-220.0 million in which approximately US\$180.0-200.0 million is for the expansion project.

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.