WE MINE FOR PROGRESS MMG

ANNUAL REPORT 2019

A member of:

ICMM International Council on Mining & Metals

MINING WITH PRINCIPLES

HKEX: 1208

WE MINE FOR PROGRESS

We mine to build wealth through the development of our people, partnering with local communities to drive economic growth and the value we deliver to our shareholders.

We work in complex jurisdictions and across numerous cultures and communities, who have vastly differing experiences with resource development.

A long-term outlook, our pride in mining, our commitment to international standards and our respect for people, land and culture underpin our success.

CHAIRMAN'S REVIEW

Looking forward, MMG is still a relatively young company and a dynamic company with potential for growth. We will keep pace with economic development in China and the world and target development opportunities presented by the metals and minerals industry.

Dear Shareholders,

I would like to thank you for your long-term support of MMG. On behalf of the MMG Board, I am pleased to present the Company's 2019 annual report.

MMG has always adhered to its core value of "safety first" making safety the highest priority in all operations. In 2019, the Company's total recordable injury frequency (TRIF) was 1.58 per million hours worked, which ranks among the world's best. Looking forward, we will continue to give top priority to employee health and safety, continuously improve production safety management and strive to create a workplace with zero injuries and accidents.

During the past year, the global situation was complex and volatile, and economic growth was relatively weak. In particular, due to factors such as escalating trade friction between China and the United States, the performance of commodity markets fell short of expectations. The price of copper and zinc, which are core commodities and integral to the Company's operations, showed a general downward trend. In this environment, MMG recorded total revenue of US$3,032.3 million for the year, and EBITDA of US$1,461.5 million. The Company's total copper and zinc production was around 452,000 tonnes and 254,000 tonnes respectively. Las Bambas actively responded to community road blockades and maintained stable production as much as possible; and Dugald River overcame the challenges of extreme weather and achieved its first full year of production at expected capacity. At the same time, we accelerated management changes, optimised operations, reduced the size of our headquarters and improved management efficiency. We continuously reduce costs and improve efficiency. We believe the above mentioned efforts will set a strong foundation to increase the Company's competitiveness.

China Minmetals Corporation Limited (CMC), the major shareholder of the Company, has always focused on its main business and core operations. 2019 saw continued high-quality development. Total revenue exceeded 600 billion RMB (approx. US$86 billion), representing a year-on-year increase of 13.4%, a new record high.

In 2020, we will continue to strive for progress while maintaining stability and further leveraging the unique advantages of our entire industry chain. CMC will fully realise its "three-step - two-double development goals" and accelerate the creation of a world-class metal resources conglomerate. As the flagship platform for overseas resources development CMC will, as always, fully support the development of MMG.

As the world's largest consumer of metal and mineral products, China's stable and healthy long-term economic and social development has not changed. This is the basis of our firm market confidence. We are aware of the

outbreak of COVID-19 since the beginning of the year which has had impacts on China and the global economy. However, we strongly believe that this situation is only temporary, that the epidemic will be defeated and that the market will improve. We will continue to climb new peaks and embark on new paths. The Company will carry out effective measures to ensure a safe, healthy and well planned business and continue to tap into existing resources and project potential, and efficiently advance production and operations.

It has been ten years since the establishment of MMG, and over that time we have laid a solid foundation for success. Looking forward, MMG is still a relatively young company and a dynamic company with potential for growth. We will keep pace with economic development in China and the world and target development opportunities presented by the metals and minerals industry. We will work with shareholders, employees, partners and other stakeholders, to create a better future together.

On behalf of the MMG Board, I thank our employees for their efforts and dedication as we have worked to transform the Company. I also thank our shareholders, partners, and the communities in which we operate for their trust and support.

GUO Wenqing
CHAIRMAN

CHIEF EXECUTIVE OFFICER'S REPORT

MMG has a strong future, and I am confident in our ability to generate further value from existing assets while we look to grow our footprint around existing operating hubs and beyond.

Dear Shareholders

This year, we celebrated MMG's 10-year anniversary – a milestone which offered an opportunity to reflect on our journey as we built a business underpinned by high quality assets, talented people and products that are leveraged to global mega trends of decarbonisation, urbanisation and vehicle electrification.

MMG has a strong future, and I am confident in our ability to generate further value from existing assets while we look to grow our footprint around existing operating hubs and beyond.

SAFETY

At MMG the health and safety of our people remains our highest operating priority.

Disappointingly we saw a slight increase in our total recordable injury frequency (TRIF) rate which rose from 1.00 to 1.58 per million hours worked in 2019.

While this result still places us as one of the best performing companies amongst our peers in the International Council on Mining and Metals (ICMM), there is more we can do as we work towards a target of zero harm.

Driving ongoing improvement in our safety performance remains a key management priority and we continue to invest time and resources in prevention, empowering leadership, and importantly, learning from events.

OUR PERFORMANCE

In 2019 MMG's continuing operations produced 451,963 tonnes of copper and 253,520 tonnes of zinc.

Las Bambas produced 382,518 tonnes of copper in copper concentrate with production and sales slightly lower than planned following community road blockades in the first and third quarters of 2019. In total, outbound logistics were restricted for more than 100 days during the year. This reduced our copper production by approximately 20,000 tonnes.

While 2019 was a challenging year, we remain optimistic about the future. 2020 represents a year of transition for Las Bambas, with an expectation that mining will commence at the Chalcobamba pit during the second half. The operation is now expected to deliver around two million tonnes of copper production in the five-year period from 2021 and 2025. This is an extension to prior guidance of two million tonnes over the mine's first five years, and significantly above the original mine plan at the time of acquisition. As a result, Las Bambas is now on track to produce approximately four million tonnes in the first decade of commercial production, an excellent outcome for this relatively young asset. Based on good operational performance and successful early drilling programs on the highly prospective tenements, we are confident in our ability to maintain a strong production profile into the future.

In its first full year of commercial production, Dugald River overcame challenges due to the severe flooding event in Queensland to deliver 170,057 tonnes of zinc with the mill operating above design capacity for seven consecutive quarters.

Rosebery and Kinsevere continued to face challenges due to declining ore grades and we are actively engaged in programs to extend the mine life and to optimise the value of both operations.

Overall, we expect to produce between 418,000 and 445,000 of copper and 225,000 and 245,000 of zinc in 2020.

Our 2020 production guidance is slightly below 2019 levels. This is largely due to lower grades at Las Bambas as we transition to mining the Chalcobamba pit, together with lower grades at Rosebery, now in its ninth decade of production. We are positive about the outlook for the Company as we look to increase mine capacity at Dugald River and capitalise on positive drilling programs around existing operations.

VALUE

In 2019 MMG delivered an EBITDA of US$1,461.5 million – a reduction of 17% on the 2018 result. This was attributable to lower sales revenue at Las Bambas and Rosebery and operational challenges at Kinsevere in the first half. The result was partially offset by the strong performance of Dugald River as it marked its first full year of commercial production. A net loss after tax for the year of US$195.3 million, reflected the impacts of a US$105.0 million after-tax impairment of assets related to the oxide operations at Kinsevere.

Throughout 2019 global markets continued to be impacted by the ongoing trade friction between China and the United States. This volatility impacted the prices of our core commodities as concerns regarding the outlook for global growth continued unabated. In December we saw a welcome upward trend in copper prices as China and the United States reached a "Phase One" trade agreement. Zinc prices were also supported by the positive trade developments albeit not to the same extent as copper.

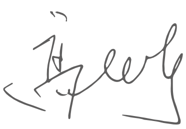
While external challenges may persist for some time, we continue to focus our efforts on the levers available to us – cost management and mine performance. To this end, we have implemented a group wide efficiency and transformation program designed to simplify our business and capture further value. I am pleased with the positive results we have already achieved, and I look forward to sharing more with you as we move through 2020.

OUTLOOK

Looking ahead, finding enduring solutions to the logistics challenges in Peru is a priority for the entire management team. We continue to engage in dialogue with communities along the transportation corridor and support their development through a range of programs. I am confident in our ability to reach common ground as we work together with Peru's Government and local stakeholders.

Finally, on behalf of the MMG management team, I extend our thanks to our shareholders, communities, contractors and our people for their continued support.

I look forward to working with you again in 2020.



Geoffrey (Xiaoyu) GAO
CHIEF EXECUTIVE OFFICER

BOARD OF DIRECTORS

Mr GUO Wenqing
Chairman and Non-executive Director

Mr GAO Xiaoyu
Chief Executive Officer and Executive Director

Mr JIAO Jian
Non-executive Director

Mr ZHANG Shuqiang
Non-executive Director

Mr XU Jiqing
Non-executive Director

Dr Peter CASSIDY
Independent Non-executive Director

Mr LEUNG Cheuk Yan
Independent Non-executive Director

Mr CHAN Ka Keung, Peter
Independent Non-executive Director

EXECUTIVE COMMITTEE

Mr GAO Xiaoyu
Chief Executive Officer

Mr Ross CARROLL
Chief Financial Officer

Mr Troy HEY
Executive General Manager – Corporate Relations

Mr WEI Jianxian
Executive General Manager – Americas

Mr LI Liangang
Executive General Manager – Commercial

MINERAL RESOURCES AND ORE RESERVES

EXECUTIVE SUMMARY

Mineral Resources and Ore Reserves for MMG have been estimated as at 30 June 2019 and are reported in accordance with the guidelines in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012 JORC Code) and Chapter 18 of the Listing Rules. Mineral Resources and Ore Reserves tables are provided on pages 8 to 11, which include the 30 June 2019 and 30 June 2018 estimates for comparison. The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources that convert to Ore Reserves. All supporting data are provided within the Technical Appendix, available on the MMG website.

Mineral Resources and Ore Reserves information in this statement has been compiled by Competent Persons (as defined by the 2012 JORC Code). Each Competent Person consents to the inclusion of the information in this report that they have provided in the form and context in which it appears. Competent Persons are listed on page 12.

MMG has established processes and structures for the governance of Mineral Resources and Ore Reserves estimation and reporting. MMG has a Mineral Resources and Ore Reserves Committee that regularly convenes to assist the MMG Governance and Nomination Committee and the Board of Directors with respect to the reporting practices of the Company in relation to Mineral Resources and Ore Reserves, and the quality and integrity of these reports of the Group.

Key changes to the Mineral Resources (contained metal) since the 30 June 2018 estimate have been mostly related to depletion[1] at all sites together with increased costs and changes to pit design at Kinsevere. An increase in metal price assumptions and decreases in cut-off grades (except Kinsevere) have partially offset these depletions. In the DRC, Mineral Resources have been declared for copper and cobalt at three new satellite oxide deposits. At Dugald River, a net increase has resulted from Mineral Resource extension in the hangingwall and footwall lenses which has replaced 2018 depletion.

Key changes to the Ore Reserves (contained metal) since the 30 June 2018 estimate have been mostly related to depletion. Ore loss and dilution greater than planned have been offset by gains from higher metal price assumptions. Decreases at Kinsevere are related to unplanned ore loss and dilution as well as to geotechnical challenges which have resulted in increased cut off grades and pit design changes. At Dugald River, changes to pillar design and mining sequence have resulted in lower Ore Reserves.

Las Bambas has been operating for 36 months since commercial production was declared on 1 July 2016. During this time the mine has experienced both positive and negative reconciliation factors compared to the Ore Reserve. Ore loss factors by material type have been increased for the 2019 Las Bambas Ore Reserve estimates (10% for mixed ores and 3%-5% for primary ore depending on the pit phase).

Page 13 provides further discussion of the Mineral Resources and Ore Reserves changes.

1. Depletion in this report refers to material processed by the mill and depleted from the Mineral Resources and Ore Reserves through mining.

MINERAL RESOURCES AND ORE RESERVES CONTINUED

MINERAL RESOURCES[2]

All data reported here is on a 100% asset basis, with MMG's attributable interest shown against each asset within brackets.

	2019								2018							
DEPOSIT	TONNES (MT)	CU (%)	ZN (%)	PB (%)	AG (G/T)	AU (G/T)	MO (PPM)	CO (%)	TONNES (MT)	CU (%)	ZN (%)	PB (%)	AG (G/T)	AU (G/T)	MO (PPM)	CO (%)
LAS BAMBAS (62.5%)																
Ferrobamba Oxide Copper																
Indicated	2.1	1.7							3.0	1.7						
Inferred	1.3	1.8							1.1	1.9						
Total	**3.4**	**1.7**							**4.1**	**1.7**						
Ferrobamba Primary Copper																
Measured	553	0.56			2.4	0.05	202		546	0.60			2.7	0.05	1099	
Indicated	465	0.58			2.5	0.05	166		426	0.61			3.0	0.05	890	
Inferred	239	0.61			1.3	0.03	79		254	0.63			3.0	0.05	493	
Total	**1,257**	**0.57**			**2.2**	**0.04**	**166**		**1,226**	**0.61**			**2.9**	**0.05**	**2483**	
Ferrobamba Total	**1,260**								**1,230**							
Chalcobamba Oxide Copper																
Indicated	6.5	1.4							6.1	1.5						
Inferred	0.5	1.5							0.7	1.5						
Total	**7.0**	**1.4**							**6.8**	**1.5**						
Chalcobamba Primary Copper																
Measured	113	0.44			1.4	0.02	75		75	0.44			1.4	0.02	189	
Indicated	174	0.63			2.4	0.03	179		179	0.67			2.5	0.03	353	
Inferred	38	0.51			1.8	0.02	33		33	0.54			1.9	0.03	70	
Total	**325**	**0.55**			**2.0**	**0.02**	**287**		**287**	**0.60**			**2.2**	**0.03**	**612**	
Chalcobamba Total	**332**								**294**							
Sulfobamba Primary Copper																
Indicated	98	0.61			4.3	0.02	89		89	0.65			4.6	0.02	187	
Inferred	133	0.50			5.2	0.02	106		106	0.56			6.3	0.02	238	
Total	**231**	**0.55**			**4.8**	**0.02**	**194**		**194**	**0.60**			**5.5**	**0.02**	**425**	
Sulfobamba Total	**231**								**194**							
Oxide Copper Stockpile																
Indicated	11.4	1.2							9.9	1.2						
Total	**11.4**	**1.2**							**9.9**	**1.2**						
Sulphide Stockpile																
Measured	9.0	0.46							2.3	0.41						
Total	**9.0**	**0.46**							**2.3**	**0.41**						
Las Bambas Total	**1,843**								**1,729**							

2. S.I. units used for metals of value; Cu=copper, Zn=zinc, Pb=lead, Ag=silver, Au=gold, Mo=molybdenum, Ni=nickel.

MINERAL RESOURCES – DRC[2]

DEPOSIT	2019 TONNES (MT)	2019 CU (%)	2019 ZN (%)	2019 PB (%)	2019 AG (G/T)	2019 AU (G/T)	2019 MO (PPM)	2019 CO (%)	2018 TONNES (MT)	2018 CU (%)	2018 ZN (%)	2018 PB (%)	2018 AG (G/T)	2018 AU (G/T)	2018 MO (PPM)	2018 CO (%)
KINSEVERE (100%)																
Oxide Copper																
Measured	1.4	4.2						0.17	2.0	4.3						
Indicated	7.2	3.3						0.08	9.7	3.1						
Inferred	0.9	2.4						0.09	1.8	2.4						
Total	**9.5**	**3.3**						**0.10**	**13.5**	**3.2**						
Transition Mixed Copper Ore																
Measured	0.5	2.5						0.21	1.3	2.9						
Indicated	2.0	2.0						0.14	3.4	2.0						
Inferred	0.3	1.9						0.09	0.4	1.9						
Total	**2.8**	**2.1**						**0.15**	**5.1**	**2.3**						
Primary Copper																
Measured	1.2	2.8						0.28	6.1	2.7						
Indicated	19.5	2.3						0.13	15.8	2.1						
Inferred	2.4	1.9						0.12	2.0	1.7						
Total	**23.1**	**2.3**						**0.14**	**23.9**	**2.2**						
Oxide-TMO Cobalt																
Measured	0.03							0.61								
Indicated	0.3							0.59								
Inferred	0.1							0.56								
Total	**0.4**							**0.58**								
Primary Cobalt																
Measured	0.01							0.33								
Indicated	0.2							0.31								
Inferred	0.1							0.29								
Total	**0.3**							**0.30**								
Stockpiles																
Measured																
Indicated	12.9	1.8							10.2	2.2						
Total	**12.9**	**1.8**							**10.2**	**2.2**						
Kinsevere Total	**49.1**								**52.9**							
SOKOROSHE II (100%)																
Oxide Copper																
Measured																
Indicated	0.8	3.5						0.28								
Inferred	0.1	1.9						0.11								
Total	**0.9**	**3.3**						**0.26**								
NAMBULWA (100%)																
Oxide Copper																
Measured																
Indicated																
Inferred	0.9	2.3						0.11								
Total	**0.9**	**2.3**						**0.11**								
DZ (100%)																
Oxide Copper																
Measured																
Indicated																
Inferred	0.5	1.9						0.16								
Total	**0.5**	**1.9**						**0.16**								

MINERAL RESOURCES AND ORE RESERVES CONTINUED

MINERAL RESOURCES[2]

	2019								2018							
DEPOSIT	TONNES (MT)	CU (%)	ZN (%)	PB (%)	AG (G/T)	AU (G/T)	MO (PPM)	CO (%)	TONNES (MT)	CU (%)	ZN (%)	PB (%)	AG (G/T)	AU (G/T)	MO (PPM)	CO (%)
DUGALD RIVER (100%)																
Primary Zinc																
Measured	12.9		13.1	2.3	69				8.9		12.9	2.3	72			
Indicated	20.9		12.3	1.6	23				24.3		12.6	2.0	30			
Inferred	25.5		11.7	1.2	7				23.5		12.1	1.5	8			
Total	**59.3**		**12.2**	**1.6**	**26**				**56.7**		**12.4**	**1.8**	**27**			
Primary Copper																
Inferred	8.7	1.6				0.2			6.6	1.5				0.2		
Total	**8.7**	**1.6**				**0.2**			**6.6**	**1.5**				**0.2**		
Dugald River Total	**68.0**								**63.3**							
ROSEBERY (100%)																
Primary Sulphides																
Measured	6.1	0.20	8.3	2.9	109	1.3			6.4	0.21	8.6	2.9	113	1.3		
Indicated	3.1	0.18	7.0	2.4	92	1.3			5.6	0.23	7.6	2.4	91	1.2		
Inferred	7.3	0.33	8.9	3.1	100	1.5			6.0	0.28	7.4	2.8	89	1.4		
Total	**16.5**	**0.26**	**8.3**	**2.9**	**102**	**1.4**			**18.0**	**0.24**	**7.9**	**2.7**	**98**	**1.3**		
Rosebery Total	**16.5**								**18.0**							
HIGH LAKE (100%)																
Measured																
Indicated	7.9	3.0	3.5	0.3	83	1.3			7.9	3.0	3.5	0.3	83	1.3		
Inferred	6.0	1.8	4.3	0.4	84	1.3			6.0	1.8	4.3	0.4	84	1.3		
Total	**13.9**	**2.5**	**3.8**	**0.4**	**84**	**1.3**			**13.9**	**2.5**	**3.8**	**0.4**	**84**	**1.3**		
IZOK LAKE (100%)																
Measured																
Indicated	13.5	2.4	13	1.4	73	0.18			13.5	2.4	13.3	1.4	73	0.18		
Inferred	1.2	1.5	11	1.3	73	0.21			1.2	1.5	10.5	1.3	73	0.21		
Total	**14.7**	**2.3**	**13**	**1.4**	**73**	**0.18**			**14.7**	**2.3**	**13.1**	**1.4**	**73**	**0.18**		

ORE RESERVES[3]

All data reported here is on a 100% asset basis, with MMG's attributable interest shown against each asset within brackets.

RESERVES														
	2019							2018						
DEPOSIT	TONNES (MT)	CU (%)	ZN (%)	PB (%)	AG (G/T)	AU (G/T)	MO (PPM)	TONNES (MT)	CU (%)	ZN (%)	PB (%)	AG (G/T)	AU (G/T)	MO (PPM)
LAS BAMBAS (62.5%)														
Ferrobamba Primary Copper														
Proved	487	0.59			2.5	0.05	205	504	0.62			3	0.05	197
Probable	295	0.65			2.9	0.06	172	287	0.68			4	0.07	179
Total	**782**	**0.61**			**2.7**	**0.05**	**192**	**791**	**0.64**			**3**	**0.06**	**191**
Chalcobamba Primary Copper														
Proved	73	0.52			1.7	0.02	161	56	0.54			1.8	0.02	144
Probable	122	0.71			2.7	0.03	128	139	0.72			2.7	0.03	135
Total	**195**	**0.64**			**2.4**	**0.03**	**141**	**195**	**0.67**			**2.5**	**0.03**	**137**
Sulfobamba Primary Copper														
Proved														
Probable	69	0.73			5.2	0.03	164	59	0.81			5.9	0.03	161
Total	**69**	**0.73**			**5.2**	**0.03**	**164**	**59**	**0.81**			**5.9**	**0.03**	**161**
Primary Copper Stockpiles														
Proved	9.0	0.46			2.3		151	2.30	0.41			1.7		158
Total	**9.0**	**0.46**			**2.3**		**151**	**2.30**	**0.41**			**1.7**		**158**
Las Bambas Total	**1,056**							**1,047**						
KINSEVERE (100%)														
Oxide Copper														
Proved	1.0	4.2						1.9	4.4					
Probable	4.3	3.2						6.1	3.7					
Total	**5.3**	**3.4**						**8.0**	**3.8**					
Stockpiles														
Proved														
Probable	6.6	1.9						7.7	2.3					
Total	**6.6**	**1.9**						**7.7**	**2.3**					
Kinsevere Total	**11.9**							**15.7**						
DUGALD RIVER (100%)														
Primary Zinc														
Proved	11.8		10.9	2.0	57			6.9		11.5	2.1	65		
Probable	14.1		11.1	1.5	18			21.7		11.7	2.0	30		
Total	**25.9**		**11.0**	**1.7**	**36**			**28.6**		**11.7**	**2.0**	**38**		
Dugald River Total	**25.9**							**28.6**						
ROSEBERY (100%)														
Proved	3.6	0.20	7.4	2.7	107	1.3		3.7	0.21	8.3	3.0	114	1.4	
Probable	1.1	0.20	6.9	2.5	95	1.3		1.7	0.19	7.3	2.9	113	1.4	
Total	**4.7**	**0.20**	**7.3**	**2.7**	**104**	**1.3**		**5.4**	**0.21**	**8.0**	**3.0**	**114**	**1.4**	
Rosebery Total	**4.7**							**5.4**						

3. S.I. units used for metals of value; Cu=copper, Zn=zinc, Pb=lead, Ag=silver, Au=gold, Mo=molybdenum.

MINERAL RESOURCES AND ORE RESERVES CONTINUED

COMPETENT PERSONS

DEPOSIT	ACCOUNTABILITY	COMPETENT PERSON	PROFESSIONAL MEMBERSHIP	EMPLOYER
MMG Mineral Resources and Ore Reserves Committee	Mineral Resources	Rex Berthelsen[4]	HonFAusIMM(CP)	MMG
MMG Mineral Resources and Ore Reserves Committee	Ore Reserves	Neil Colbourne[4]	MAusIMM	MMG
MMG Mineral Resources and Ore Reserves Committee	Metallurgy: Mineral Resources / Ore Reserves	Geoffrey Senior[4]	MAusIMM	MMG
Las Bambas	Mineral Resources	Rex Berthelsen[4]	HonFAusIMM(CP)	MMG
Las Bambas	Ore Reserves	Yao Wu[4]	MAusIMM(CP)	MMG
Las Bambas	Metallurgy: Mineral Resources / Ore Reserves	Amy Lamb[4]	MAusIMM(CP)	MMG
Kinsevere	Mineral Resources	Douglas Corley[4]	MAIG R.P.Geo.	MMG
Kinsevere	Ore Reserves	Dean Basile	MAusIMM(CP)	MMG
Kinsevere	Metallurgy: Mineral Resources / Ore Reserves	Nigel Thiel[4]	MAusIMM(CP)	MMG
Rosebery	Mineral Resources	Douglas Corley[4]	MAusIMM(CP)	MMG
Rosebery	Ore Reserves	Karel Steyn[4]	MAusIMM	MMG
Rosebery	Metallurgy: Mineral Resources / Ore Reserves	Kevin Rees	MAusIMM(CP)	MMG
Dugald River	Mineral Resources	Douglas Corley[4]	MAIG R.P.Geo.	MMG
Dugald River	Ore Reserves	Karel Steyn[4]	MAusIMM	MMG
Dugald River	Metallurgy: Mineral Resources / Ore Reserves	Nigel Thiel[4]	MAusIMM(CP)	MMG
High Lake, Izok Lake	Mineral Resources	Allan Armitage[5]	MAPEG (P.Geo)	Formerly MMG

The information in this report that relates to Mineral Resources and Ore Reserves is based on information compiled by the listed Competent Persons, who are Members or Fellows of the Australasian Institute of Mining and Metallurgy (AusIMM), the Australian Institute of Geoscientists (AIG) or a Recognised Professional Organisation (RPO) and have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Each of the Competent Persons has given consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

4. Participants in the MMG Long-Term Incentive Plans which may include Mineral Resources and Ore Reserves growth as a performance condition.
5. Member of the Association of Professional Engineers and Geoscientists of British Columbia.

SUMMARY OF SIGNIFICANT CHANGES

MINERAL RESOURCES

Mineral Resources as at 30 June 2019 have changed since the 30 June 2018 estimate for a number of reasons with the most significant changes outlined in this section.

Increases:

- increases to the Mineral Resources (contained metal) for zinc (3%) at Dugald River are due to continued drilling, resulting in additions in the hangingwall and footwall lenses;
- additional copper Mineral Resources (60kt) have been added from MMG's DRC tenements from the deposits of Sokoroshe II, Nambulwa and DZ. Cobalt has been reported for the first time and now includes 48kt cobalt from Kinsevere and 4kt from the regional deposits.

Decreases:

The decreases in Mineral Resources (contained metal) are due to:

- depletion at all producing operations;
- reduction in tonnage at Kinsevere Hill South Inferred Resource after drilling;
- overall reduction in Kinsevere due to a small increase to cut-off grade and changes to pit design parameters resulting from geotechnical assumptions.

ORE RESERVES

Ore Reserves as at 30 June 2019 (contained metal) have decreased for copper (7%), zinc (15%), lead (23%), silver (13%), gold (9%) and increased for molybdenum (2%).

Variations to Ore Reserves (contained metal) on an individual site basis are discussed below:

Increases:

- a net increase in Ore Reserves for molybdenum at Las Bambas due to increased metal price assumptions.

Decreases:

A net reduction in Ore Reserves (metal) for copper, zinc, lead, silver and gold due to:

- depletion at all producing operations;
- a further reduction at Las Bambas due to increase in ore loss assumption;
- a further reduction at Kinsevere due to changes in ore loss assumption, pit design from changed geotechnical assumptions and reductions in uneconomic stockpiles. Increase in copper price assumption did not offset the above;
- a further reduction at Dugald River due to changed pillar design and mining sequence;
- at Rosebery, metal price increases had negligible impact on the overall outcome compared to depletion.

MINERAL RESOURCES AND ORE RESERVES CONTINUED

KEY ASSUMPTIONS

PRICES AND EXCHANGE RATES

The following price and foreign exchange assumptions, set according to the relevant MMG Standard as at January 2019, have been applied to all Mineral Resources and Ore Reserves estimates. Price assumptions for all metals have changed from the 2018 Mineral Resources and Ore Reserves statement.

Table 1 : 2019 Price (real) and foreign exchange assumptions

	ORE RESERVES	MINERAL RESOURCES
Cu (US$/lb)	3.18	3.64
Zn (US$/lb)	1.22	1.46
Pb (US$/lb)	0.90	1.08
Au US$/oz	1252	1461
Ag US$/oz	16.66	19.19
Mo (US$/lb)	8.58	9.81
Co (US$/lb)	23.23	30.19
USD:CAD	1.30	As per Ore Reserves
AUD:USD	0.78	
USD:PEN	3.20	

CUT-OFF GRADES

Mineral Resources and Ore Reserves cut-off values are shown in Table 2 and Table 3 respectively.

Table 2: Mineral Resources cut-off grades

SITE	MINERALISATION	LIKELY MINING METHOD[6]	CUT-OFF VALUE	COMMENTS
Las Bambas	Oxide Copper	OP	1% Cu	Cut-off is applied as a range that varies for each deposit and mineralised rock type at Las Bambas. *In-situ* copper Mineral Resources constrained within US$3.64/lb Cu pit shell.
	Primary Copper	OP	0.14 – 0.22% Cu	
Kinsevere	Oxide Copper & Stockpiles	OP	0.6% CuAS[7]	*In-situ* copper Mineral Resources constrained within a US$3.64/lb Cu pit shell.
	Transition Mixed Copper	OP	0.7% Cu[8]	
	Primary Copper	OP	0.8% Cu[8]	
	Oxide TMO Cobalt	OP	0.4% Co[9]	*In-situ* cobalt Mineral Resources constrained within a US$3.64/lb Cu pit shell, but exclusive of copper mineralisation.
	Primary Cobalt	OP	0.2% Co[9]	*In-situ* cobalt Mineral Resources constrained within a US$3.64/lb Cu pit shell, but exclusive of copper mineralisation.
Sokoroshe II	Oxide Copper	OP	1.1% CuAS[7]	*In-situ* copper Mineral Resources constrained within a US$3.64/lb Cu pit shell.
Nambulwa / DZ	Oxide Copper	OP	0.9% CuAS[7]	*In-situ* copper Mineral Resources constrained within a US$3.64/lb Cu pit shell.
Rosebery	Rosebery (Zn, Cu, Pb, Au, Ag)	UG	A$165/t NSR[10]	Remnant upper mine areas A$165/t NSR[4]
Dugald River	Primary Zinc (Zn, Pb, Ag)	UG	A$138/t NSR[10]	
	Primary Copper	UG	1% Cu	
High Lake	Cu, Zn, Pb, Ag, Au	OP	2.0% CuEq[11]	CuEq[11] = Cu + (Zn×0.30) + (Pb×0.33) + (Au×0.56) + (Ag×0.01): based on Long-Term prices and metal recoveries at Au:75%, Ag:83%, Cu:89%, Pb:81% and Zn:93%.
High Lake	Cu, Zn, Pb, Ag, Au	UG	4.0% CuEq[11]	CuEq[11] = Cu + (Zn×0.30) + (Pb×0.33) + (Au×0.56) + (Ag×0.01): based on Long-Term prices and metal recoveries at Au:75%, Ag:83%, Cu:89%, Pb:81% and Zn:93%.
Izok Lake	Cu, Zn, Pb, Ag, Au	OP	4.0% ZnEq[12]	ZnEq[12] = Zn + (Cu×3.31) + (Pb×1.09) + (Au×1.87) + (Ag×0.033); prices and metal recoveries as per High Lake.

6. OP = Open Pit, UG = Underground
7. CuAS = Acid Soluble Copper
8. Cu = Total Copper
9. Co = Total Cobalt
10. NSR = Net Smelter Return
11. CuEq = Copper Equivalent
12. ZnEq = Zinc Equivalent

MINERAL RESOURCES AND ORE RESERVES CONTINUED

Table 3: Ore Reserves cut-off grades

SITE	MINERALISATION	MINING METHOD	CUT-OFF VALUE	COMMENTS
Las Bambas	Primary Copper Ferrobamba	OP	0.17 – 0.21% Cu	Range based on rock type recovery.
	Primary Copper Chalcobamba		0.20 – 0.25% Cu	
	Primary Copper Sulfobamba		0.22 – 0.27% Cu	
Kinsevere	Copper Oxide	OP	1.3% CuAS[7]	Approximate cut-off grades shown in this table for ex-pit material. Variable cut-off grade based on net value script.
		OP	1.0% CuAS[7]	For existing stockpiles reclaim.
Rosebery	(Zn, Cu, Pb, Au, Ag)	UG	A$165/t NSR[10]	
Dugald River	Primary Zinc	UG	A$138/t NSR[10]	

PROCESSING RECOVERIES

Average processing recoveries are shown in Table 4. More detailed processing recovery relationships are provided in the Technical Appendix.

Table 4: Processing Recoveries

		RECOVERY						CONCENTRATE
SITE	PRODUCT	COPPER	ZINC	LEAD	SILVER	GOLD	MO	MOISTURE ASSUMPTIONS
Las Bambas	Copper Concentrate	86%	-	-	75%	71%		10%
	Molybdenum Concentrate						55%	5%
Rosebery	Zinc Concentrate		84%	6%	9%	7%		8%
	Lead Concentrate		8%	80%	41%	14%		7%
	Copper Concentrate	57%			41%	37%		8%
	Doré[13] (gold and silver)				0.2%	28%		
Dugald River	Zinc Concentrate	–	87%		35%	–		10%
	Lead Concentrate	–		64%	37%	–		10%
Kinsevere	Copper Cathode	76% (96% CuAS[11])	–	–	–	–		–

The Technical Appendix published on the MMG website contains additional Mineral Resources and Ore Reserves information (including the Table 1 disclosure).

13. Silver in Rosebery doré is calculated as a constant ratio to gold in the doré. Silver is set to 0.17 against gold being 20.7

MANAGEMENT DISCUSSION AND ANALYSIS

RESULTS FOR THE YEAR ENDED 31 DECEMBER 2019

For the purpose of management discussion and analysis, the Group's results for the year ended 31 December 2019 are compared with results for the year ended 31 December 2018.

YEAR ENDED 31 DECEMBER	2019 US$ MILLION	2018* US$ MILLION	CHANGE % FAV/(UNFAV)
Revenue	**3,032.3**	**3,670.2**	**(17%)**
Operating expenses	(1,558.8)	(1,862.8)	16%
Exploration expenses	(37.7)	(47.5)	21%
Administration expenses	(23.3)	(35.8)	35%
Other income	14.0	20.6	81%
EBITDA	**1,461.5**	**1,751.2**	**(17%)**
Depreciation and amortisation expenses	(969.6)	(918.1)	(6%)
EBIT (underlying)	**341.9**	**833.1**	**(41%)**
Net finance costs	(511.9)	(526.9)	3%
(Loss)/profit before income tax (underlying)	**(20.0)**	**306.2**	**(106%)**
Income tax expense (underlying)	(70.3)	(169.6)	59%
(Loss)/profit after income tax from continuing operations (underlying)	**(90.3)**	**136.6**	**(166%)**
Impairment expense – net of income tax benefit	(105.0)	-	(100%)
(Loss)/profit for the year from continuing operations	**(195.3)**	**136.6**	**(243%)**
Profit after income tax from discontinued operation	-	0.8	(100%)
(Loss)/profit for the year after income tax	**(195.3)**	**137.4**	**(242%)**
Attributable to:			
Equity holders of the Company	**(230.4)**	**68.3**	**(437%)**
– From continuing operations	(230.4)	64.8	(455%)
– From discontinued operation		3.5	(100%)
Non-controlling interests	**35.1**	**69.1**	**(49%)**
– From continuing operations	35.1	71.8	(51%)
– From discontinued operation	-	(2.7)	100%

* MMG sold its 90% interest in Sepon during the year ended 31 December 2018 and accordingly it was classified as a discontinued operation.

PROFIT ATTRIBUTABLE TO EQUITY HOLDERS OF THE COMPANY

MMG's loss from continuing operations of US$195.3 million for the year ended 31 December 2019 includes losses attributable to equity holders of US$230.4 million and profits attributable to non-controlling interests of US$35.1 million. This compares to a profit from continuing operations attributable to equity holders of US$64.8 million and non-controlling interests of US$71.8 million in 2018. Profits attributable to non-controlling interests from continuing operations relates to the 37.5% interest in Las Bambas not owned by the Company.

MANAGEMENT DISCUSSION AND ANALYSIS

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

YEAR ENDED 31 DECEMBER	2019 US$ MILLION	2018 US$ MILLION	CHANGE % FAV/(UNFAV)
Profit after tax – Las Bambas 62.5% interest	58.5	119.6	(51%)
(Loss)/profit after tax – Other operations (underlying)	(38.5)	114.3	(134%)
Impairment expense – net of income tax benefit	(105.0)	-	(100%)
Exploration expenses	(37.7)	(47.5)	21%
Administration expenses	(23.3)	(35.8)	35%
Net finance costs (excluding Las Bambas)	(106.3)	(125.4)	15%
Others	21.9	43.1	(49%)
(Loss)/profit for the year attributable to equity holders	**(230.4)**	**68.3**	**(437%)**
– From continuing operations	(230.4)	64.8	(455%)
– From discontinued operation	-	3.5	(100%)

OVERVIEW OF RESULTS FROM CONTINUING OPERATIONS

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	2019 US$ MILLION	2018 US$ MILLION	CHANGE % FAV/(UNFAV)	2019 US$ MILLION	2018 US$ MILLION	CHANGE % FAV/(UNFAV)
Las Bambas	2,013.0	2,578.6	(22%)	1,237.1	1,341.2	(8%)
Kinsevere	406.7	516.4	(21%)	44.8	203.0	(78%)
Dugald River	336.0	247.3	36%	108.7	87.6	24%
Rosebery	272.8	328.7	(17%)	125.9	171.6	(27%)
Other	3.8	(0.8)	575%	(55.0)	(52.2)	(5%)
Total	**3,032.3**	**3,670.2**	**(17%)**	**1,461.5**	**1,751.2**	**(17%)**

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

Revenue from continuing operations decreased by US$637.9 million (17%) compared to 2018, driven by lower sales volumes (US$426.9 million) and unfavourable commodity price movements (US$211.0 million).

Lower sales volumes were primarily due to a reduction in payable copper volumes at Las Bambas of approximately 70,000 tonnes (US$468.6 million), a result of community road blockades which restricted concentrate logistics throughout the year. In addition, lower copper production at Kinsevere caused by lower ore grades, reduced pit access and high levels of waste movement resulted in lower sales volumes (US$77.5 million). Rosebery sales volumes were unfavourable (US$19.4 million) due to the production impacts of lower lead, gold and silver grades compared to 2018. This was partly offset by an increase in Dugald River zinc sales volumes (US$138.6 million), with 2019 representing the first full year of commercial production (declared on 1 May 2018) and thus including an additional four months of sales compared to the prior year.

An unfavourable commodity price variance of US$211.0 million was the result of lower realised prices for copper (US$142.1 million), zinc (US$85.0 million), lead (US$8.4 million) and molybdenum (US$8.0 million). This was partly offset by higher prices for gold (US$24.8 million) and silver (US$7.7 million).

REVENUE BY COMMODITY YEAR ENDED 31 DECEMBER	2019 US$ MILLION	2018 US$ MILLION	CHANGE % FAV/(UNFAV)
Copper (US$ million)	2,187.8	2,839.2	(23%)
Zinc (US$ million)	420.7	379.3	11%
Lead (US$ million)	81.8	85.3	(4%)
Gold (US$ million)	172.6	174.6	(1%)
Silver (US$ million)	131.7	143.0	(8%)
Molybdenum (US$ million)	37.7	48.8	(23%)
Total	**3,032.3**	**3,670.2**	**(17%)**

PRICE

LME base metals prices were lower in 2019 compared to 2018, except for gold and silver.

AVERAGE LME CASH PRICE YEAR ENDED 31 DECEMBER	2019	2018	CHANGE % FAV/(UNFAV)
Copper (US$/tonne)	6,005	6,525	(8%)
Zinc (US$/tonne)	2,549	2,925	(13%)
Lead (US$/tonne)	1,998	2,244	(11%)
Gold (US$/ounce)	1,393	1,270	10%
Silver (US$/ounce)	16.20	15.71	3%
Molybdenum (US$/tonne)	25,032	26,327	(5%)

SALES VOLUMES

PAYABLE METAL IN PRODUCT SOLD YEAR ENDED 31 DECEMBER	2019	2018	CHANGE % FAV/(UNFAV)
Copper (tonnes)	379,659	465,898	(19%)
Zinc (tonnes)	208,538	189,751	10%
Lead (tonnes)	43,981	41,734	5%
Gold (ounces)	120,061	141,799	(15%)
Silver (ounces)	8,061,622	9,302,009	(13%)
Molybdenum (tonnes)	1,866	1,990	(6%)

MANAGEMENT DISCUSSION AND ANALYSIS

PAYABLE METAL IN PRODUCT SOLD YEAR ENDED 31 DECEMBER 2019	COPPER TONNES	ZINC TONNES	LEAD TONNES	GOLD OUNCES	SILVER OUNCES	MOLYBDENUM TONNES
Las Bambas	312,918	-	-	91,439	4,581,714	1,866
Kinsevere	65,326	-	-	-	-	-
Dugald River	-	138,409	20,291	-	1,193,303	-
Rosebery	1,415	70,129	23,690	28,622	2,286,605	-
Other	-	-	-	-	-	-
Total from continuing operations	**379,659**	**208,538**	**43,981**	**120,061**	**8,061,622**	**1,866**

PAYABLE METAL IN PRODUCT SOLD YEAR ENDED 31 DECEMBER 2018	COPPER TONNES	ZINC TONNES	LEAD TONNES	GOLD OUNCES	SILVER OUNCES	MOLYBDENUM TONNES
Las Bambas	384,674	-	-	107,850	5,483,796	1,990
Kinsevere	79,873	-	-	-	-	-
Dugald River	-	121,548	14,353	-	899,409	-
Rosebery	1,351	68,203	27,381	33,949	2,918,804	-
Total from continuing operations	**465,898**	**189,751**	**41,734**	**141,799**	**9,302,009**	**1,990**
Discontinued operation	65,236	-	-	-	-	-

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 decreased by US$304.0 million (16%) in 2019. This was mainly due to the impact of lower production expenses and sales volumes at Las Bambas and favourable stock movements at Rosebery; partly offset by higher operating costs at Dugald River reflecting the first full year of commercial production, and increased costs at Kinsevere due to additional material movement and challenging mining conditions in the first half of the year, together with higher acid costs. Further detail is set out below in the mine analysis section.

Impairment expense relates to a non-cash adjustment to the carrying value of oxide related assets at Kinsevere (US$150.0 million) to more accurately reflect the remaining life of Kinsevere's copper oxide operations, net of income tax benefits arising (US$45.0 million).

Exploration expenses decreased by US$9.8 million (21%) to US$37.7 million in 2019. This was mainly due to the winding down of new discovery programs in Northern Australia and Zambia, and a renewed focus on exploration opportunities in and around existing operating hubs – in particular on the highly prospective Las Bambas tenements where drilling activity has delivered encouraging early results.

Administrative expenses decreased by US$12.5 million (35%) in 2019. This was predominantly driven by cost and efficiency improvement initiatives across group and support functions, resulting in lower people costs, consultant spend and travel expenses compared to 2018. In addition, provisions associated with the Company's Long-Term Incentive Plans were reduced to reflect expected final outcomes (US$8.8 million). These savings were partly offset by higher redundancy expenses (US$6.9 million) associated with restructuring initiatives in the second half of 2019.

Other income and expenses had an aggregate favourable impact on EBIT of US$49.0 million in 2019 (2018: US$27.1 million). Other income in 2019 includes the reversal of prior-year withholding tax overprovisions (US$20.6 million), insurance proceeds received in relation to a conveyor belt failure at Las Bambas in 2017 (US$12.0 million) and favourable foreign exchange gains (US$3.8 million).

Depreciation and amortisation expenses increased by US$51.5 million (6%) to US$969.6 million in 2019. The increase was predominantly driven by Las Bambas (US$54.9 million), with higher amortisation of capitalised deferred stripping assets recognised following a change in accounting methodology. Dugald River also recorded an additional four months of depreciation (US$15.2 million), reflecting its first full year of commercial production. This was partly offset by lower depreciation expenses at Kinsevere (US$14.7 million), as a result of lower mining and production levels when compared to 2018.

Net finance costs of US$511.9 million were lower by US$15.0 million compared to 2018. Interest expense reductions attributable to lower loan balances (US$30.7 million), together with the impact of a full year of fixed interest rates under shareholder debt used to fund the MMG Group's equity contribution to the Las Bambas Joint Venture Group (US$10.8 million); were partly offset by higher average LIBOR rates applicable to floating rate borrowings (US$23.2 million). A favourable movement in other finance costs together with additional interest income (US$17.3 million), was largely offset by the unwind of discounts in relation to lease liabilities (US$16.0 million).

Income tax expense (underlying) decreased by US$99.3 million, reflecting the decrease in the Group's underlying profit before income tax from the prior year. Underlying income tax expense for 2019 of US$70.3 million reflects the impacts of non-creditable withholding tax of US$57.8 million (2018: US$59.6 million), and other non-deductible items.

Image: Las Bambas employees at truck workshop.

MINE ANALYSIS
LAS BAMBAS

Produces:

Copper in copper concentrate

Ownership:

62.5% **MMG**

22.5% **Guoxin International Investment Co. Ltd.**

15.0% **CITIC Metals Co. Ltd.**

KEY HIGHLIGHTS

Revenue:
US$ Million

$2,013.0

Ore milled:
Tonnes

51,283,371

Copper in concentrate produced:
Tonnes

382,518

YEAR ENDED 31 DECEMBER	2019	2018	CHANGE % FAV/(UNFAV)
Production			
Ore mined (tonnes)	51,653,616	57,439,971	(10%)
Ore milled (tonnes)	51,283,371	49,443,867	4%
Waste movement (tonnes)	128,286,976	115,709,415	11%
Copper in copper concentrate (tonnes)	382,518	385,299	(1%)
Payable metal in product sold			
Copper (tonnes)	312,918	384,674	(19%)
Gold (ounces)	91,439	107,850	(15%)
Silver (ounces)	4,581,714	5,483,796	(16%)
Molybdenum (tonnes)	1,866	1,990	(6%)

YEAR ENDED 31 DECEMBER	2019 US$ MILLION	2018 US$ MILLION	CHANGE% FAV/(UNFAV)
Revenue	**2,013.0**	**2,578.6**	**(22%)**
Operating expenses			
Production expenses			
Mining	(296.1)	(399.1)	26%
Processing	(243.5)	(285.6)	15%
Other	(335.2)	(325.9)	(3%)
Total production expenses	**(874.8)**	**(1,010.6)**	**13%**
Freight (transportation)	(63.0)	(66.5)	5%
Royalties	(58.1)	(78.9)	26%
Other[1]	170.1	(77.2)	320%
Total operating expenses	**(825.8)**	**(1,233.2)**	**33%**
Other income/(expenses)	49.9	(4.2)	1,286%
EBITDA	**1,237.1**	**1,341.2**	**(8%)**
Depreciation and amortisation expenses	(696.4)	(641.5)	(9%)
EBIT	**540.7**	**699.7**	**(23%)**
EBITDA margin	**61%**	**52%**	

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

MANAGEMENT DISCUSSION AND ANALYSIS
MINE ANALYSIS – LAS BAMBAS

Revenue of US$2,013.0 million was 22% below 2018, due to lower sales volumes (US$468.6 million) and lower realised commodity prices (US$97.0 million). Reduced sales volumes were the result of a series of community actions which occurred throughout 2019, including two major road blockages that occurred in the first and third quarters. These actions resulted in outbound logistics being restricted for over 100 days in 2019. The impact of the major road blocks also extended to inbound logistics, which progressively limited mine operations in April and October. This adversely impacting copper production by approximately 20,000 tonnes for the year and resulted in a significant build-up of concentrate stocks at site. As at 31 December 2019, approximately 50,000 tonnes of copper metal remained stockpiled at site. It is anticipated that this stockpiled material will have been drawn down and shipped by the middle of the second quarter of 2020.

Lower mining costs were largely the result of a change in the application of the deferred stripping accounting policy for better alignment between the cost of waste removal activity and timing of economic benefit of this activity. This change has no cash impact, however resulted in capitalisation of US$89.3 million of mining costs that would otherwise have been expensed. Of this US$89.3 million, US$74.2 million represented additional mining costs due to increased waste material movement compared to the prior year.

Processing costs reduced by US$42.1 million through efficiency initiatives that lowered maintenance and energy expenditure. Lower royalties and transport costs (US$24.3 million) were due to reduced sales volumes, as was a favourable stock movement (US$255.7 million) due to stockpiled concentrate at site that had built up during periods of disruption along the Las Bambas logistics route. Additional savings were the result of cost improvement projects that were delivered throughout the year. A total of approximately $85.0 million in savings have now been achieved over the last two years through ongoing business improvement, cost and efficiency programs. These savings ensure Las Bambas remains one of the lowest cost mines of its scale in the world.

C1 costs for 2019 were US$0.99/lb, which compares favourably to 2018 C1 costs of US$1.18/lb. This improvement is largely the result of the change to accounting methodology for deferred stripping, however on a like for like basis C1 costs would still have been below 2018 levels, at US$1.10/lb. This is despite significantly higher mining and milling volumes and longer haul distances. Additional savings are attributable to production cost efficiencies and lower than planned transport costs due to community road blocks during the year.

Full year EBITDA of US$1,237.1 million was below the US$1,341.2 million result delivered in 2018, with effective cost discipline partially mitigating the impact of lower sales and commodity prices. Depreciation increased by US$54.9 million, largely due to higher amortisation of the deferred mining asset following the change in accounting methodology for deferred stripping.

Following some initial permitting delays at Chalcobamba, work is now progressing well. Ore from this pit is anticipated to come into production during the third quarter, should permitting continue to progress as expected. As a result, Las Bambas copper concentrate production for 2020 is expected to be between 350,000 and 370,000 tonnes, with higher grades from Chalcobamba partially offsetting declining grades at Ferrobamba.

C1 unit costs for 2020 are expected to be broadly flat within the range of US$0.95-1.05/lb. Cost pressures from additional mining and milling volumes, together with the cost impact of longer haul distances as the depth of the Ferrobamba pit increases and Chalcobamba comes into production will be offset by ongoing efficiency programs.

Image: Kinsevere employees reviewing drilling samples.

MINE ANALYSIS KINSEVERE

Produces:

Copper cathode

Ownership:

100% **MMG**

KEY HIGHLIGHTS

Revenue:
US$ Million

$406.7

Ore milled:
Tonnes

2,355,275

Copper cathode produced:
Tonnes

67,935

MANAGEMENT DISCUSSION AND ANALYSIS
MINE ANALYSIS – KINSEVERE

YEAR ENDED 31 DECEMBER	2019	2018	CHANGE % FAV/(UNFAV)
Production			
Ore mined (tonnes)	2,462,037	3,054,844	(19%)
Ore milled (tonnes)	2,355,275	2,407,267	(2%)
Waste movement (tonnes)	17,024,362	11,515,086	48%
Copper cathode (tonnes)	67,935	79,711	(15%)
Payable metal in product sold			
Copper (tonnes)	65,326	79,873	(18%)

YEAR ENDED 31 DECEMBER	2019 US$ MILLION	2018 US$ MILLION	CHANGE % FAV/(UNFAV)
Revenue	**406.7**	**516.4**	**(21%)**
Operating expenses			
Production expenses			
Mining	(88.2)	(47.2)	(87%)
Processing	(103.3)	(103.5)	0%
Other	(111.7)	(77.7)	(44%)
Total production expenses	**(303.2)**	**(228.4)**	**(33%)**
Freight (transportation)	(31.8)	(38.0)	16%
Royalties	(22.5)	(26.0)	13%
Other[1]	(0.9)	(19.2)	95%
Total operating expenses	**(358.4)**	**(311.6)**	**(15%)**
Other expenses	(3.5)	(1.8)	(94%)
EBITDA	**44.8**	**203.0**	**(78%)**
Depreciation and amortisation expenses	(138.5)	(153.2)	10%
EBIT (underlying)	**(93.7)**	**49.8**	**(288%)**
Impairment expense	**(150.0)**	**-**	**(100%)**
EBIT (statutory)	**(243.7)**	**49.8**	**(589%)**
EBITDA margin	**11%**	**39%**	

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

Kinsevere produced 67,935 tonnes of copper cathode in 2019, down 15% on 2018. Production was impacted by declining ore grades and increasingly challenging operating conditions. Ore mined decreased by 19% compared to 2018, reflecting mine dewatering challenges and the more complex geology encountered in the Mashi pit, which reached the end of its life in 2019.

Revenue decreased by $109.7 million (21%) compared to 2018, primarily driven by the lower production and lower average realised copper prices.

Total operating costs increased by US$46.8 million (15%) compared to 2018. Additional production expenses were due to higher levels of waste material movement and the difficult mining conditions experienced in the first half, together with an increase in third party ore purchases to supplement the mill feed and acid costs. Freight and Royalties decreased by 16% and 13% respectively, consistent with lower sales volumes. Depreciation and amortisation expenses also decreased, reflecting lower mine output and reduced copper production.

Pursuant to a detailed assessment of recoverable values, a pre-tax impairment write-down of $150.0 million was recognised in relation to the Kinsevere cash generating unit at 31 December 2019 (US$105.0 million, net of tax). This has resulted in a reduction to the carrying value of oxide related assets, which as previously disclosed, have a limited remaining life. A feasibility study for the next phase of development of the Kinsevere asset is progressing, with an investment decision expected during the second half of 2020.

C1 unit costs for 2019 of $US2.24/lb reflected lower production, together with higher costs predominantly associated with increased waste mining.

A return to mining at the Central pit will deliver higher feed grades and increased mill throughput in 2020. This, together with the benefits of operational performance initiatives that were implemented in 2019 is expected to result in copper cathode production for 2020 of between 68,000 and 75,000 tonnes. C1 costs are expected to decrease to between US$1.80-1.95/lb.

Image: Dugald River employee reviewing drilling samples.

MINE ANALYSIS
DUGALD RIVER

Produces:

Zinc in zinc concentrate
Lead in lead concentrate

Ownership:

100% **MMG**

KEY HIGHLIGHTS

Revenue:
US$ Million

$336.0

Ore milled:
Tonnes

1,975,569

Zinc in concentrate produced:
Tonnes

170,057

YEAR ENDED 31 DECEMBER	2019	2018	CHANGE % FAV/(UNFAV)
Production			
Ore mined (tonnes)	1,853,876	1,473,804	26%
Ore milled (tonnes)	1,975,569	1,755,847	13%
Zinc in zinc concentrate (tonnes)	170,057	147,320	15%
Lead in lead concentrate (tonnes)	23,154	16,693	39%
Payable metal in product sold			
Zinc (tonnes)	138,409	121,548	14%
Lead (tonnes)	20,291	14,353	41%
Silver (ounces)	1,193,303	899,409	33%

YEAR ENDED 31 DECEMBER	2019 US$ MILLION	2018 US$ MILLION	CHANGE % FAV/(UNFAV)
Revenue	**336.0**	**247.3**	**36%**
Operating expenses			
Production expenses			
Mining	(73.4)	(46.0)	(60%)
Processing	(67.0)	(54.0)	(24%)
Other	(59.1)	(30.7)	(93%)
Total production expenses	**(199.5)**	**(130.7)**	**(53%)**
Freight (transportation)	(13.2)	(6.5)	(103%)
Royalties	(12.3)	(5.1)	(141%)
Other	(2.8)	(18.4)	85%
Total operating expenses	**(227.8)**	**(160.7)**	**(42%)**
Other income	0.5	1.0	(50%)
EBITDA	**108.7**	**87.6**	**24%**
Depreciation and amortisation expenses	(55.9)	(40.7)	(37%)
EBIT	**52.8**	**46.9**	**13%**
EBITDA margin	**32%**	**35%**	**-**

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

MANAGEMENT DISCUSSION AND ANALYSIS
MINE ANALYSIS – DUGALD RIVER

Dugald River recorded an US$88.7 million increase in revenue for 2019. This reflected sales for a full year, compared to eight months in 2018, with Dugald River achieving commercial production on 1 May 2018. Zinc production of 170,057 tonnes was 15% higher and was the result of the steady ramp-up of mine production and continued performance of the mill, in excess of its 1.7 million tonne per annum design capacity.

Total operating expenses were US$67.1 million (42%) higher compared to 2018. This was again due to the impact of a full year of commercial production, US$64.1 million of costs having been capitalised over the pre-production phase in the first four months of 2018.

Full year C1 unit costs were US$0.70/lb in 2019, despite an average increase in zinc treatment charges of approximately US$0.05/lb during the year. Guidance for 2020 is consistent with 2019 at between US$0.70-0.75/lb, with production of between 170,000 and 180,000 tonnes of zinc expected. This will be supported by a continuing focus on mine development to facilitate increased reliance on stope ore feed to the mill.

MINE ANALYSIS ROSEBERY

Produces:

Zinc in zinc concentrate
Lead in lead concentrate
Copper in copper concentrate
Gold dore

Ownership:

100% **MMG**

KEY HIGHLIGHTS

Revenue:
US$ Million

$272.8

Ore milled:
Tonnes

1,030,016

Zinc in concentrate produced:
Tonnes

83,463

MANAGEMENT DISCUSSION AND ANALYSIS
MINE ANALYSIS – ROSEBERY

YEAR ENDED 31 DECEMBER	2019	2018	CHANGE % FAV/(UNFAV)
Production			
Ore mined (tonnes)	1,032,508	1,017,089	1%
Ore milled (tonnes)	1,030,016	1,028,234	0%
Copper in copper concentrate (tonnes)	1,510	1,465	3%
Zinc in zinc concentrate (tonnes)	83,463	75,721	10%
Lead in lead concentrate (tonnes)	24,549	28,744	(15%)
Gold contained in gold doré (ounces)	10,567	12,968	(19%)
Silver contained in gold doré (ounces)	6,051	7,243	(16%)
Payable metal in product sold			
Copper (tonnes)	1,415	1,351	5%
Zinc (tonnes)	70,129	68,203	3%
Lead (tonnes)	23,690	27,381	(13%)
Gold (ounces)	28,621	33,949	(16%)
Silver (ounces)	2,286,605	2,918,804	(22%)

YEAR ENDED 31 DECEMBER	2019 US$ MILLION	2018 US$ MILLION	CHANGE % FAV/(UNFAV)
Revenue	**272.8**	**328.7**	**(17%)**
Operating expenses			
Production expenses			
Mining	(74.3)	(71.8)	(3%)
Processing	(29.3)	(31.2)	6%
Other[1]	(24.9)	(21.9)	(14%)
Total production expenses	**(128.5)**	**(124.9)**	**(3%)**
Freight (transportation)	(7.0)	(6.9)	(1%)
Royalties	(12.3)	(16.9)	27%
Other	0.9	(8.5)	111%
Total operating expenses	**(146.9)**	**(157.2)**	**7%**
Other income	-	0.1	(100%)
EBITDA	**125.9**	**171.6**	**(27%)**
Depreciation and amortisation expenses	(70.7)	(73.8)	4%
EBIT	**55.2**	**97.8**	**(44%)**
EBITDA margin	**46%**	**52%**	

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

Rosebery delivered 83,463 tonnes of zinc in 2019. This 10% increase over prior year reflected higher zinc feed grades and record mining and milling volumes. Lead production was however 15% below the 2018 result, largely driven by reduced lead grades.

Revenue decreased by US$55.9 million (17%) to US$272.8 million in 2019. This was due to lower gold and silver sales volumes, lower zinc and lead prices, and higher zinc treatment charges compared to 2018. Total production expenses were marginally higher than 2018, due to increased mining and milling volumes, and higher contractor costs.

EBITDA of US$125.9 million was US$45.7 million (27%) lower than 2018, predominately due to lower revenue, offset by a favourable year end stock movement (US$7.2 million).

Rosebery's zinc C1 costs were US$0.20/lb, reflecting the strong contribution of precious metal by-product credits.

As a result of lower zinc ore grades, the Company expects to produce between 55,000 and 65,000 tonnes of zinc in zinc concentrate at Rosebery in 2020. C1 costs are estimated to be broadly in line with 2019 at US$0.20-0.30/lb, with the impacts of lower zinc production and an anticipated increase in zinc treatment charges being offset by production cost savings and higher precious metal production.

A major focus for 2020 will be on resource extension drilling and tailings disposal strategies, both aimed at extending current mine life.

MANAGEMENT DISCUSSION AND ANALYSIS

CASH FLOW ANALYSIS

NET CASH FLOW

YEAR ENDED 31 DECEMBER	2019 US$ MILLION	2018 US$ MILLION
Net operating cash flows	1,145.1	1,731.5
Net investing cash flows	(480.8)	(104.9)
Net financing cash flows	(1,048.7)	(1,960.8)
Net cash outflows	**(384.4)**	**(334.2)**

Net operating cash inflows decreased by US$586.4 million (34%) to US$1,145.1 million mainly reflecting lower EBITDA as a result of lower sales at Las Bambas, Kinsevere and Rosebery and unfavourable commodity price movements. This was partly offset by higher EBITDA at Dugald River, reflecting a full twelve months of commercial production in 2019.

Net investing cash outflows increased by US$375.9 million (358%) to US$480.8 million. This was primarily due to higher capital expenditure at Las Bambas (US$179.3 million). Net investing cash flows in 2018 included one-off inflows related to the Sepon sale (US$113.9 million), the repayment of funds on loan to a related party (US$120.0 million) and capitalised revenue generated by Dugald River during its pre-commissioning stage prior to 1 May 2018.

Net financing cash outflows decreased by US$912.1 million (47%) in 2019 and included a US$511.4 million net repayment of borrowings (2018: US$1,196.8 million), together with payment of interest and financing costs of US$509.1 million (2018: $759.6 million). Net financing cash outflows in 2018 were also due to a US$500.0 million voluntary pre-payment in relation to Las Bambas debt facilities, the redemption of Convertible Redeemable Preference Shares (US$338.0 million) and a US$356.2 million interest payment which fell due in relation to shareholder debt that was used to fund the MMG Group's equity contribution to the Las Bambas Joint Venture Group.

FINANCIAL RESOURCES AND LIQUIDITY

AT 31 DECEMBER	2019 US$ MILLION	2018 US$ MILLION	CHANGE US$ MILLION
Total assets	12,665.1	13,255.4	(553.6)
Total liabilities	(9,987.2)	(10,359.1)	335.2
Total equity	**2,677.9**	**2,896.3**	**(218.4)**

Total equity decreased by US$218.4 million to US$2,677.9 million at 31 December 2019. This was mainly due to the net loss for the year (US$195.3 million), together with the impact of the adoption of HKFRS 16 Leases, which resulted in a reduction of opening retained profits and non-controlling interest balances (US$24.3 million).

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 set out below, with gearing 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.

MMG GROUP	2019 US$ MILLION	2018 US$ MILLION
Total borrowings (excluding prepaid finance charges)[1]	7,691.9	8,203.3
Less: cash and cash equivalents	(217.5)	(601.9)
Net debt	**7,474.4**	**7,601.4**
Total equity	2,677.9	2,896.3
Net debt + Total equity	**10,152.3**	**10,497.7**
Gearing ratio	**0.74**	**0.72**

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 2019 were US$4,852.1 million (2018: US$5,396.5 million) and Las Bambas Joint Venture Group cash and cash equivalents at 31 December 2019 were US$90.9 million (2018: US$469.2 million). For the purpose of calculating the gearing ratio, Las Bambas Joint Venture Group borrowings and cash and cash equivalent balances 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 (2018: 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

AVAILABLE DEBT FACILITIES

At 31 December 2019:

1. The Group (excluding the Las Bambas Joint Venture Group) had available to it undrawn debt facilities of US$220.0 million (2018: US$300.0 million). This was represented by US$120.0 (2018: US$300.0 million) that was undrawn and available under a US$300.0 million revolving credit facility provided by ICBC, Melbourne Branch and available for general corporate purposes; together with US$100.0 million (2018: nil) that was undrawn and available under a US$100.0 million working capital facility provided by Top Create Resources Limited. The facility provided by ICBC, Melbourne Branch is due to mature in December 2020, and the facility provided by Top Create Resources Limited is due to mature in April 2021.
2. The Las Bambas Joint Venture Group had available to it undrawn debt facilities of US$350.0 million (2018: US$350.0 million). This was represented by a US$175.0 million revolving credit facility provided by BOC Sydney, and a US$175.0 million revolving credit facility provided by ICBC, Luxembourg Branch, both established in August 2019. These facilities are available for general corporate purposes and mature in August 2022. They replaced a US$350.0 million working capital facility provided by BOC Sydney, which matured in March 2019.

DEVELOPMENT PROJECTS

Drilling, permitting and engineering works continue at the Las Bambas Chalcobamba project. Despite initial permitting delays, progress continues to be made and the current mine plan includes production from the Chalcobamba pit commencing in the third quarter of 2020.

CONTRACTS AND COMMITMENTS

584 contracts have been reviewed during 2019 through either market engagements or in-contract renegotiations. The approximate annual operational or capital values addressed by these activities totals US$665.0 million.

LAS BAMBAS

New and revised agreements were finalised in the period for requirements in support of optimising production and expansion options for Las Bambas including; contracts for the supply of additional mobile equipment, components (and associated maintenance services), spares, tyres, contracts for civil and earthmoving services and long lead equipment requirements for projects. Multiple IT contracts, site services contracts, contracts covering Tailings Storage Facility (TSF) and other site infrastructure capital works, multiple contracts covering operations, studies and exploration drilling services, and multiple goods and services contracts were also finalised in support of the operations, including planned shut-downs and ongoing revised maintenance requirements. Agreements includes engagements with various local communities.

KINSEVERE

New and revised agreements were finalised with regard to various goods and services focussed on supporting production levels while improving operational cost performance including; revision of mining and civil services contracts, operations and exploration drilling services contracts, , multiple contracts covering material and service requirements for site infrastructure projects, multiple contracts for the supply of reagents and commodities and multiple near-site explorations support services contracts. In addition to operations-oriented agreements, multiple engineering services and consultancy agreements were finalised in support of Kinsevere expansion and development studies.

DUGALD RIVER

New and revised agreements were finalised with regards to operations including; new power and gas supply arrangements, multiple contracts for the supply of commodities and reagents and, supply of spares for fixed plant. Multiple agreements were also prioritised in Q1 2019 focussed on optimising recovery from the Queensland flood event in January 2019.

ROSEBERY

New and revised agreements were finalised with regards to various goods and services with a focus on supporting mine development activities and maintaining production performance. These included; drilling services, multiple contracts for the provision of goods and services for the maintenance of fixed and mobile assets and multiple new agreements for the supply of mining and maintenance consumables.

GROUP (INCLUDING GLOBAL GEOSCIENCE AND DISCOVERY REQUIREMENTS)

New and revised agreements were finalised with regards to various goods and services including; Group-wide travel management contracts, IT related services, goods supply and service agreements, new enterprise licence agreements, multiple corporate consultancy agreements and multiple exploration geophysical consultancy and survey agreements.

PEOPLE

As at 31 December 2019, the Group employed a total of 3,852 full-time equivalent employees (2018: 3,491) in its operations (excluding contractors) with the majority of employees based in Australia, Peru, the Democratic Republic of Congo and Laos.

Total employee benefits expenses for the Group's continuing operations for the year ended 31 December 2019, including Directors' emoluments, totalled US$302.9 million – a reduction of 5% (2018: US$320.4 million), primarily due to lower incentive costs.

The Group has remuneration policies that align with market practice and remunerates its employees based on the responsibilities of their roles, their performance, market requirements and the performance of the Group. Employee benefits include market-competitive fixed remuneration, performance-related incentives, a limited share option scheme and, in specific cases, insurance and medical coverage. 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

Exploration expenditure for 2019 was US$37.7 million (2018: US$47.5 million). This reduction in expenditure is consistent with the announcement in 2018 that MMG would wind down its new discovery exploration programs in Australia and Africa and focus on exploration opportunities in and around existing operating hubs.

The 2019 exploration program at Las Bambas focused on resource definition drilling at Ferrobamba and Chalcobamba as well as development drilling within the southwest extension of the Chalcobamba deposit (Chalcobamba Southwest Zone). A series of significant drill intercepts during 2019 continued to demonstrate that the Chalcobamba Southwest Zone is likely continuous with the main Chalcobamba mineralisation and are expected to drive expansion of the Chalcobamba pit design. In addition, surface exploration continued within the mining leases surrounding the currently identified mineral resources. Surface exploration programs include electrical and magnetic geophysical methods as well as surface geochemical surveys and are evaluating potential extensions to known mineral resources as well as recently identified exploration targets.

MANAGEMENT DISCUSSION AND ANALYSIS

In the DRC, exploration activity has primarily focused on the discovery and delineation of satellite copper oxide deposits within a roughly 50km radius of the Kinsevere mine. This activity continues to confirm and define several compelling copper-cobalt targets at the Nambulwa, Mwepu, and Sokaroshe II Projects. Preliminary interpretations of grade, thickness, and metallurgical characteristics exhibited in drilling intercepts at Mwepu indicate a reasonable probability for the economic exploitation of oxide ore feed for the Kinsevere mine, with further work planned for the 2020 field season.

PROJECT	HOLE TYPE	METERAGE (METRES)	NUMBER OF HOLES	AVERAGE LENGTH (METRES)
Africa, Australia, Asia				
Kinsevere RAD50	Diamond	12,770	68	188
	Reverse Circulation	15,893	161	99
	Aircore	776	66	12
DRC New Discovery	Diamond	1,384	5	277
	Reverse Circulation	2,099	16	131
Kinsevere (near mine)	Diamond	4,510	18	250
	Reverse Circulation	1,089	30	36
Americas				
Las Bambas	Diamond	62,351	178	350
	Reverse Circulation	5,699	41	139
Total		**106,571**	**583**	

MATERIAL ACQUISITIONS AND DISPOSALS

The Group made no material acquisition or disposal in the year ended 31 December 2019.

EVENTS AFTER THE REPORTING DATE

The outbreak of COVID-19, has adversely impacted global economic activity and commodity prices in the period subsequent to the reporting date. This outbreak has not directly impacted on the operations of the Company. Nonetheless, reduced demand for base metals and the resulting decline in commodity prices can reasonably be expected to have an impact on the Group's future financial performance. The extent of this impact cannot be reliably quantified or estimated as at the reporting date. The Company continues to closely monitor the situation.

Other than this and matters outlined in the financial information of the Group and other sections of the management discussion and analysis, 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.

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 foreign exchange contracts 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, and silver 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.

The following table details the sensitivity of the Group's financial assets (excluding commodity price contracts) 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.

As at the reporting date, if the commodity prices increased/(decreased) by 10% and all other variables were held constant, the Group's post-tax loss would have changed as set out below:

	2019			2018		
Commodity	**Commodity price movement**	**Decrease in loss US$ million**	**Increase in loss US$ million**	**Commodity price movement**	**Increase in profit US$ million**	**Decrease in profit US$ million**
Copper	10%	44.0	(44.0)	10%	37.5	(37.5)
Zinc	10%	4.0	(4.0)	10%	4.5	(4.5)
Total		**48.0**	**(48.0)**		**42.0**	**(42.0)**

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

As at the reporting date, if the interest rate had increased/(decreased) by 100 basis points with all other variables held constant, post-tax (loss)/profit would have changed as follows:

	2019		2018	
	-100 basis points	+100 basis points	-100 basis points	+100 basis points
US$ MILLION	(Increase) / decrease in loss	(Increase) / decrease in loss	(Decrease) / increase in profit	(Decrease) / increase in profit
Financial assets				
Cash and cash equivalents	(1.5)	1.5	(4.2)	4.2
Financial liabilities				
Borrowings	36.9	(36.9)	41.6	(41.6)
Total	**35.4**	**(35.4)**	**37.4**	**(37.4)**

(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 (US$). The majority of revenue received by the Group is in US$. 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 the reporting date, a movement of the US$ against the principal non-functional currencies illustrated below, with all other variables held constant, would cause changes in post-tax (loss)/profit as follows:

	2019		2018	
	Weakening of US dollar	Strengthening of US dollar	Weakening of US dollar	Strengthening of US dollar
US$ MILLION	(Increase) / decrease in loss	(Increase) / decrease in loss	(Decrease) / increase in profit	(Decrease) / increase in profit
10% movement in Australian dollar (2018: 10%)	(13.4)	13.4	(13.2)	13.2
10% movement in Peruvian sol (2018: 10%)	1.1	(1.1)	4.0	(4.0)
Total	**(12.3)**	**12.3**	**(9.2)**	**9.2**

(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. All of the Group's trade receivables at 31 December 2019 are aged within six months of the invoice date.

Investments in cash, short-term deposits and similar assets are with approved counterparty banks and the intermediate holding company of the Company. Counterparties are assessed prior to, during and after the conclusion of transactions to ensure exposure to credit risk is limited to acceptable levels. The limits are set to minimise the concentration of risks and therefore mitigate the potential for financial loss through counterparty failure. Management considers cash and cash equivalents that are placed on deposit with financial institutions that hold a high-grade credit rating to be low credit risk financial assets.

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:

	2019	**2018**
CMN	36.4%	36.3%
CITIC Metal	16.9%	16.1%
Trafigura	14.0%	14.6%

The Group's largest debtor at 31 December 2019 was CMN, with a balance of US$60.4 million (2018: CMN with US$140.5 million) and the five largest debtors accounted for 77.6% (2018: 92.3%) 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.

Credit risk by geographic region was:

	AT 31 DECEMBER	
US$ MILLION	**2019**	**2018**
Asia	157.7	228.0
Europe	65.7	48.8
Australia	5.6	6.1
Other	11.6	2.6
	240.6	**285.5**

MANAGEMENT DISCUSSION AND ANALYSIS

(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 information to ensure that appropriate liquidity buffers are maintained to support the Group's activities.

The table below analyses the Group's non-derivative financial liabilities by relevant maturity groupings based on the remaining period to contractual maturity as at the reporting date. The amounts disclosed in each maturity grouping are the contractual undiscounted cash flows for non-derivative 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 2019						
Financial assets						
Cash and cash equivalents	217.5	-	-	-	**217.5**	**217.5**
Trade receivables	240.6	-	-	-	**240.6**	**240.6**
Other receivables	83.6	92.9	-	-	**176.5**	**176.5**
Other financial assets	3.1	-	-	-	**3.1**	**3.1**
Financial liabilities						
Trade and other payables	(591.3)	-	-	-	**(591.3)**	**(591.3)**
Other financial liabilities	-	-	-	(135.7)	**(135.7)**	**(135.7)**
Borrowings (including interest)	(1,157.0)	(1,650.5)	(3,388.5)	(3,392.9)	**(9,588.9)**	**(7,628.3)**
Lease liabilities (including interest)	(36.5)	(28.5)	(64.0)	(128.6)	**(257.6)**	**(160.8)**
	(1,240.0)	**(1,586.1)**	**(3,452.5)**	**(3,657.2)**	**(9,935.8)**	**(7,878.4)**

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 2018						
Financial assets						
Cash and cash equivalents	601.9	-	-	-	**601.9**	**601.9**
Trade receivables	285.5	-	-	-	**285.5**	**285.5**
Other receivables	104.9	124.1	-	-	**229.0**	**229.0**
Other financial assets	3.3	-	-	-	**3.3**	**3.3**
Financial liabilities						
Trade and other payables	(508.1)	-	-	-	**(508.1)**	**(508.01)**
Other financial liabilities	-	-	-	(136.6)	**(136.6)**	**(136.6)**
Borrowings (including interest)	(1,064.9)	(940.0)	(4,209.2)	(4,156.6)	**(10,370.7)**	**(8,131.4)**
	(577.4)	**(815.9)**	**(4,209.2)**	**(4,293.2)**	**(9,895.7)**	**(7,656.4)**

(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.

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

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 2019, these guarantees amounted to US$373.4 million (2018: US$351.1 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 triggers various taxation obligations including corporation tax, royalties, withholding taxes, transfer pricing arrangements with related parties, resource and production-based 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, Laos and the DRC. For some of the tax matters under audit in Peru, if unfavourable assessment resolutions were ultimately issued, MLB intends to appeal and not to pay any assessed amount. No disclosure of an estimate of financial effect of the subject matter has been made in the financial statements as in the opinion of the management, 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 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.

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 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, a payment is either not probable or cannot be measured reliably. As such, no provision has been reflected in the consolidated financial statements for such tax matters.

MANAGEMENT DISCUSSION AND ANALYSIS

CHARGES ON ASSETS

At 31 December 2019, certain borrowings of the Group were secured as follows:

1. Approximately US$4,852.07 million (2018: US$5,396.48 million) from China Development Bank, ICBC, 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. Approximately US$469.0 million (2018: US$699.0 million) of these borrowings are guaranteed on a several basis by China Minmetals Non-ferrous Metals Holding Company Limited, Guoxin International Investment Corporation Limited and CITIC Corporation Limited in proportion to the respective shareholdings of MMG SA, Elion Holdings Corporation Limited and Citic Metal Peru Investment Limited in the Las Bambas Joint Venture Group.

2. Approximately US$398.56 million (2018: US$445.56 million) from China Development Bank and BOC Sydney was substantively secured by the shares and assets of MMG Dugald River Pty Ltd. 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.

FUTURE PROSPECTS

MMG expects to produce between 418,000 and 445,000 tonnes of copper and between 225,000 and 245,000 tonnes of zinc in 2020. This is a slightly below 2019 levels, largely due to lower grades at Las Bambas prior to the commencement of mining at the Chalcobamba pit in the second half of 2020, and lower grades at Rosebery.

Las Bambas is now expected to deliver around two million tonnes of copper production in the five-year period from 2021 to 2025. This extends the previous guidance of two million tonnes in the first five years and is significantly above the pre-production mine plan. This would result in the mine producing approximately four million tonnes in the first decade of commercial production. Beyond 2025, the Company remains confident that a strong production profile can be maintained. This view is underpinned by the highly prospective nature of the Las Bambas tenements and supported by encouraging early drilling results at the Chalcobamba Southwest Zone. These results continue to indicate that the Chalcobamba Southwest Zone is likely continuous with the main Chalcobamba mineralisation and are expected to drive expansion of the Chalcobamba pit design. Other greenfield exploration targets in the area will be pursued in 2020.

A major focus for the Company's Australian operations will be de-bottlenecking and optimisation work at Dugald River. It is anticipated that this will increase mine capacity from 1.75 million to over 2 million tonnes per annum by 2022, paving the way for increased zinc equivalent production towards 200,000 tonnes annually. At Rosebery, work directed at extending the current mine life will continue to be pursued, including resource extension drilling and tailings disposal strategies.

MMG maintains a favourable outlook for the DRC. We have built a valuable skill base in a world-leading copper province, established practices for the development and processing of third-party and satellite deposits and derived valuable in-country operating knowledge as part of the Kinsevere project. The Company continues to investigate options to extend the life of Kinsevere with a feasibility study for the next phase of development of the Kinsevere project ongoing. A final investment decision is expected in the second half of 2020. This potential development includes the addition of a sulphide ore and cobalt processing circuit alongside the existing oxide circuit. Should it proceed, it will add significant life and value to MMG's operations in the DRC, provide an entry for the Company into the cobalt market, and enhance optionality for future potential investments in country. This work is in addition to the continuation of regional exploration programs focused on proving up discoveries within a 50-kilometre radius of the Kinsevere mine.

Total capital expenditure in 2020 is expected to be between US$650.0 million and US$700.0 million. Of this, approximately US$600.0 million is attributable to Las Bambas, including approximately US$230.0 million related to capitalised deferred stripping activity. Expansion of the Las Bambas mining fleet, costs related to the development of Chalcobamba, completion of the third ball mill project and expansion of the Las Bambas tailings dam facility all result in a high level of capital expenditure during 2020. The higher spend also partially reflects projects that have been delayed from prior years due to community action along the Las Bambas logistic corridor. The level of capital expenditure is expected to reduce over subsequent years, with total capital expenditure for the Group expected to be between US$500.0 million and US$600.0 million per year in the mid-term, approximately US$150.0 million to US$200.0 million of which relates to capitalised mining.

MMG currently 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.

DIRECTORS AND SENIOR MANAGEMENT

DIRECTORS' BIOGRAPHIES

CHAIRMAN

MR GUO WENQING

Mr Guo, aged 55, was appointed as a Non-executive Director and the Chairman of the Company in February 2017.

Mr Guo is a director and the President of China Minmetals Corporation (CMC), the Chairman of China Minmetals Corporation Limited (CMCL), as well as the Chairman of China Metallurgical Group Corporation (MCC Group) since May 2016, June 2018 and August 2014, respectively.

Mr Guo graduated from Hebei University of Science and Technology in the People's Republic of China (PRC) with a Bachelor's degree in Business Administration. He also holds an executive MBA degree from Tsinghua University in the PRC.

From 1994 to 2002, Mr Guo served as the deputy director and, subsequently, the director of Hebei Province Highways Authority, the Chairman and the General Manager of Hebei Province Highways Development Company Limited, and the director of Hebei Province Ports Authority. From 2002 to 2008, he served as an executive director and the Deputy General Manager of CRBC International Co., Ltd. From December 2008 to July 2012, Mr Guo served as a director of Metallurgical Corporation of China Ltd. (MCC) (a company listed on The Stock Exchange of Hong Kong Limited (Hong Kong Stock Exchange) and the Shanghai Stock Exchange), and a director of MCC Group. From July 2012 to August 2014, he held positions as the Vice Chairman and the General Manager of MCC Group. Mr Guo served as the Chairman of MCC since September 2013. From August 2014 to April 2015, he served as the General Manager of MCC Group.

EXECUTIVE DIRECTOR

MR GAO XIAOYU

Mr Gao, aged 50, was appointed as the Chief Executive Officer (CEO) of the Company and redesignated from a Non-executive Director to an Executive Director of the Company in August 2018. He served as a Non-executive Director of the Company from April 2011 to July 2018. Mr Gao was a member of the Company's Audit Committee, Governance and Nomination Committee, Remuneration Committee and Risk Management Committee from May 2013, February 2017, August 2015 and October 2015 to July 2018 respectively. Mr Gao is also a director of a subsidiary of the Company.

Mr Gao was appointed as a director of China Minmetals Non-ferrous Metals Company Limited (CMN) in February 2016. He is a director of certain subsidiaries of CMC, including Top Create Resources Limited (Top Create) since February 2012. Mr Gao was also appointed as the Chairman of Copper Partners Investment Co., Ltd. (Copper Partners Investment) in July 2016, and of Album Enterprises Limited (Album Enterprises) in May 2016.

Mr Gao holds a Master's degree in Business Management from The Renmin University of China in the PRC. He has extensive experience in enterprise risk management and control.

Mr Gao joined the CMC and its subsidiaries (CMC Group) in 1993. He worked in the Futures department of China Nonferrous Metals Import and Export Corporation from 1993 to 1997. Mr Gao was the General Manager of the Risk Management department of CMN from 2000 to 2009, the Vice President of CMN from January 2008 to February 2016 and the President of CMN from February 2016 to August 2018. He was also the Vice President of China Minmetals Non-ferrous Metals Holding Company Limited (CMNH) from January 2011 to January 2016.

NON-EXECUTIVE DIRECTORS

MR JIAO JIAN

Mr Jiao, aged 51, was redesignated from an Executive Director and CEO to a Non-executive Director of the Company in August 2018. Prior to his redesignation, he was an Executive Director and the CEO of the Company from February 2017 to July 2018, the Chairman of the Company from August 2014 to February 2017 and a Non-executive Director of the Company from December 2010 to February 2017. Mr Jiao is a member of the Company's Governance, Remuneration and Nomination Committee.

Mr Jiao was reappointed as Vice President of CMC and designated as director and the President of CMCL in

August 2018. He was appointed as the Chairman of CMN in February 2016, and has been a director of CMN since December 2009. Mr Jiao has also been a director of Hunan Nonferrous Metals Holding Group Co., Ltd (HNG) since July 2010.

Mr Jiao holds a Bachelor's degree in International Economics from the Nankai University in the PRC and a Master's degree in Business Administration from Saint Mary's University in Canada. He has extensive experience in international trade, investment and corporate management.

Mr Jiao joined the CMC Group in 1992. He was the Vice President of CMN from 2007 to May 2010. Mr Jiao was the President of CMN from May 2010 to January 2016. He was a director and the President of CMNH from December 2009 to February and January 2016, respectively. Mr Jiao was the Vice President of CMC from December 2015 to January 2017. He was also a director of China Minmetals H.K. (Holdings) Limited (Minmetals HK) from August 2016 to March 2017.

Mr Jiao was the Chairman of China Minmetals Rare Earth Co., Ltd (a company listed on the Shenzhen Stock Exchange) and China Tungsten and Hightech Materials Co., Ltd. (a company listed on the Shenzhen Stock Exchange) from April 2010 to April 2014 and from April 2013 to March 2014 respectively. He was a director of Jiangxi Tungsten and China Minmetals Rare Earth Group Co., Ltd from November 2009 to August 2014 and from December 2011 to September 2016 respectively. Mr Jiao was also the Chairman of Album Enterprises and a director of Top Create from November 2011 to May 2016 and from February 2012 to May 2016 respectively. He resigned as the Chairman of Copper Partners Investment in July 2016.

MR ZHANG SHUQIANG

Mr Zhang, aged 53, was appointed as a Non-executive Director of the Company in February 2017. He is a member of the Company's Audit and Risk Management Committee.

Mr Zhang has been the General Manager of the Finance Department of CMC since January 2016, a director of CMNH and CMN since February 2016, and a director of Minmetals HK since August 2016. He was appointed as a director of Minmetals Capital Company Limited and Minmetals Innovative Investment Co., Limited in April 2017 and July 2017 respectively. Mr Zhang was also appointed as the Chairman of Minmetals Finance Co., Ltd. in September 2018. He was the Vice Chairman and a director of Xiamen Tungsten Co. Ltd (a company listed on the Shanghai Stock Exchange) from January 2014 to December 2014. Mr Zhang was also a director of HNG from August 2013 to January 2017 and a director of China Tungsten and Hightech Materials Co., Ltd. (a company listed on the Shenzhen Stock Exchange) from June 2016 to November 2018.

Mr Zhang graduated from Zhejiang Metallurgical Economy College in the PRC, majoring in Financial Accounting. He also obtained a Master's degree in Economics from Wuhan University of Technology in the PRC.

Mr Zhang started his career at China National Nonferrous Metals Import and Export Corporation, working as the Financial Accountant since 1987. From 1997 to 2000, he served as the Deputy Chief of the Finance Division of China National Nonferrous Metals Industry Trading Group Corporation. From 2000 to 2002, Mr Zhang served as the Assistant General Manager of the Finance Department of China National Nonferrous Metals Industry Trading Corporation. He also served as the Assistant General Manager (from April 2002 to March 2003) and the Deputy General Manager (from March 2003 to October 2005) of the Finance Department of CMN. From October 2005 to May 2013, Mr Zhang was the Deputy General Manager of the Finance Department of CMC. From May 2013 to December 2015, he served as the Vice President and the Chief Financial Officer (CFO) of CMN and CMNH. From December 2015 to January 2016, Mr Zhang was the acting Deputy General Manager of the Finance Department of CMC. From December 2016 to August 2018, he was a director of Minmetals Development Co., Ltd.

MR XU JIQING

Mr Xu, aged 52, was redesignated from an Executive Director to a Non-executive Director of the Company with effect from 1 January 2020. Prior to his redesignation, he was an Executive Director and Executive General Manager of the Company with responsibilities for Strategic Planning, China and Group Strategy, China and Strategy, Marketing and Risk and Commercial from May 2013 to December 2019. Mr Xu was also a Non-executive Director of the Company from May 2009 to May 2013. He is a

DIRECTORS AND SENIOR MANAGEMENT CONTINUED

member of the Company's Audit and Risk Management Committee and the Governance, Remuneration and Nomination Committee.

Mr Xu was appointed as President of CMN in January 2020. He has been a director of CMN since February 2016.

Mr Xu holds a Bachelor's degree in Accounting from the University of International Business and Economics in the PRC, and a Master's degree in Business Administration from Saint Mary's University in Canada. He is a qualified senior accountant in the PRC, a fellowship member of the Certified General Accountants Association of Canada and a chartered professional accountant member of the Chartered Professional Accountants of British Columbia, Canada. Mr Xu has extensive experience in strategy planning, accounting, marketing and corporate financial and risk management.

Mr Xu joined the CMC Group in 1991, holding a number of management roles from 1997 in various Finance departments. He was the Vice President and CFO of CMN between 2005 and 2013.

INDEPENDENT NON-EXECUTIVE DIRECTORS

DR PETER CASSIDY

Dr Cassidy, aged 74, was appointed as an Independent Non-executive Director of the Company in December 2010. He is the Chairman of the Company's Governance, Remuneration and Nomination Committee and a member of Audit and Risk Management Committee.

Dr Cassidy is a metallurgical engineer with more than 45 years' experience in the resource and energy sectors, including more than 25 years as a director of major public companies. He was an independent non-executive director of Oxiana Limited (2002 to 2007); Zinifex Limited (2004 to 2008); Sino Gold Mining Limited (2002 to 2009); Lihir Gold Limited (2003 to 2010); OZ Minerals Limited (2008 to 2009); Energy Developments Limited (2003 to 2009) and Kerry Gold Mines Limited (2010 to 2018).

Dr Cassidy was also non-executive Chairman of Allegiance Mining NL (April to July 2008) and a director of Eldorado Gold Corporation (2009 to 2010). He was CEO of Goldfields Limited from 1995 until its merger with Delta Gold Limited in 2002 to form Aurion Gold Limited where he remained a director until 2003. Prior to 1995, Dr Cassidy was executive director - Operations of RGC Limited. He was also a member of the Board of Advice of the Monash University Division of Mining and Resources Engineering.

Dr Cassidy has most recently been involved in the development and operation of major mining and processing projects in Australia, the PRC, Laos, Papua New Guinea and the Cote d'Ivoire.

MR LEUNG CHEUK YAN

Mr Leung, aged 68, was appointed as an Independent Non-executive Director of the Company in July 2012. He is a member of the Company's Audit and Risk Management Committee and Governance, Remuneration and Nomination Committee.

Mr Leung is a solicitor admitted to practise law in Hong Kong, England and Wales, and Victoria and the Australian Capital Territory in Australia. He holds a Bachelor's degree in Social Science (First Class Honours) from the Chinese University of Hong Kong, and a Master's degree in Philosophy from the University of Oxford. Mr Leung, a corporate finance and capital markets specialist, was a partner at Baker & McKenzie and for many years the head of its securities practice group in Hong Kong. He retired from Baker & McKenzie in 2011.

Mr Leung was an independent non-executive director of Bank of China Limited (a company listed on the Hong Kong Stock Exchange and the Shanghai Stock Exchange) from September 2013 to September 2019.

MR CHAN KA KEUNG, PETER

Mr Chan, aged 68, was appointed as an Independent Non-executive Director, the Chairman of the Audit and Risk Management Committee and a member of the Governance, Remuneration and Nomination Committee of the Company in December 2019.

Mr Chan has served as an independent non-executive director of Metallurgical Corporation of China Ltd. (a company listed on the Hong Kong Stock Exchange and the Shanghai Stock Exchange) since November 2014 and has been an independent non-executive director of China Railway Signal & Communication Corporation Limited (a company listed on the Hong Kong Stock Exchange and the Shanghai Stock Exchange) since August 2018. He was also an independent non-executive director of CRRC Corporation Limited (a company listed on the Hong Kong Stock Exchange and the Shanghai Stock Exchange) from May 2015 to May 2018.

Mr Chan graduated from Hong Kong Polytechnic majoring in accounting. He is a member of Hong Kong Institute of Certified Public Accountants, a fellow member of the Association of Chartered Certified Accountants of the United Kingdom, an associate member of the Institute of Chartered Secretaries and Administrators of the United Kingdom, and a member of CPA Australia.

From January 1994 to December 2008, Mr Chan served as Beijing-based managing partner of the Tax and Investment Advisory Service Department and then managing partner of the NPA Transaction Advisory Service Department of Ernst & Young. He also served as member of the executive committee of the Hong Kong Chamber of Commerce in China from 1996 to 2003 and the Chairman of Hong Kong Chamber of Commerce in China in 2000 and 2003.

BIOGRAPHIES OF SENIOR MANAGEMENT

MR ROSS CARROLL, CHIEF FINANCIAL OFFICER

Mr Carroll, aged 55, was appointed as CFO and a member of the Executive Committee of the Company in December 2015, with responsibility for Finance, Legal, Risk and Audit, Mergers and Acquisitions, and Project Services. He is also a director of a number of subsidiaries of the Company.

Prior to joining the Company, Mr Carroll was CEO and Managing Director of Macmahon Holdings Limited (a company listed on the Australian Securities Exchange), and previously held the positions of CFO and director of International Mining, and Chief Operating Officer of Mining at Macmahon Holdings Limited. Prior to that, he was CFO of Woodside Petroleum Limited, and also worked in senior financial roles within BHP Billiton Limited.

Mr Carroll has extensive experience in the mining industry and in corporate finance, capital management and business development. He holds a Bachelor's degree in Commerce from the University of Melbourne and is a Certified Public Accountant with the Australian Society of Certified Practising Accountants. Mr Carroll is a member of the Australian Institute of Company Directors and was previously a member of the Executive Committee of the Western Australian Chamber of Mines.

MR TROY HEY, EXECUTIVE GENERAL MANAGER – CORPORATE RELATIONS

Mr Hey, aged 49, has served on the Executive Committee of the Company since August 2013 in his capacity as the Executive General Manager – Stakeholder Relations. His present role title is Executive General Manager – Corporate Relations. In this role, he is responsible for Stakeholder Relations, Corporate Affairs, Human Resources, Global Business Services and Technology. He is also a director of a number of subsidiaries of the Company.

Prior to joining the Company as General Manager – Stakeholder and Investor Relations in April 2011, Mr Hey was the General Manager – Media and Reputation at Foster's Group since 2005. He was previously the Group Manager – Public Affairs for WMC Resources Limited, up to its acquisition by BHP Billiton Limited in 2005. He began his career in economic and public policy consultancy at the Allen Consulting Group and Australian Centre for Corporate Public Affairs, before working across the aviation, entertainment and mining sectors.

Mr Hey has over 20 years' experience in government, media, community and investor relations, economic and public policy, industry association and communications management.

Mr Hey has dual degrees in Law and Commerce from the University of Melbourne and is the recipient of an Australia-Japan Foundation Language Scholarship at Kwansei Gakuin University, Nishinomiya, Japan.

DIRECTORS AND SENIOR MANAGEMENT CONTINUED

MR WEI JIANXIAN, EXECUTIVE GENERAL MANAGER – AMERICAS

Mr Wei, aged 54, has served on the Executive Committee of the Company since December 2019 in his capacity as the Executive General Manager – Americas. He is also a director of a number of subsidiaries of the Company.

Prior to joining the Company, Mr Wei was the President of Minmetals Mining Holdings Limited. He previously held the positions of the President of Minmetals Hansing Mining Co., Ltd and the President of Anhui Kaifa Mining Co., Ltd., managing the construction and operation of one of the China's largest underground mines.

Mr Wei has over 30 years of both open pit and underground mining experience covering operations management and mine planning.

Mr Wei is a Professoriate Senior Engineer of Mining and holds a Bachelor's degree in Mining Engineering from The Beijing Institute of Iron and Steel Engineering (now known as University of Science and Technology Beijing) in the PRC.

MR LI LIANGANG, EXECUTIVE GENERAL MANAGER – COMMERCIAL

Mr Li, aged 55, was appointed as the Executive General Manager – Commercial and a member of the Executive Committee of the Company in January 2020 with responsibilities for Supply and Marketing.

Mr Li joined CMC in 1987. He has held various senior management positions with subsidiaries of CMC in the PRC, Australia, Mexico and the USA. Mr Li was also a Director of the Company from 2009 to 2012. He was a Vice President of CMN in Beijing, leading several global trading departments from 2016 to 2018. Mr Li was the President and CEO of Minmetals Inc. (L.A.) from 2018 to 2019.

Mr Li has extensive experience in international business and the non-ferrous metals industry.

Mr Li holds a Bachelor's degree in English language from the Normal College for Foreign Language of Beijing Union University in the PRC.

DIRECTORS' REPORT

The Board of Directors of the Company (Board) is pleased to present the Annual Report together with the audited Financial Statements of the Group for the year ended 31 December 2019.

PRINCIPAL ACTIVITIES

The principal activities of the Group during the financial year were exploration, development and mining of zinc, copper, gold, silver and lead deposits around the world.

The full details of the principal activities of the Company's subsidiaries are set out in Note 17 to the Consolidated Financial Statements.

An analysis of the Group's revenue for the year ended 31 December 2019 by reportable segments, together with their respective contributions to profit from operations (EBIT), is set out in Note 5 to the Consolidated Financial Statements.

STRATEGY AND BUSINESS REVIEW

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.

MMG has taken deliberate steps to lay a strong foundation. The operating model is based around clear accountability for performance, empowering decentralised sites to operate differently and drive their business for value. To achieve this, the Company will be structured along the following lines:

– Operations - Largely self-sufficient sites, with proximal offices where cost of efficiency compels.

– Group operations support - A limited number of experts in areas critical to the operation of the global asset base.

– Corporate office - A lean corporate office focused on only what is needed to operate and govern a listed business and deliver inorganic growth.

– Global services - Lowest cost delivery of truly global and shared activities.

The Board is committed to sustaining the successful model that brings together the best management team from around the world 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.

A review of the business of the Group during the year, possible risks and uncertainties that the Group may be facing, and a discussion on the Group's future business development are provided in the Chairman's Review, CEO's Report and the Management Discussion and Analysis sections.

Other than financial performance, the Group believes that a high standard of corporate social responsibility is essential for building good corporate and social relationships, motivating staff and creating a sustainable return to the Group. Discussions on the Group's environmental policies and performance, relationships with its key stakeholders and compliance with relevant laws and regulations which have a significant impact on the Group are provided on pages 82 to 90 of this Annual Report.

MAJOR CUSTOMERS AND SUPPLIERS

During the year, sales to the largest customer and the five largest customers in aggregate accounted for approximately 36.4% and approximately 78.7% of the total sales of the Group respectively. Purchases from the five largest suppliers to the Group in aggregate accounted for approximately 18.3% of the total purchases of the Group during the year.

Apart from CMC, the ultimate controlling Shareholder, having an interest of approximately 88.4% in two of the five largest customers, none of the Directors or any of their close associates or any Shareholders (which to the knowledge of the Directors, owned more than 5% of the total number of issued shares of the Company) had any beneficial interest in any of the five largest customers or suppliers of the Group.

RESULTS AND APPROPRIATIONS

The results of the Group for the year ended 31 December 2019 are set out in the Consolidated Statement of Profit or Loss in the Financial Statements on page 98 of this Annual Report.

DIRECTORS' REPORT CONTINUED

No interim dividend was declared for 2019 (2018: nil). The Board does not recommend the payment of a final dividend for the year ended 31 December 2019 (2018: nil).

DIVIDEND POLICY

In respect of code provision E.1.5 of Appendix 14 of the Listing Rules, the Company does not have a dividend policy. The Board will decide on the declaration/ recommendation of any future dividends after taking into consideration a number of factors, including the prevailing market conditions, the Company's operating results, future growth requirements, liquidity position, and other factors that the Board considers relevant. The recommendation of the payment of any dividend is subject to the discretion of the Board, and any declaration of dividend will be subject to the approval of the Company's shareholders at the annual general meeting of the Company (AGM).

RESERVES

Movements in reserves of the Group during the year are set out in Note 25 to the Consolidated Financial Statements.

DISTRIBUTABLE RESERVES

Details of the distributable reserves of the Company as at 31 December 2019 are set out in Note 25 to the Consolidated Financial Statements.

PROPERTY, PLANT AND EQUIPMENT

Movements in property, plant and equipment during the year are set out in Note 14 to the Consolidated Financial Statements.

BORROWINGS

Particulars of borrowings of the Group, as at 31 December 2019, are set out in Note 26 to the Consolidated Financial Statements.

During 2019, the Company and its subsidiaries continued to maintain loan agreements that included conditions imposing specific performance obligations on a controlling Shareholder. A breach of such an obligation would cause a default in respect of loans that are significant to the operations of the issuer, the details of which are set out below.

LOAN AGREEMENTS WITH COVENANTS RELATING TO SPECIFIC PERFORMANCE OF THE CONTROLLING SHAREHOLDER

In accordance with the continuing disclosure requirements under Rule 13.21 of the Listing Rules, following are the details of the Group's facility agreements that contain covenants requiring specific performance obligations of the controlling Shareholders.

1. Facilities granted by China Development Bank and Bank of China Limited, Sydney Branch to MMG Dugald River

On 27 June 2013, the Company, MMG Dugald River and certain other subsidiaries entered into a facility agreement with CDB and BOC Sydney in relation to the financing of the development and construction of the Dugald River project for an amount up to US$1.0 billion (Dugald River Facility). On 27 June 2016, the parties to the Dugald River Facility entered into an amendment agreement pursuant to which the Dugald River Facility was reduced to US$550.0 million. On 9 January 2018, the Dugald River Facility was further amended to, among other things, reduce the security arrangements and relax covenant compliance requirements. The Dugald River Facility was available for drawdown until 27 June 2018, and is to be repaid by 28 June 2026. As at 31 December 2019, the amount of US$398.6 million was outstanding under the Dugald River Facility.

Pursuant to the terms of the amended Dugald River Facility, on the occurrence of the following events (among others), CDB and/or BOC Sydney may declare all outstanding loans under the facility immediately due and payable if:

- CMCL ceases to legally and beneficially own, directly or indirectly, at least 51% of the total number of issued shares of the Company; or
- CMCL ceases to have the power to:

  (a) cast, or control the casting of, more than one half of the maximum number of votes that might be cast at a general meeting of the Company; or

  (b) appoint or remove all, or the majority, of the Directors or other equivalent officers of the Company; or

(c) give directions with respect to the Company's operating and financial policies with which the Directors or other equivalent officers of the Company are obliged to comply.

2. Facility granted by Industrial and Commercial Bank of China Limited to MMG Finance Limited

On 20 May 2014, ICBC and MMG Finance Limited entered into a US$300.0 million three-year loan facility that consisted of a US$200.0 million term facility, along with a US$100.0 million revolving facility for discretionary working capital (2014 ICBC Facility). On 30 December 2016, MMG Finance Limited prepaid all amounts then outstanding under the 2014 ICBC Facility, at which point the US$200.0 million term tranche was cancelled. On 22 May 2017, the remaining US$100.0 million revolving tranche of the facility expired. At that time, no amounts were outstanding.

On 22 December 2017, MMG Finance Limited entered into a restatement and amendment agreement of the 2014 ICBC Facility for the purpose of establishing a new facility (2017 ICBC Facility) pursuant to which ICBC agreed to provide MMG Finance Limited with a US$300.0 million revolving credit facility for a term of three years for general corporate purposes. As at 31 December 2019, the amount of US$180.0 million was outstanding under the 2017 ICBC Facility.

Under the 2017 ICBC Facility, an event of default will occur in the event that the Company ceases to be a subsidiary of CMN, or MMG Finance Limited ceases to be a wholly owned subsidiary of the Company, and the lender may declare all outstanding loans under the facilities immediately due and payable.

3. Facilities granted by Bank of China Limited, Sydney Branch and Industrial and Commercial Bank of China Ltd., Luxembourg Branch to Minera Las Bambas S.A.

On 21 August 2019, Minera Las Bambas S.A. entered into a US$175.0 million three-year revolving loan facility for its operational funding requirements with each of BOC Sydney and ICBC Luxembourg (2019 Facilities). As at 31 December 2019, both of the 2019 Facilities were undrawn.

Under the 2019 Facilities, on the occurrence of the following events, BOC Sydney and/or ICBC Luxembourg may, by not less than 5 days' notice to Minera Las Bambas S.A., cancel commitments and declare all outstanding loans under their respective facility agreement immediately due and payable if:

- CMC ceases to beneficially hold more than 50% of the issued share capital of the Company; or
- CMC ceases to have the power, directly or indirectly, to:

  (a) cast, or control the casting of, more than 50% of the maximum number of votes that might be cast at a general meeting of the Company; or

  (b) appoint or remove all, or the majority, of the directors or other equivalent officers of the Company; or

  (c) give directions with respect to the operating and financial policies of the Company with which the directors or other equivalent officers of the Company are obliged to comply.

The same control requirements are imposed on the Company in relation to its interest in and control of Minera Las Bambas S.A., failing which BOC Sydney and/or ICBC Luxembourg may also cancel commitments and declare all outstanding loans under their respective facility agreement immediately due and payable.

FIVE-YEAR FINANCIAL SUMMARY

A summary of the results and of the assets and liabilities of the Group for the past five financial years is set out on pages 181 to 182 of this Annual Report.

SHARE CAPITAL

Details of the movements in the Company's share capital are set out in Note 24 to the Consolidated Financial Statements.

DONATIONS

Donations made by the Group during the year for charitable and community purposes amounted to approximately US$311,015.

DIRECTORS' REPORT CONTINUED

DIRECTORS

The Directors who held office during the year and up to the date of this report are as follows:

CHAIRMAN

Mr GUO Wenqing (Non-executive Director)

EXECUTIVE DIRECTOR

Mr GAO Xiaoyu (CEO)

NON-EXECUTIVE DIRECTORS

Mr JIAO Jian

Mr ZHANG Shuqiang

Mr XU Jiqing
(Redesignated from an Executive Director to a Non-executive Director of the Company on 1 January 2020)

INDEPENDENT NON-EXECUTIVE DIRECTORS

Dr Peter CASSIDY

Mr LEUNG Cheuk Yan

Mr CHAN Ka Keung, Peter
(Appointed on 4 December 2019)

Ms Jennifer SEABROOK
(Resigned on 22 October 2019)

Professor PEI Ker Wei
(Resigned on 4 December 2019)

On 4 December 2019, Mr Chan Ka Keung, Peter was appointed as an Independent Non-executive Director of the Company. In accordance with article 77 of the articles of association of the Company, Mr Chan will retire at the forthcoming AGM and, being eligible, offer himself for re-election.

In accordance with article 98 of the articles of association of the Company and code provision A.4.2 of Appendix 14 of the Listing Rules, Mr Guo Wenqing, Mr Gao Xiaoyu and Mr Jiao Jian will retire by rotation at the forthcoming AGM and, being eligible, offer themselves for re-election.

The Company has received from each of the Independent Non-executive Directors an annual confirmation of independence pursuant to Rule 3.13 of the Listing Rules and considers them to be independent.

DIRECTORS' SERVICE CONTRACTS

No Director proposed for re-election at the forthcoming AGM has an unexpired service contract that is not determinable by the Company or any of its subsidiaries within one year without payment of compensation, other than normal statutory compensation.

DIRECTORS' INTERESTS IN TRANSACTION, ARRANGEMENT OR CONTRACT OF SIGNIFICANCE

No contracts of significance to which the Company, any of its holding companies, or any of their subsidiaries was a party, in which a Director had a material interest, subsisted at the end of the year or at any time during the year.

DIRECTORS' INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES

As at 31 December 2019, the interests and short positions of the Directors and the CEO of the Company or any of their associates in the shares, underlying shares and debentures of the Company or any of its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance (SFO)), which were required to be notified to the Company and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which they are taken or deemed to have under such provisions of the SFO), or which were required to be recorded in the register required to be kept pursuant to Section 352 of the SFO or which were required to be notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 of the Listing Rules (Model Code) were as follows:

LONG POSITION IN THE SHARES AND THE UNDERLYING SHARES OF THE COMPANY AS AT 31 DECEMBER 2019

NAME OF DIRECTOR	NATURE OF INTEREST	NUMBER OF UNDERLYING SHARES HELD: NUMBER OF SHARES HELD	NUMBER OF UNDERLYING SHARES HELD: OPTIONS[2]	NUMBER OF UNDERLYING SHARES HELD: PERFORMANCE AWARDS[3]	APPROXIMATE PERCENTAGE OF TOTAL NUMBER OF ISSUED SHARES (%)[4]
GAO Xiaoyu	Personal	-	-	5,604,754	0.07
XU Jiqing[1]	Personal	-	3,791,121	3,327,062	0.09

Notes:

1. On 1 January 2020, Mr Xu Jiqing resigned as the Executive General Manager – Commercial and was redesignated from an Executive Director to a Non-executive Director of the Company. His interests in the 3,272,062 performance awards granted under 2017, 2018 and 2019 Performance Awards lapsed on the same day.
2. The Directors' interests in the underlying shares of the Company are through options granted by the Company, details of which are set out under the section headed 'Share Option Scheme' on pages 57 to 59 of this Annual Report.
3. The Directors' interests in the underlying shares of the Company are through performance awards granted by the Company, details of which are set out under the section headed 'Performance Awards' on pages 60 to 62 of this Annual Report.
4. The calculation is based on the number of shares and/or underlying shares as a percentage of the total number of issued shares of the Company (that is, 8,054,786,607 shares) as at 31 December 2019.

Save as disclosed above, as at 31 December 2019, none of the Directors or the CEO of the Company or any of their associates had any interests or short positions in any shares, underlying shares or debentures of the Company or any of its associated corporations (within the meaning of Part XV of the SFO), which were required to be notified to the Company and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions, which they are taken or deemed to have under such provisions of the SFO), or which were required to be entered in the register required to be kept pursuant to Section 352 of the SFO or which were required to be notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code. In addition, none of the Directors or the CEO of the Company or any of their associates had been granted or had exercised any rights to subscribe for any equity or debt securities of the Company or any of its associated corporations (within the meaning of Part XV of the SFO) during the year ended 31 December 2019.

DIRECTORS' REPORT CONTINUED

DIRECTORS' INTERESTS IN COMPETING BUSINESSES

During the year ended 31 December 2019, the interests of Directors in a business that competes or is likely to compete with the businesses of the Group, as defined in the Listing Rules, are as follows:

1. Mr Guo Wenqing, a Non-executive Director and the Chairman of the Company, is:
   - a director and the President of CMC;
   - the Chairman of CMCL; and
   - the Chairman of MCC Group.
2. Mr Gao Xiaoyu, an Executive Director and the CEO of the Company, is:
   - a director of CMN;
   - a director of Top Create;
   - the Chairman of Album Enterprises; and
   - the Chairman of Copper Partners Investment.
3. Mr Jiao Jian, a Non-executive Director of the Company, is:
   - the Vice President of CMC;
   - a director and the President of CMCL;
   - the Chairman of CMN; and
   - a director of HNG.
4. Mr Zhang Shuqiang, a Non-executive Director of the Company, is:
   - the General Manager of the Finance Department of CMC;
   - a director CMNH;
   - a director of CMN;
   - a director of Minmetals HK;
   - a director of Minmetals Capital Company Limited;
   - the Chairman of Minmetals Finance Co., Ltd.; and
   - a director of Minmetals Innovative Investment Co., Limited.
5. Mr Xu Jiqing, a Non-executive Director of the Company (formerly an Executive Director of the Company), is:
   - a director and the President of CMN.

Although the Group and the above companies are involved in businesses in the same industry, they are separate companies operated by separate and independent management. The Company is therefore capable of carrying on its business independently of, and at arm's length from, the CMC Group, HNG and Copper Partners Investment.

PERMITTED INDEMNITY AND DIRECTORS' AND OFFICERS' LIABILITY INSURANCE

Pursuant to the articles of association of the Company and subject to the provisions of the Companies Ordinance, every Director or other officer of the Company shall be indemnified out of the assets of the Company against all loss and liabilities which he/she may sustain or incur in or about the execution of the duties of his/her office or otherwise in relation thereto, provided that such article shall only have effect in so far as its provisions are not avoided by the Companies Ordinance. The Company has arranged appropriate Directors' and officers' liability insurance coverage for the Directors and officers of the Company during the year.

SHARE OPTION SCHEME

2013 SHARE OPTION SCHEME

Pursuant to share option scheme adopted at the extraordinary general meeting of the Company (EGM) held on 26 March 2013 (2013 Share Option Scheme), options were granted to eligible participants under 2013 Options and 2016 Options. As at 31 December 2019, there were a total of 49,386,564 options outstanding granted under 2013 Options and 2016 Options, which represented approximately 0.61% of the total number of issued shares of the Company as at that date.

The following is a summary of the principal terms of the 2013 Share Option Scheme:

(a) Purpose

The purpose of the 2013 Share Option Scheme is to enable the Company to grant awards to selected employees of the Group as incentives or rewards for their contribution or potential contribution to the development and growth of the Group.

(b) Participants

The Company may grant an option to anyone who is an employee of the Company, its subsidiaries or any other company that is associated with the Company and is so designated by the Directors on the date of grant.

(c) Total number of shares available for issue under the 2013 Share Option Scheme

The total number of shares available for issue under the 2013 Share Option Scheme is 419,260,421 shares, representing approximately 5.21% of the total number of issued shares of the Company as at the date of this report.

(d) Maximum entitlement of each participant

No option may be granted to any eligible person which, if exercised in full, would result in the total number of shares issued and to be issued upon exercise of the options already granted and to be granted to such eligible person under the 2013 Share Option Scheme (including exercised, cancelled and outstanding options) in the 12-month period up to and including the date of such new grant exceeding 1% of the total number of issued shares of the Company as at the date of such new grant. Any grant of further options above this limit shall be subject to the requirements under the Listing Rules.

(e) Period within which the shares must be taken up under an option

The Board may in its absolute discretion determine the period during which an option may be exercised, save that such period shall not be more than 10 years from the date on which such option is granted and accepted subject to the provisions for early termination.

(f) Minimum period for which an option must be held before it can be exercised

The minimum period for which an option must be held before it can be exercised is 12 months from the date of grant, subject to the Board having the right to determine a longer minimum period at the time of granting the option.

(g) Time of acceptance and the amount payable on acceptance of the option

No amount is payable upon application or acceptance of an option.

(h) Basis of determining the exercise price

The exercise price shall be determined by the Board at the time of grant of the relevant option and shall not be less than the highest of:

- the closing price per share of the Company as stated in the Hong Kong Stock Exchange's daily quotations sheet on the date of grant of the relevant option; and
- an amount equivalent to the average closing price per share of the Company as stated in the Hong Kong Stock Exchange's daily quotations sheets for the five business days immediately preceding the date of grant of the relevant option.

(i) The remaining life of the 2013 Share Option Scheme

The 2013 Share Option Scheme will terminate on 26 March 2023 unless terminated earlier by the Board.

1. 2013 OPTIONS

On 9 April 2013, 13 December 2016 and 15 December 2016, the Company granted options to the eligible participants pursuant to the 2013 Share Option Scheme (2013 Options). There were 23,593,338 options outstanding as at 31 December 2019, which represented approximately 0.29% of the total number of issued shares of the Company as at that date.

During the year ended 31 December 2019, the movements of the 2013 Options were as follows:

				NUMBER OF OPTIONS				
CATEGORY AND NAME OF PARTICIPANT	DATE OF GRANT[1,2,3]	EXERCISE PRICE PER SHARE (HK$)[2,4]	EXERCISE PERIOD[2,5]	BALANCE AS AT 1 JANUARY 2019	GRANTED DURING THE YEAR	EXERCISED DURING THE YEAR[6]	LAPSED DURING THE YEAR[7]	BALANCE AS AT 31 DECEMBER 2019
Director								
XU Jiqing	15 December 2016	2.51	End of vesting period to 8 April 2020	2,626,701	-	-	-	2,626,701
Employees of the Group	9 April 2013, 13 December 2016 and 15 December 2016	2.51	End of vesting period to 8 April 2020	25,233,127	-	(2,157,638)	(2,108,852)	20,966,637
Total				**27,859,828**	**-**	**(2,157,638)**	**(2,108,852)**	**23,593,338**

Notes:

1. The closing price of the shares of the Company immediately before the date on which the options were granted on 9 April 2013 was HK$2.45 per share.
2. Pursuant to the terms of the long term incentive equity plan of the Company (Long Term Incentive Equity Plan), which governs (among others) the share option scheme, the exercise price and the number of shares issuable upon exercise of the 2013 Options were adjusted as a result of the Rights Issue with the effect from 13 December 2016. As a result, adjustment of options took place on 13 December 2016, and conversation from cash-based entitlements to equity-based entitlements took place on 15 December 2016.
3. As originally contemplated in the 2013 Long Term Incentive Cash Plan, 5,923,307 options were also granted to certain employees of the Company and its subsidiaries, as a result of the conversion of their entitlements under the 2013 Long Term Incentive Cash Plan pursuant to the 2013 Share Option Scheme, to the equity equivalent of the entitlements they would have received historically under the 2013 Share Option Scheme, had they received such equity-based entitlements, rather than cash-based entitlements at that time. The options are fully vested upon grant. The closing price of the shares of the Company immediately before the date on which the options were granted on 15 December 2016 was HK$2.25 per share.
4. As a result of the Rights Issue, the exercise price per share was adjusted from HK$2.62 to HK$2.51.
5. The vesting period of the options is three years from the date of grant. The vesting of options is conditional upon the achievement of certain performance conditions as set out in the respective letters of grant including, among others, achievement of financial, resources growth and market-related performance targets during the vesting period. Achievement of the Company and individual performance conditions has resulted in 66.67% of the 2013 Options granted to participants vesting on 9 April 2016.
6. The weighted average closing price of the shares of the Company immediately before the date on which the options were exercised was HK$3.03.
7. Options lapsed due to cessation of employment.
8. No options were cancelled during the period.

2. 2016 OPTIONS

On 15 December 2016, the Company granted options to the eligible participants pursuant to the 2013 Share Option Scheme (2016 Options). There were 25,793,226 options outstanding as at 31 December 2019, which represented approximately 0.32% of the total number of issued shares of the Company as at that date.

During the year ended 31 December 2019, the movements of the 2016 Options were as follows:

				NUMBER OF OPTIONS				
CATEGORY AND NAME OF PARTICIPANT	DATE OF GRANT[1]	EXERCISE PRICE PER SHARE (HK$)	EXERCISE PERIOD[2]	BALANCE AS AT 1 JANUARY 2019	GRANTED DURING THE YEAR	EXERCISED DURING THE YEAR[3]	LAPSED DURING THE YEAR[4]	BALANCE AS AT 31 DECEMBER 2019
Director								
XU Jiqing	15 December 2016	2.29	4 years after the date of vesting	3,493,261	-	-	(2,328,841)	1,164,420
Employees of the Group	15 December 2016	2.29	4 years after the date of vesting	128,980,780	-	(630,785)	(103,721,189)	24,628,806
Total				**132,474,041**	**-**	**(630,785)**	**(106,050,030)**	**25,793,226**

Notes:

1. The closing price of the shares of the Company immediately before the date on which the options were granted on 15 December 2016 was HK$2.25 per share.
2. The vesting and performance period of the options is three years from 1 January 2016 to 31 December 2018, with 60% of vested options exercisable from 1 January 2019 and 40% of the vested options subject to a 12-month exercise deferral period, such options being exercisable after 1 January 2020. The vesting of options is conditional upon the achievement of certain performance conditions as set out in the respective letters of grant including, among others, achievement of resources growth and market-related performance targets during the vesting period. Options vest on a percentage basis based on the target performance level achieved. Achievement of the Company and individual performance conditions have resulted in 33.33% of the 2016 Options granted to participants vesting on 22 May 2019.
3. The weighted average closing price of the shares of the Company immediately before the date on which the options were exercised was HK$2.78.
4. Options lapsed due to a combination of cessation of employment and non-achievement of performance conditions during the vesting period.
5. No options were cancelled during the period.

DIRECTORS' REPORT CONTINUED

PERFORMANCE AWARDS

Pursuant to the performance awards granted under the Long Term Incentive Equity Plan, performance awards were granted to eligible participants under the 2017 Performance Awards, 2018 Performance Awards and 2019 Performance Awards. As at 31 December 2019, there were a total of 68,872,662 performance awards outstanding granted under the 2017 Performance Awards, 2018 Performance Awards and 2019 Performance Awards, which represented approximately 0.85% of the total number of issued shares of the Company as at that date.

2017 PERFORMANCE AWARDS

On 31 August 2017, the Company granted performance awards to the eligible participants pursuant to the Long Term Incentive Equity Plan (2017 Performance Awards). There were 39,348,866 performance awards outstanding as at 31 December 2019, representing approximately 0.49% of the total number of issued shares of the Company as at that date.

During the year ended 31 December 2019, the movements of the 2017 Performance Awards were as follows:

		NUMBER OF PERFORMANCE AWARDS					
CATEGORY AND NAME OF PARTICIPANT	DATE OF GRANT[2]	BALANCE AS AT 1 JANUARY 2019	GRANTED DURING THE YEAR	VESTED DURING THE YEAR	CANCELLED DURING THE YEAR	LAPSED DURING THE YEAR[3]	BALANCE AS AT 31 DECEMBER 2019
Director							
XU Jiqing[1]	31 August 2017	1,476,000	-	-	-	-	1,476,000
Employees of the Group	31 August 2017	42,429,449	-	-	-	(4,556,583)	37,872,866
Total		**43,905,449**	**-**	**-**	**-**	**(4,556,583)**	**39,348,866**

Notes:

1. On 1 January 2020, Mr Xu Jiqing resigned as the Executive General Manager – Commercial and was redesignated from an Executive Director to a Non-executive Director of the Company. His interests in the 1,476,000 performance awards lapsed on the same day.
2. The vesting and performance period of the performance awards is three years from 1 January 2017 to 31 December 2019. The time of vesting will be on or around April 2020. The vesting of performance awards is conditional upon the achievement of certain performance conditions as set out in the respective letters of grant including, among others, achievement of resources growth and market-related performance targets during the vesting period. Performance awards vest on a percentage basis based on the threshold and target performance levels achieved. Portions of the vested performance awards will be subject to holding locks for various periods of up to three years after vesting. The performance awards are granted for nil cash consideration.
3. Performance awards lapsed due to cessation of employment.

2018 PERFORMANCE AWARDS

On 29 June 2018, the Company granted performance awards to the eligible participants pursuant to the Long Term Incentive Equity Plan (2018 Performance Awards). There were 8,324,117 performance awards outstanding as at 31 December 2019, representing approximately 0.10% of the total number of issued shares of the Company as at that date.

During the year ended 31 December 2019, the movements of the 2018 Performance Awards were as follows:

		NUMBER OF PERFORMANCE AWARDS					
CATEGORY AND NAME OF PARTICIPANT	DATE OF GRANT[2]	BALANCE AS AT 1 JANUARY 2019	GRANTED DURING THE YEAR	VESTED DURING THE YEAR	CANCELLED DURING THE YEAR	LAPSED DURING THE YEAR[3]	BALANCE AS AT 31 DECEMBER 2019
Director							
XU Jiqing[1]	29 June 2018	705,833	-	-	-	-	705,833
Employees of the Group	29 June 2018	8,566,723	-	-	-	(948,439)	7,618,284
Total		**9,272,556**	**-**	**-**	**-**	**(948,439)**	**8,324,117**

Notes:

1. On 1 January 2020, Mr Xu Jiqing resigned as the Executive General Manager – Commercial and was redesignated from an Executive Director to a Non-executive Director of the Company. His interests in the 705,833 performance awards lapsed on the same day.
2. The vesting and performance period of the performance awards is three years from 1 January 2018 to 31 December 2020. The time of vesting will be on or around June 2021. The vesting of performance awards is conditional upon the achievement of certain performance conditions as set out in the respective letters of grant including, among others, achievement of resources growth and market-related performance targets during the vesting period. Performance awards vest on a percentage basis based on the threshold and target performance levels achieved. Portions of the vested performance awards will be subject to holding locks for various periods of up to two years after vesting. The performance awards are granted for nil cash consideration.
3. Performance awards lapsed due to cessation of employment.

DIRECTORS' REPORT CONTINUED

2019 PERFORMANCE AWARDS

On 3 May 2019, the Company granted performance awards to the eligible participants pursuant to the Long Term Incentive Equity Plan (2019 Performance Awards). There were 21,199,679 performance awards outstanding as at 31 December 2019, representing approximately 0.26% of the total number of issued shares of the Company as at that date.

During the year ended 31 December 2019, the movements of the 2019 Performance Awards were as follows:

		NUMBER OF PERFORMANCE AWARDS					
CATEGORY AND NAME OF PARTICIPANT	DATE OF GRANT[2]	BALANCE AS AT 1 JANUARY 2019	GRANTED DURING THE YEAR	VESTED DURING THE YEAR	CANCELLED DURING THE YEAR	LAPSED DURING THE YEAR[3]	BALANCE AS AT 31 DECEMBER 2019
Directors							
GAO Xiaoyu	3 May 2019	-	5,604,754	-	-	-	5,604,754
XU Jiqing[1]	3 May 2019	-	1,145,229	-	-	-	1,145,229
Employees of the Group	3 May 2019	-	15,444,192	-	-	(994,496)	14,449,696
Total		**-**	**22,194,175**	**-**	**-**	**(994,496)**	**21,199,679**

Notes:

1. On 1 January 2020, Mr Xu Jiqing resigned as the Executive General Manager – Commercial and was redesignated from an Executive Director to a Non-executive Director of the Company. His interests in the 1,145,229 performance awards lapsed on the same day.
2. The vesting and performance period of the performance awards is three years from 1 January 2019 to 31 December 2021. The time of vesting will be on or around June 2022. The vesting of performance awards is conditional upon the achievement of certain performance conditions as set out in the respective letters of grant including, among others, achievement of resources growth and market-related performance targets during the vesting period. Performance awards vest on a percentage basis based on the threshold and target performance levels achieved. Portions of the vested performance awards will be subject to holding locks for various periods of up to two years after vesting. The performance awards are granted for nil cash consideration.
3. Performance awards lapsed due to cessation of employment.

SUBSTANTIAL SHAREHOLDERS' INTERESTS AND SHORT POSITIONS IN THE SHARES AND UNDERLYING SHARES OF THE COMPANY

So far as is known to the Directors and CEO of the Company, as at 31 December 2019, the following persons had interests or short positions in the shares or underlying shares of the Company that were required to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO, or that were recorded in the register required to be kept by the Company under Section 336 of the SFO:

LONG POSITION IN THE SHARES OF THE COMPANY AS AT 31 DECEMBER 2019

NAME OF SUBSTANTIAL SHAREHOLDER	CAPACITY	NUMBER OF SHARES HELD[1]	APPROXIMATE PERCENTAGE OF TOTAL NUMBER OF ISSUED SHARES (%)[2]
China Minmetals Corporation (CMC)	Interest of controlled corporations	5,847,166,374	72.59
China Minmetals Corporation Limited (CMCL)	Interest of controlled corporations	5,847,166,374	72.59
China Minmetals Non-ferrous Metals Holding Company Limited (CMNH)	Interest of controlled corporations	5,847,166,374	72.59
China Minmetals Non-ferrous Metals Company Limited (CMN)	Interest of controlled corporations	5,847,166,374	72.59
Album Enterprises Limited (Album Enterprises)	Interest of controlled corporations	5,847,166,374	72.59
China Minmetals H.K. (Holdings) Limited (Minmetals HK)	Beneficial owner	5,847,166,374	72.59

Notes:

1. Minmetals HK is owned as to approximately 39.04%, 38.95% and 22.01% by CMCL, Album Enterprises and Top Create Resources Limited respectively. Album Enterprises and Top Create Resources Limited are wholly owned by CMN that, in turn, is owned as to approximately 99.999% and 0.001% by CMNH and CMCL respectively. CMNH is a wholly owned subsidiary of CMCL. CMCL is owned as to approximately 87.5% by CMC and approximately 0.8% by China National Metal Products Co. Ltd. that, in turn, is a wholly owned subsidiary of CMC. Accordingly, each of CMC, CMCL, CMNH, CMN and Album Enterprises was deemed as interested in the 5,847,166,374 shares of the Company held by Minmetals HK.
2. The calculation is based on the number of shares that each person is interested in (whether directly/indirectly interested or deemed to be interested) as a percentage of the total number of issued shares (that is, 8,054,786,607 shares) of the Company as at 31 December 2019.

Save as disclosed above, as at 31 December 2019, there was no other person who was recorded in the register of the Company, as having an interest or short positions in the shares or underlying shares of the Company who was required to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO, or who was recorded in the register required to be kept by the Company under Section 336 of the SFO.

DIRECTORS' REPORT CONTINUED

CONNECTED TRANSACTIONS

During the year ended 31 December 2019 the Group had the following material connected transactions, details of which are set out below:

1. On 20 December 2018, MMG Dugald River entered into an agreement with Minmetals North-Europe AB in relation to the sale of approximately 10,000 dry metric tonnes of zinc concentrates produced at the Dugald River mine valued at approximately US$10.0 million. The delivery of zinc concentrates pursuant to the agreement took place in January 2019.

   On 22 August 2019, MMG Dugald River entered into a further agreement with Minmetals North-Europe AB in relation to the sale of approximately 10,000 dry metric tonnes of zinc concentrates produced at the Dugald River mine valued at approximately US$9.0 million. The delivery of zinc concentrates pursuant to the agreement took place in August 2019.

   Minmetals North-Europe AB is a wholly owned subsidiary of CMC, the ultimate controlling shareholder of the Company, and is therefore an associate of CMC and a connected person of the Company under the Listing Rules. As a result, the agreements (Dugald River Zinc Concentrate Sale Agreements) constitute connected transactions for the Company.

2. On 29 August 2018, MMG Kinsevere SARL and MCC International Incorporation Limited (MCC International), entered into a feasibility study agreement for the delivery of a copper sulphide feasibility study. On 4 June 2019, the parties entered into an amendment agreement to include the delivery of a cobalt feasibility study. The agreement (as amended) was valued at approximately US$3.7 million, with up to approximately US$2.6 million attributable to the copper sulphide feasibility study and up to approximately US$1.1 million attributable to the cobalt feasibility study.

   MCC International is a wholly owned subsidiary of CMC, the ultimate controlling shareholder of the Company, and is therefore an associate of CMC and a connected person of the Company under the Listing Rules. As a result, the agreement (as amended) constitutes a connected transaction for the Company.

CONTINUING CONNECTED TRANSACTIONS

During the year ended 31 December 2019, the Group had the following material continuing connected transactions, details of which are set out below:

1. 27 June 2014, MMG SA entered into an agreement with CMN in relation to the sale of copper concentrate to be purchased by MMG SA from the Las Bambas Project to the CMN Group (Las Bambas CMN Copper Sale Framework Agreement), subject to the approval of the Independent Shareholders. The Independent Shareholders approved the Las Bambas CMN Copper Sale Framework Agreement, and the proposed annual caps on sales, at an EGM held on 21 July 2014.

   On 11 January 2016, pursuant to the terms of the Las Bambas CMN Copper Sale Framework Agreement, MMG SA and CMN entered into an agreement to set out the specific terms on which the sale and purchase of the copper concentrate between CMN and MMG SA will be made (Las Bambas CMN Copper Concentrate Offtake Agreement).

   In accordance with the Las Bambas CMN Copper Sale Framework Agreement, the term of the Las Bambas CMN Copper Concentrate Offtake Agreement is for the term of the life of the Las Bambas mine. The annual caps with respect to the Las Bambas CMN Copper Sale Framework Agreement are set as a fixed quantity of copper contained in copper concentrate from the Las Bambas project to be sold by MMG SA to members of the CMN Group in a year, which for the year commencing 1 January 2019 was set at 354,000 tonnes. During the year ended 31 December 2019 approximately 183,000 tonnes of copper contained in copper concentrate were sold by MMG SA to members of the CMN Group under the Las Bambas CMN Copper Concentrate Offtake Agreement.

   CMN is a controlling Shareholder, and is therefore a connected person of the Company under the Listing Rules. Accordingly, the Las Bambas CMN Copper Sale Framework Agreement and Las Bambas CMN Copper Concentrate Offtake Agreement constitute continuing connected transactions for the Company under Chapter 14A of the Listing Rules.

2. On 11 January 2016, pursuant to the Shareholders' Agreement, Minera Las Bambas S.A. (MLB) and CITIC Metal Peru Investment Limited (CITIC) entered into an agreement for the sale and purchase of CITIC's entitlement to copper concentrate from the Las Bambas mine (CITIC Copper Concentrate Offtake Agreement). The term of the CITIC Copper Concentrate Offtake Agreement is for the term of the life of the Las Bambas mine. The annual caps with respect to the CITIC Copper Sale Framework Agreement are set as a fixed quantity of copper contained in copper concentrate from the Las Bambas Project to be sold by MLB to CITIC in a year, which for the year commencing 1 January 2019 was set at 162,000 tonnes. During the year ended 31 December 2019, approximately 83,900 tonnes of copper contained in copper concentrate were sold by MLB to CITIC under the CITIC Copper Concentrate Offtake Agreement.

   As CITIC controls more than 10% of the total number of issued shares of MMG SAM, it is a substantial shareholder of MMG SAM. The Buyer is therefore a connected person of the Company and the transactions contemplated under the CITIC Copper Concentrate Offtake Agreement constitute continuing connected transactions of the Company under Chapter 14A of the Listing Rules.

3. On 13 July 2017 (Hong Kong time), the Company announced that (i) Minera Las Bambas and China Minmetals Nonferrous Metals Peru SAC (Minmetals Peru) entered into the Las Bambas Grinding Media Supply Agreement for the Las Bambas operation for an initial term of 6 months, and (ii) MMG Australia and Minmetals Australia Pty Ltd (Minmetals Australia) entered into the Australian Operations Grinding Media Supply Agreement for the Australian operations for an initial term of 24 months (together, the Grinding Media Supply Agreements).

   On 22 December 2017 (Hong Kong time) and on 31 December 2018, Minera Las Bambas elected to exercise options to extend the Las Bambas Grinding Media Supply Agreement, each for a further period of 12 months. On 18 December 2019, Minera Las Bambas elected to exercise its final option to extend the Las Bambas Grinding Media Supply Agreement for a further period of 6 months.

   On 8 July 2019, MMG Australia elected to exercise its option to extend the Australian Operations Grinding Media Supply Agreement for a further period of 12 months. The Grinding Media Supply Agreements will each expire on 30 June 2020.

   The maximum aggregate amount to be paid in 2019 under (i) the Las Bambas Grinding Media Supply Agreement was US$16.0 million and (ii) the Australian Operations Grinding Media Supply Agreement was US$3.5 million. For the year ended 31 December 2019, expenditure under (i) the Las Bambas Grinding Media Supply Agreement was US$6.5 million and (ii) the Australian Operations Grinding Media Supply Agreement was approximately US$0.5 million.

   Both Minmetals Peru and Minmetals Australia are each wholly owned subsidiaries of CMC and are therefore associates of CMC and a connected person of the Company under the Listing Rules. Accordingly, the Grinding Media Supply Agreements each constitute a continuing connected transaction for the Company under Chapter 14A of the Listing Rules.

4. On 19 September 2017, MMG Australia Limited entered into an agreement with Album Trading in relation to the sale of concentrate from the Rosebery mine by MMG Australia Limited to Album Trading (2018 Rosebery Concentrate Sales Agreement) for the period from 1 January 2018 to 31 December 2019.

   The annual cap for sales under the Rosebery Concentrate Sales Agreement for the year ending 31 December 2019 was US$25.0 million. For the year ended 31 December 2019, approximately US$8.7 million in sales were transacted.

   On 4 July 2019, MMG Australia Limited also entered into an agreement with Album Trading in relation to the sale of concentrate from the Rosebery mine by MMG Australia Limited to Album Trading (2020 Rosebery Concentrate Sales Agreement) for the period from 1 January 2020 to 31 December 2021. The annual cap for sales for each year of this agreement is US$50.0 million.

   Album Trading is a wholly owned subsidiary of CMC, the ultimate controlling shareholder of the Company, and is therefore an associate of CMC and a connected person of the Company under the Listing Rules.

DIRECTORS' REPORT CONTINUED

Accordingly, the 2018 and 2020 Rosebery Concentrate Sales Agreements constitute a continuing connected transaction for the Company under Chapter 14A of the Listing Rules.

5. During 2018, the Company announced that MMG Dugald River had entered into zinc concentrate sales agreements with Minmetals North-Europe as follows: (i) on 20 August 2018, for sales of approximately 40,000 dry metric tonnes of zinc during 2019 and 2020 with an annual cap of US$50.0 million per year, and (ii) on 5 December 2018, for sales of approximately 100,000-120,000 dry metric tonnes of zinc during 2019, 2020 and 2021 with an annual cap of US$130.0 million per year (the Dugald River Zinc Concentrate Sales Agreements).

   During the year ended 31 December 2019, sales of approximately (i) US$38.0 million and (ii) US$87.0 million were transacted under each of the agreements respectively.

   Minmetals North-Europe is a wholly owned subsidiary of CMC, the ultimate controlling shareholder of the Company, and is therefore an associate of CMC and a connected person of the Company under the Listing Rules. As a result, the Dugald River Zinc Concentrate Sales Agreements each constitute a continuing connected transaction for the Company.

Upon the completion of the acquisition of Minerals and Metals Group on 31 December 2010, the following material continuing transaction became a continuing connected transaction under Chapter 14A of the Listing Rules (Grandfathered Continuing Connected Transaction) and details of this transaction for the year ended 31 December 2019 are set out below:

6. On 10 June 2010, MMG Management, a wholly owned subsidiary of the Company, entered into a loan facility agreement with Album Enterprises (Grandfathered MMG Loan Facility) pursuant to which MMG Management agreed to make loan facilities available to Album Enterprises on an uncommitted basis. During the year ended 31 December 2019, no amounts were advanced or outstanding under the Grandfathered MMG Loan Facility. Album Enterprises is a substantial Shareholder and is therefore a connected person of the Company under the Listing Rules. Accordingly, the Grandfathered MMG Loan Facility constitutes a Grandfathered Continuing Connected Transaction for the Company and the Company will comply with Listing Rule 14A.60 in respect of this transaction.

The Company has followed its pricing policies and guidelines when determining the price and terms of the connected transactions and continuing connected transactions conducted during the year.

REVIEW OF CONTINUING CONNECTED TRANSACTIONS

The continuing connected transactions described above for the year ended 31 December 2019 have been reviewed by the Independent Non-executive Directors of the Company.

The Independent Non-executive Directors of the Company have confirmed that the continuing connected transactions have been entered into:

(a) the ordinary and usual course of business of the Group;

(b) either on normal commercial terms or better; and

(c) in accordance with the respective terms of the Las Bambas CMN Copper Sale Framework Agreement, the Las Bambas CMN Copper Concentrate Offtake Agreement, the CITIC Copper Concentrate Offtake Agreement, the Grinding Media Supply Agreements, the 2018 and 2020 Rosebery Concentrate Sales Agreements, and the Dugald River Zinc Concentrate Sales Agreements that are fair and reasonable, in the interests of the Shareholders as a whole.

The Company's auditor was engaged to report on the Group's continuing connected transactions in accordance with the Hong Kong Standard on Assurance Engagements 3000 (Revised) 'Assurance Engagements Other Than Audits or Reviews of Historical Financial Information' and with reference to Practice Note 740 'Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules' issued by the Hong Kong Institute of Certified Public Accountants. The auditor has issued their unqualified letter containing its conclusion in respect of the continuing connected transactions for the year ended 31 December 2019 disclosed above in accordance with Rule 14A.56 of the

Listing Rules. A copy of the auditor's letter has been provided by the Company to the Hong Kong Stock Exchange.

In addition, the auditor of the Company has confirmed to the Board that nothing has come to their attention that causes them to believe that the above continuing connected transactions for the year ended 31 December 2019:

(a) have not been approved by the Board;

(b) were not, in all material respects, in accordance with the pricing policies of the Group where the transactions involve the provision of goods by the Group;

(c) were not entered into, in all material respects, in accordance with the relevant agreements governing the transactions; and

(d) the Las Bambas CMN Copper Sale Framework Agreement, the Las Bambas CMN Copper Concentrate Offtake Agreement, the CITIC Copper Concentrate Offtake Agreement, the Grinding Media Supply Agreements, the 2018 Rosebery Concentrate Sales Agreement and the Dugald River Zinc Concentrate Sales Agreements have not exceeded the respective annual caps as disclosed in the announcements of the Company.

CONTROLLING SHAREHOLDERS' INTERESTS IN CONTRACTS

On 22 July 2014 Top Create, a subsidiary of CMN, a controlling Shareholder, extended a loan facility for a principal sum of up to US$2,262.0 million to MMG SA for a term of four years for the purpose of acquiring the Las Bambas Project. On 29 December 2017, the Company announced that the loan facility was amended by the parties for the purpose of (among other things) extending the term of the loan from four years to eleven years. Such loan facility was exempt from the announcement and reporting requirements of the Listing Rules with respect to connected transactions on the basis that it was unsecured and on normal commercial terms.

Particulars of other contracts of significance that exist between the Company (or one of its subsidiary companies) and a controlling Shareholder (or any of its subsidiaries) are set out under Connected Transactions on pages 64 to 67 of this Annual Report.

RELATED PARTY TRANSACTIONS

Details of the related party transactions undertaken in the normal course of business are set out in Note 32 to the Consolidated Financial Statements.

Related party transactions set out in Note 32 to the Consolidated Financial Statements also constitute connected transactions and continuing connected transactions of the Company under the Listing Rules. The Company has complied with the disclosure requirements in accordance with Chapter 14A of the Listing Rules except for those transactions that are exempt from the disclosure requirements in Chapter 14A of the Listing Rules.

MANAGEMENT CONTRACTS

No contracts concerning the management and administration of the whole or any substantial part of the business of the Company were entered into or existed during the year.

PURCHASE, SALE OR REDEMPTION OF THE COMPANY'S LISTED SECURITIES

During the year ended 31 December 2019, neither the Company nor any of its subsidiaries purchased, sold or redeemed any of the Company's listed securities.

EMOLUMENT POLICY

The Group's Emolument Policy is formulated by the Governance, Remuneration and Nomination Committee on the basis of employees' merit, market practice, qualifications and competence.

The determination of remuneration for the Directors takes into consideration factors such as remuneration paid by comparable companies, accountabilities of the Directors, applicable regional employment conditions. In the circumstance of Executive Directors, appropriate 'at-risk' performance-based remuneration is also provided.

The Company has adopted share option schemes and performance awards as incentives to the Executive Directors and eligible employees. Details of the share option schemes and performance awards are set out under the sections headed 'Share Option Scheme' and 'Performance Awards'. In relation to MMG, it has

DIRECTORS' REPORT CONTINUED

adopted both long-term and short-term 'at-risk' incentive plans to reward its Executive Directors and eligible employees and to align their incentive remuneration with the performance of MMG.

RETIREMENT SCHEMES

Details of the Group's retirement schemes are set out in Note 13 to the Consolidated Financial Statements.

DIRECTORS AND SENIOR MANAGEMENT

Particulars of the Directors and senior management of the Company are set out on pages 46 to 50 of this Annual Report.

INDEPENDENT AUDITOR

The Consolidated Financial Statements have been audited by Deloitte Touche Tohmatsu who will retire at the forthcoming AGM and, being eligible, offer themselves for re-appointment.

CORPORATE GOVERNANCE REPORT

Details of the Corporate Governance Report are set out on pages 69 to 81 of this Annual Report.

SUFFICIENCY OF PUBLIC FLOAT

Based on information that is publicly available to the Company and within the knowledge of its Board, as at the latest practicable date prior to the printing of this report, the Company has maintained sufficient public float of not less than 25% of the Company's issued shares as required under the Listing Rules.

EVENTS AFTER THE BALANCE SHEET DATE

The outbreak of the COVID-19, has adversely impacted global economic activity and commodity prices in the period subsequent to the reporting date. This outbreak has not directly impacted on the operations of the Company. Nonetheless, reduced demand for base metals and the resulting decline in commodity prices can reasonably be expected to have an impact on the Group's future financial performance. The extent of this impact cannot be reliably quantified or estimated as at the reporting date. The Company continues to closely monitor the situation.

Other than this and other matters outlined in these financial statements, 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.

By order of the Board

GUO Wenqing
CHAIRMAN

4 March 2020

CORPORATE GOVERNANCE REPORT

The Company is committed to maintaining a high standard of corporate governance practices by emphasising a quality Board, sound internal controls, and transparency and accountability to all Shareholders.

CORPORATE GOVERNANCE

The Company has complied with all the code provisions of the Corporate Governance Code as set out in Appendix 14 of the Listing Rules throughout the year ended 31 December 2019, except for the deviations from code provision A.4.1 as explained under the section headed 'Re-election of Directors' and Rule 3.21 of the Listing Rules as explained below.

In 22 October 2019, Ms Jennifer Seabrook resigned as an Independent Non-executive Director, Chair of the Audit Committee and a member of the Remuneration Committee of the Company. For a brief period, due to the time taken to appoint a suitable replacement, the chairmanship of the Audit Committee was left vacant and the Company did not meet the requirement under Rule 3.21 of the Listing Rules. Following the appointment of Mr Chan Ka Keung, Peter as an Independent Non-executive Director and the Chairman of the Audit and Risk Management Committee on 4 December 2019, the Company has complied with the chairman requirement of the audit committee under Rule 3.21 of the Listing Rules.

The Company adopted a Board Charter to outline the manner in which its constitutional powers and responsibilities will be exercised, delegated and discharged, having regard to principles of good corporate governance, international best practice and applicable laws. The Board Charter is adopted on the basis that strong corporate governance can add to the performance of the Company, create Shareholder value and engender the confidence of the investment market.

DIRECTORS' SECURITIES TRANSACTIONS

The Company has adopted a model code for securities trading by Directors (Securities Trading Model Code) on terms no less exacting than the required standard of the Model Code.

Specific enquiry was made with all the Directors and all confirmed that they have complied with the requirements set out in the Model Code and the Securities Trading Model Code during the year ended 31 December 2019.

BOARD

COMPOSITION

The Board currently comprises eight Directors of which one is an Executive Director, four are Non-executive Directors and three are Independent Non-executive Directors.

The members of the Board as at the date of this report are as follows:

Executive Director

Mr GAO Xiaoyu (CEO)

Non-executive Directors

Mr GUO Wenqing (Chairman)

Mr JIAO Jian

Mr ZHANG Shuqiang

Mr XU Jiqing
(Redesignated from an Executive Director to a Non-executive Director on 1 January 2020)

Independent Non-executive Directors

Dr Peter CASSIDY

Mr LEUNG Cheuk Yan

Mr CHAN Ka Keung, Peter
(Appointed on 4 December 2019)

The current Board possesses an appropriate balance of skills, experience and diversity of perspectives relevant to the management of the Company's business. The Directors' biographical information is set out on pages 46 to 50 under the section headed 'Directors and Senior Management' of this Annual Report.

ROLE AND FUNCTION

The Board formulates overall strategies and policies of the Group. It also ensures the availability of adequate capital and managerial resources to implement the strategies adopted, the adequacy of systems of financial and internal control and the conduct of business in conformity with applicable laws and regulations. The Board members are fully committed to their roles and have acted in the best interests of the Group and its Shareholders at all times. There is no financial, business, family or other

CORPORATE GOVERNANCE REPORT CONTINUED

material/relevant relationship among the Directors.

All Directors are required to comply with Rule 3.08(d) of the Listing Rules to avoid actual and potential conflicts of interest and duty at all times. Directors are required to declare their interest in the matters to be considered at each Board meeting and Board committee meeting. If a Director or any of his/her associates has material interest in the matter to be considered, the Director will not be counted in the quorum, nor allowed to vote at the meeting. The Director may also be required to withdraw from the meeting during discussion of the matter.

Board meetings are held regularly, approximately six times a year, and are also held on an ad hoc basis as required by business needs. Regular Board meetings and ad hoc Board meetings are attended by a majority of the Directors in person or through electronic means of communication.

During the year ended 31 December 2019, other than resolutions passed in writing by all the Directors, the Company held six regular Board meetings. The AGM was held on 23 May 2019.

The attendance of each Director at the Board meetings and the AGM during the year ended 31 December 2019 is set out below. Figures in brackets indicate the maximum number of meetings held in the period in which the individual was a Board member.

	NUMBER OF MEETING ATTENDED	
DIRECTORS	BOARD MEETINGS	AGM
Executive Director		
GAO Xiaoyu	6/(6)	1/(1)
Non-Executive Directors		
GUO Wenqing (Chairman)	5/(6)	1/(1)
JIAO Jian	6/(6)	1/(1)
ZHANG Shuqiang	6/(6)	1/(1)
XU Jiqing[1]	6/(6)	1/(1)
Independent Non-Executive Directors		
Peter CASSIDY	6/(6)	1/(1)
LEUNG Cheuk Yan	5/(6)	1/(1)
CHAN Ka Keung, Peter[2]	0/(0)	0/(0)
Jennifer SEABROOK[3]	5/(5)	1/(1)
PEI Ker Wei[4]	6/(6)	0/(1)

Notes:

1. Redesignated from an Executive Director to a Non-executive Director of the Company on 1 January 2020.
2. Appointed as an Independent Non-executive Director of the Company on 4 December 2019.
3. Resigned as the Independent Non-executive Director of the Company on 22 October 2019.
4. Resigned as the Independent Non-executive Director of the Company on 4 December 2019.

BOARD DIVERSITY

The Company has developed the Board Diversity Statement recognising and embracing the benefits of having a diverse Board to enhance the quality of its performance. With a view to achieving a sustainable and balanced development, the Company sees increasing diversity at the Board level as an essential element in supporting the attainment of its strategic objectives and its sustainable development.

In designing the Board's composition, the Company has considered Board diversity from a number of aspects, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service.

All Board appointments will be based on meritocracy, and candidates will be considered against objective criteria, having due regard for the benefits of diversity on the Board. The ultimate decision will be based on merit and contribution that the selected candidate will bring to the Board.

The Board comprises members from a diverse background. The Company has at all times during the year had one Independent Non-executive Director who is a qualified accountant. One of the Independent Non-executive Directors is a qualified solicitor. Six Directors have experience sitting on the boards of other companies listed on the stock exchanges of Hong Kong, the PRC and Australia. Collectively the Directors have extensive experience in the metals and mining industry, trading, finance and accounting, business strategy, law, enterprise risk management and exposure or experience in various countries. Some of them are members of professional and/or industry bodies and/or academic institutions.

CHAIRMAN OF THE BOARD AND CHIEF EXECUTIVE OFFICER

The Chairman of the Board currently is Mr Guo Wenqing and the CEO of the Company is Mr Gao Xiaoyu. The roles of the Chairman of the Board and the CEO of the Company are segregated to ensure their respective independence, accountability and responsibility.

The Chairman takes the lead in formulating the Group's overall strategies and policies, ensures the Board's effective performance of its functions, including compliance with good corporate governance practices, and encourages and facilitates active contribution of Directors in Board activities. Directors with different views are encouraged to voice their concerns. They are allowed sufficient time for discussion of issues so as to ensure that Board decisions fairly reflect Board consensus. A culture of openness and debate is promoted to facilitate the effective contribution of Non-executive Directors and ensure constructive relations between Executive and Non-executive Directors. During the year, the Chairman met with the Independent Non-executive Directors and Non-executive Directors.

The Chairman also ensures that all Directors are properly briefed on issues arising at Board meetings and have received, in a timely manner, adequate information, which must be accurate, clear, complete and reliable.

The CEO, supported by a management committee comprising Executive Directors and senior management (Executive Committee), is responsible for managing day-to-day operations of the Group and executing the strategies adopted by the Board. The CEO is also accountable to the Board for the implementation of the Group's overall strategies, and coordination of overall business operations.

EXECUTIVE DIRECTORS AND EXECUTIVE COMMITTEE

The Board has delegated the management of the Group's day-to-day operations to the CEO and his Executive Committee. The Executive Committee is also required to report regularly to the Board on the progress being made by the Group's businesses.

The members of the Executive Committee as at the date of this report are as follows:

Mr GAO Xiaoyu (CEO and Executive Director);

Mr Ross CARROLL (CFO);

Mr Troy HEY (Executive General Manager – Corporate Relations);

Mr WEI Xianjian (Executive General Manager – Americas); and

Mr LI Liangang (Executive General Manager – Commercial).

CORPORATE GOVERNANCE REPORT CONTINUED

NON-EXECUTIVE DIRECTORS

The Non-executive Directors (including the Independent Non-executive Directors) provide a wide range of expertise and experience and bring independent judgement on issues relating to the Group's strategies, development, performance and risk management through their contribution at Board and committee meetings.

INDEPENDENT NON-EXECUTIVE DIRECTORS

The Independent Non-executive Directors serve the important function of ensuring and monitoring the basis for an effective corporate governance framework. Their participation provides adequate checks and balances to safeguard the interests of Shareholders. The Board has three Independent Non-executive Directors and one of them have accounting or related financial management expertise. The Board confirms that the Company has received from each of the Independent Non-executive Directors a confirmation of independence for the year ended 31 December 2019 pursuant to Rule 3.13 of the Listing Rules and considers such Directors to be independent.

RE-ELECTION OF DIRECTORS

Each of the Non-executive Directors entered into an appointment agreement with the Company for a specific term of three years, except for Dr Peter Cassidy. Dr Cassidy's appointment agreement commenced on 31 December 2010 and continues until either the Company or he terminates such agreement by serving on the other not less than one month's prior written notice.

In accordance with the Company's articles of association, each Director appointed by the Board shall be subject to re-election by Shareholders at the next general meeting (in the case of filling a casual vacancy) or at the next AGM (in the case of an addition to the Board), and thereafter be subject to retirement by rotation at least once every three years at the AGM. Dr Cassidy, who was appointed by the Board on 31 December 2010 to fill a casual vacancy, is also subject to retirement from the Board by rotation at least once every three years at the AGM. Since Dr Cassidy has been appointed, he has been re-elected by the Shareholders at the AGMs held in 2011, 2013, 2016 and 2019.

DIRECTORS' TRAINING AND CONTINUOUS PROFESSIONAL DEVELOPMENT

Every newly appointed Director receives a briefing and orientation on his/her legal and other responsibilities as a listed company director and the role of the Board. He/she also receives a comprehensive induction package covering the statutory and regulatory obligations of a director, organisational structure, policies, procedures and codes of the Company, terms of reference of Board committees and charter of responsibilities. All Directors are encouraged to participate in continuous professional development and refresh their knowledge and skills.

All Directors have been updated on the latest developments regarding the Listing Rules and other applicable regulatory requirements to ensure compliance and enhance their awareness of good corporate governance practices.

All Directors have participated in continuous professional development by attending seminars and/or conferences and/or forums and/or in-house trainings to develop and refresh their knowledge and skills. In addition, attendance at briefing sessions (including the delivery of speeches) and the provision of reading materials on the relevant topics contributed toward continuous professional training. All Directors provided a record of training to the Company. A summary of training attended by the Directors for the year ended 31 December 2019 is set out below:

DIRECTORS	TYPES OF TRAINING (NOTES)
Executive Director	
GAO Xiaoyu	1, 2, 3
Non-executive Directors	
GUO Wenqing	1, 2, 3
JIAO Jian	1, 3
ZHANG Shuqiang	1, 3
XU Jiqing (Redesignated from an Executive Director to a Non-executive Director on 1 January 2020)	1, 2, 3
Independent Non-executive Directors	
Peter CASSIDY	1, 3
LEUNG Cheuk Yan	1, 2, 3
CHAN Ka Keung, Peter (Appointed on 4 December 2019)	1, 3
Jennifer SEABROOK (Resigned on 22 October 2019)	1, 2, 3
PEI Ker Wei (Resigned on 4 December 2019)	1, 2, 3

Notes:

1. Attending seminars and/or conferences and/or forums and/or in-house trainings.
2. Delivering speeches/presentations at seminars and/or conferences and/or forums.
3. Reading journals, documentaries, books, newspapers relating to the director's duties and responsibilities.

DIRECTORS' AND OFFICERS' LIABILITIES INSURANCE

The Company has arranged appropriate directors' and officers' liabilities insurance in respect of legal action against the Directors and officers of the Company.

THE BOARD COMMITTEES

To further enhance the corporate governance practices, the Board has approved a restructuring and reconstitution of its Board committees from four Board committees to two Board committees with effect from 4 December 2019.

Prior to the restructure of the Board committees on 4 December 2019, there were four Board committees, namely the Audit Committee, the Remuneration Committee, the Governance and Nomination Committee and the Risk Management Committee.

AUDIT COMMITTEE

For the period from 1 January 2019 to 4 December 2019, the Audit Committee comprised five members including three Independent Non-executive Directors, namely Ms Jennifer Seabrook as Chair (until her resignation on 22 October 2019), Dr Peter Cassidy (from 22 October 2019), Mr Leung Cheuk Yan and Professor Pei Ker Wei, and two Non-executive Directors, namely Mr Jiao Jian and Mr Zhang Shuqiang.

The Audit Committee was accountable to the Board. It focused primarily on financial reporting related matters, such as reviewing financial information and overseeing financial reporting related systems and controls.

The Audit Committee was principally responsible for monitoring the relationship with the Company's external auditor, reviewing the financial information of the Company (including its treasury and tax functions) and the oversight of the Group's financial reporting system. The Audit Committee was also principally responsible for monitoring the relationship with the Company's internal auditor and financial risk management and financial internal control systems.

During the period from 1 January 2019 to 4 December 2019, the Audit Committee held four meetings. The Committee reviewed financial reporting matters, the Company's Financial Statements, annual and interim reports, the connected transactions and the continuing connected transactions entered into by the Group and the audit fees for the year ended 31 December 2019. It also reviewed the external audit scope and plans and audit findings, internal audit plans and audit findings, financial risk, treasury, capital management plans and tax matters, and the programs for Audit Committee activities for 2019 and 2020. The Committee discussed with senior management the independence of the external auditors and the effectiveness of the external and internal audit process.

The attendance of each member at the Audit Committee meetings during the period from 1 January 2019 to 4 December 2019 is set out below. Figures in brackets indicate the maximum number of meetings held in the period in which the individual was a member of the Audit Committee.

CORPORATE GOVERNANCE REPORT CONTINUED

MEMBERS	NUMBER OF MEETINGS ATTENDED
Non-executive Directors	
JIAO Jian	3/(4)
ZHANG Shuqiang	4/(4)
Independent Non-executive Directors	
Peter CASSIDY[1]	1/(1)
LEUNG Cheuk Yan	3/(4)
Jennifer SEABROOK (Chair)[2]	3/(3)
PEI Ker Wei[3]	4/(4)

Notes:

1. Appointed as a member of the Audit Committee on 22 October 2019.
2. Resigned as the Chair of the Audit Committee on 22 October 2019.
3. Resigned as a member of the Audit Committee on 4 December 2019.

REMUNERATION COMMITTEE

For the period from 1 January 2019 to 4 December 2019, the Remuneration Committee comprised five members including three Independent Non-executive Directors, namely Dr Peter Cassidy as Chair, Ms Jennifer Seabrook (until her resignation on 22 October 2019), Mr Leung Cheuk Yan (from 22 October 2019) and Professor Pei Ker Wei and two Non-executive Directors, namely Mr Jiao Jian and Mr Zhang Shuqiang.

The Remuneration Committee was principally responsible for determining, with delegated responsibility, the remuneration packages of individual Executive Directors and senior management and making recommendations to the Board on the Group remuneration policy and the remuneration of Non-executive Directors and Independent Non-executive Directors.

During the period from 1 January 2019 to 4 December 2019, the Remuneration Committee held five meetings. The Committee reviewed the terms of reference of the Remuneration Committee, the remuneration policy, the annual remuneration of Directors and senior management, the senior management market remuneration, CEO market remuneration, the 2019 and 2020 long term incentive plans, the 2019 and 2020 short term incentive plans and the risk measures for the incentive plans. It also reviewed the remuneration for the Independent Non-executive Director and the Executive General Manager – Commercial appointed in December 2019 and January 2020 respectively.

The attendance of each member at the Remuneration Committee meetings during the period from 1 January 2019 to 4 December 2019 is set out below. Figures in brackets indicate the maximum number of meetings held in the period in which the individual was a member of the Remuneration Committee.

MEMBERS	NUMBER OF MEETINGS ATTENDED
Non-executive Directors	
JIAO Jian	4/(5)
ZHANG Shuqiang	4/(5)
Independent Non-executive Directors	
Peter CASSIDY (Chairman)	5/(5)
LEUNG Cheuk Yan[1]	1/(1)
Jennifer SEABROOK[2]	4/(4)
PEI Ker Wei[3]	5/(5)

Notes:

1. Appointed as a member of the Remuneration Committee on 22 October 2019.
2. Resigned as a member of the Remuneration Committee on 22 October 2019.
3. Resigned as a member of the Remuneration Committee on 4 December 2019.

GOVERNANCE AND NOMINATION COMMITTEE

For the period from 1 January 2019 to 4 December 2019, the Governance and Nomination Committee comprised three members including two Independent Non-executive Directors, namely Mr Leung Cheuk Yan as Chair and Dr Peter Cassidy, and one Non-executive Director, Mr Jiao Jian.

The Governance and Nomination Committee was principally responsible for developing and reviewing the Group's policies and practices on corporate governance, the Code of Conduct, monitoring the Group's compliance with the Listing Rules and other applicable laws, monitoring the training and continuous professional development of Directors and senior management, reviewing the terms of references of all the committees and reviewing and recommending to the Board for approval the Corporate Governance Report for inclusion in the Company's Annual Report. The Committee was also responsible for formulating the policy for nomination of Directors and to lead the process of identifying and nominating candidates suitably qualified to become Board members. It reviews the structure, size and composition of the Board and Board Committees (including knowledge, skills and experience, independence and diversity of the members) and makes recommendations to the Board with regard to any changes. It also reviewed the succession plans for Directors and senior management.

During the period from 1 January 2019 to 4 December 2019, the Governance and Nomination Committee held five meetings. The Committee reviewed the Mineral Resources and Ore Reserves Committee Statement, the Whistleblower Framework, the 2019 Disclosure Reports, the performance review and evaluation of the Board, the succession planning for the Directors and senior management, the restructure of the Board committees, the Directors and senior management training program and the Corporate Governance Report for inclusion in the annual report, and the programs for Governance and Nomination Committee activities for 2019 and 2020. It also reviewed and recommended for approval by the Board the appointment of Mr Chan Ka Keung, Peter as the Independent Non-executive Director and Mr Li Liangang as the Executive General Manager – Commercial of the Company.

The attendance of each member at the Governance and Nomination Committee meetings during the period from 1 January 2019 to 4 December 2019 is set out below. Figures in brackets indicate the maximum number of meetings held in the period in which the individual was a member of the Governance and Nomination Committee.

MEMBERS	NUMBER OF MEETINGS ATTENDED
Non-executive Director	
JIAO Jian	4/(5)
Independent Non-executive Directors	
Peter CASSIDY	5/(5)
LEUNG Cheuk Yan (Chairman)	4/(5)

RISK MANAGEMENT COMMITTEE

For the period from 1 January 2019 to 4 December 2019, the Risk Management Committee comprised four members including three Independent Non-executive Directors, namely Professor Pei Ker Wei as Chair, Dr Peter Cassidy and Mr Leung Cheuk Yan and one Non-executive Director, Mr Jiao Jian.

The Risk Management Committee was principally responsible for overseeing the Company's risk management and internal control systems and reviewing the risks associated with the Group strategy and making recommendations to the Board for consideration and approval.

During the period from 1 January 2019 to 4 December 2019, the Risk Management Committee held four meetings. The Committee reviewed compliance against the Risk Management Framework, incident and control failures, risk profile and material risk analyses. It also reviewed the internal audit program including its program status, internal audit findings, improvement themes and action close out updates. The Committee also reviewed risks associated with Group strategy, the Insurance Program including the renewals of the annual insurance and the directors and officers insurance and the programs for Risk Management Committee activities for 2019 and 2020.

The attendance of each member at the Risk Management Committee meetings during the period from 1 January 2019 to 4 December 2019 is set out below. Figures in brackets indicate the maximum number of meetings held in the period in which the individual was a member of the Risk Management Committee.

MEMBERS	NUMBER OF MEETINGS ATTENDED
Non-executive Director	
JIAO Jian	3/(4)
Independent Non-executive Directors	
Peter CASSIDY	4/(4)
LEUNG Cheuk Yan	3/(4)
PEI Ker Wei (Chairman)[1]	4/(4)

Note:

1. Resigned as the Chairman of Risk Management Committee on 4 December 2019.

Following the restructure of the Board committees on 4 December 2019, there are two Board committees, namely the Audit and Risk Management Committee and the Governance, Remuneration and Nomination Committee, for overseeing particular aspects of the Company's affairs.

CORPORATE GOVERNANCE REPORT CONTINUED

AUDIT AND RISK MANAGEMENT COMMITTEE

The Audit and Risk Management Committee merged and replaced the previous Audit Committee and the Risk Management Committee. From 4 December 2019 to 31 December 2019, the Audit and Risk Management Committee comprised four members including three Independent Non-executive Directors, namely Mr Chan Ka Keung, Peter as Chair, Dr Peter Cassidy and Mr Leung Cheuk Yan, and one Non-executive Director, namely Mr Zhang Shuqiang. With effect from 1 January 2020, Mr Xu Jiqing was appointed as a member of the Audit and Risk Management Committee.

The Audit and Risk Management Committee will continue to focus on financial reporting related matters, such as reviewing financial information and overseeing financial reporting related systems and controls. The Committee also advises the Board on high-level risk related matters, risk management and internal control, including advising on risk assessment and oversight of the internal audit function. The terms of reference of the Audit and Risk Management Committee are available on the websites of the Hong Kong Stock Exchange and the Company.

For the period from 4 December 2019 to 31 December 2019, the Audit and Risk Management Committee did not hold any meetings.

GOVERNANCE, REMUNERATION AND NOMINATION COMMITTEE

The Governance, Remuneration and Nomination Committee merged and replaced the previous Governance and Nomination Committee and the Remuneration Committee. From 4 December 2019 to 31 December 2019, the Governance, Remuneration and Nomination Committee comprised four members including three Independent Non-executive Directors, namely Dr Peter Cassidy as Chair, Mr Leung Cheuk Yan and Mr Chan Ka Keung, Peter, and one Non-executive Director, namely Mr Jiao Jian. With effect from 1 January 2020, Mr Xu Jiqing was appointed as a member of the Governance, Remuneration and Nomination Committee.

The Governance, Remuneration and Nomination Committee will continue to deal with remuneration matters, nomination responsibilities and corporate governance responsibilities as outlined in the above Governance and Nomination Committee and Remuneration Committee prior to the restructure of the Board committees. The terms of reference of the Governance, Remuneration and Nomination Committee are available on the websites of the Hong Kong Stock Exchange and the Company.

For the period from 4 December 2019 to 31 December 2019, the Governance, Remuneration and Nomination Committee did not hold any meetings.

The Company's Mineral Resources and Ore Reserves Committee and the Disclosure Committee also report to the Governance, Remuneration and Nomination Committee.

The Mineral Resources and Ore Reserves Committee is responsible for overseeing the Mineral Resources and Ore Reserves reporting process and ensuring its compliance with the Listing Rules and JORC Code.

The Disclosure Committee is responsible for advising on disclosure obligations of the Company. The Company has adopted a Disclosure Framework to ensure its compliance with the disclosure obligations under the Listing Rules and the timely disclosure of inside information to the market. The Disclosure Committee comprises the CEO, CFO, Executive General Manager – Corporate Relations, the General Counsel and the Company Secretary. The Disclosure Framework requires employees to refer all information that potentially requires disclosure to a member of the Disclosure Committee.

SAFETY, HEALTH, ENVIRONMENT AND COMMUNITY COMMITTEE

During the period from 1 January 2019 to 19 December 2019, the SHEC Committee was a management committee reporting directly to the CEO. The Board received SHEC reports along with the CEO monthly reports, providing an overview of any material SHEC matters. Material SHEC matters were referred to the Board through the CEO's report section of the Board agenda as a standing item.

On 19 December 2019 the SHEC Committee was absorbed by the Executive Committee in order to improve efficiency and effectiveness. Specific SHEC matters to be discussed by the Board include identification, review and governance of SHEC-related material issues, significant incidents, remediation/mitigation strategies and any specific areas of focus as identified by the Board.

ACCOUNTABILITY AND AUDIT

FINANCIAL REPORTING

The Directors acknowledge their responsibility for preparing all information and representations contained in the Financial Statements for the year ended 31 December 2019 as disclosed in this Annual Report. The Directors consider that the Financial Statements have been prepared in conformity with Hong Kong Financial Reporting Standards (HKFRS) issued by the Hong Kong Institute of Certified Public Accountants and the Companies Ordinance, and reflect amounts that are based on the best estimates and reasonable, informed and prudent judgement of the Board and management with an appropriate consideration to materiality. The Directors, having made appropriate enquiries, were not aware of any material uncertainties relating to events or conditions that might cast significant doubt upon the Group's and the Company's ability to continue as a going concern. Please refer to Note 2.1 to the Consolidated Financial Statements for further details.

Accordingly, the Directors have prepared the Financial Statements on a going-concern basis.

The statement of the Company's auditor regarding its responsibilities for the Financial Statements is set out in the Independent Auditor's Report on pages 91 to 96 of this Annual Report.

Management has provided all members of the Board with monthly updates giving a balanced and comprehensible assessment of the Company's performance, position and prospects in sufficient detail to enable the Board as a whole and each Director to discharge their duties.

RISK MANAGEMENT AND INTERNAL CONTROLS

The Audit and Risk Management Committee (and prior to 4 December 2019, the separate Audit Committee and Risk Management Committee) assists the Board with regard to the oversight of the Company's risk management and internal control systems and practices.

The Risk and Audit function in MMG supports the Audit and Risk Management Committee and line management by:

– establishing and maintaining Group-wide Standards relating to risk management and assurance;
– undertaking internal audits to test compliance with Group Standards and legal obligations and to assess the adequacy and effectiveness of critical controls to material risks;
– reporting control weakness and non-compliances at MMG's operations;
– monitoring critical control failings across the industry and assessing implications for MMG;
– monitoring and reporting closeout of management-agreed actions to improve control effectiveness or to correct non-compliances; and
– monitoring the Group's risk profile and reporting substantive changes in the risk profile.

The Company's risk management and internal audit processes are subject to periodic, independent external assessment against relevant International Standards and industry best practice.

The annual internal audit plan is approved by the Audit and Risk Management Committee. Its focus is on material risks to the business; both financial and non-financial risks.

The Audit and Risk Management Committee is responsible for ensuring that there is appropriate coordination between internal and external audit. It is also responsible for ensuring that internal audit is adequately resourced and has appropriate standing within the Group. It also reviews and monitors the effectiveness of internal audit.

MMG's Internal Audit Procedure requires the Risk and Audit function to maintain its independence. It also requires reporting, to the Chair of the Audit and Risk Management Committee, of any instance where the Group's independence may have been compromised.

Information about the Board committees, including their work in 2019, is set out under the sections above.

AUDITOR'S REMUNERATION

An analysis of the remuneration of the external auditor, Deloitte Touche Tohmatsu (which for these purposes includes any entity under common control, ownership or management with the external auditor or any entity that a reasonable and informed third party having knowledge of all relevant information would reasonably conclude as

CORPORATE GOVERNANCE REPORT CONTINUED

part of the audit firm nationally or internationally), for the year ended 31 December 2019 is set out as follows:

SERVICES RENDERED	FEE PAID/ PAYABLE 2019 US$'000
Audit services	1,613.3
Other assurance services	87.9
Non-Audit Services	
Other tax services	152.0
Other non-audit services	36.2
	1,889.4

COMPANY SECRETARY

Ms Leung Suet Kam, Lucia was appointed as Company Secretary of the Company in June 2001. She is a fellow of The Hong Kong Institute of Chartered Secretaries and The Institute of Chartered Secretaries and Administrators. Ms Leung assists the Board by ensuring good information flow within the Board and that the Board policy and procedures including those on governance matters are followed. All the Directors are entitled access to the advice and services of the Company Secretary. She reports to the Chairman of the Board and also the CEO. Ms Leung has attended various professional seminars during the year ended 31 December 2019, which exceed the requirements of the Listing Rules.

SHAREHOLDERS' RIGHTS

PROCEDURES FOR SHAREHOLDERS TO CONVENE A GENERAL MEETING

Shareholders holding at least 5% of the total voting rights of all Shareholders having a right to vote at the Company's general meeting can deposit a written request to convene a general meeting at Unit 8506A, Level 85, International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong, the registered office of the Company, for the attention of the Company Secretary or send the written request to the Company by fax at +852 2840 0580.

The written request: (i) must state the general nature of the business to be dealt with at the meeting, and (ii) may include the text of a resolution that may properly be moved and is intended to be moved at the meeting and signed by the Shareholders concerned.

The request will be verified with the Company's Share Registrar and upon confirmation that the request is proper and in order, the Board will convene a general meeting by serving sufficient notice to all the registered Shareholders.

However, if the request has been verified as not in order, the Shareholders concerned will be advised of this outcome and accordingly, a general meeting will not be convened as requested.

Pursuant to the articles of association of the Company and the Companies Ordinance, the notice period to be given to all the registered Shareholders for consideration of the proposed resolutions at a general meeting is not less than 14 days.

If the Directors do not within 21 days after the date on which they become subject to the requirement to call a general meeting to be held on a date not more than 28 days after the date of the notice convening the meeting, the Shareholders concerned or any of them representing more than one half of the total votes of all of them, may themselves call a general meeting, provided that such general meeting must be called for a date not more than three months after the date on which the Directors become subject to the requirement to call a meeting.

Any reasonable expenses incurred by the Shareholders concerned by reason of the failure of the Directors duly to call a general meeting shall be repaid to the Shareholders concerned by the Company.

The procedures for Shareholders to convene a general meeting are available on the Company's website.

PROCEDURES FOR SHAREHOLDERS TO PUT FORWARD PROPOSALS AT THE ANNUAL GENERAL MEETING

Shareholders holding at least 2.5% of the total voting rights of all Shareholders having the right to vote at the AGM, or at least 50 Shareholders who have a right to vote on the resolution at the AGM to which the requests relate, can submit a written request to move a resolution at the AGM.

The written request must state the resolution and be signed by all the Shareholders concerned.

The written request must be deposited at Unit 8506A, Level 85, International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong, the registered office of the Company, for the attention of the Company Secretary or sent to the Company by fax at +852 2840 0580 not later than six weeks before the AGM to which the request relates or if later, the time at which notice is given of that meeting.

The request will be verified with the Company's Share Registrar and upon confirmation that the request is proper and in order, the Board will include the resolution in the agenda for the next AGM in accordance with statutory requirements. However, if the request has been verified as not in order, the Shareholders concerned will be advised of this outcome and accordingly, the proposed resolution will not be included in the agenda for the AGM.

The Company will be responsible for the expenses in serving the notice of the resolution and circulating the statement submitted by the Shareholders concerned.

The procedures for Shareholders to put forward proposals at the AGM are available on the Company's website.

PROCEDURES FOR SHAREHOLDERS TO PROPOSE A PERSON FOR ELECTION AS A DIRECTOR

If a Shareholder wishes to propose a person other than a Director for election as a Director at an AGM or a general meeting, he/she can deposit a written notice to that effect signed by the Shareholder concerned at Unit 8506A, Level 85, International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong, the registered office of the Company, for the attention of the Company Secretary.

The written notice must:

- state the full name of the person proposed for election as a Director;
- state the person's biographical details as required by Rule 13.51(2) of the Listing Rules; and
- be accompanied by a confirmation signed by the candidate indicating his/her willingness to be appointed.

The notice should be lodged for a period of seven clear calendar days commencing from the date of dispatch of the AGM/general meeting notice and no later than seven clear calendar days prior to the date of AGM/general meeting.

If the written notice is received after the AGM/general meeting notice has been dispatched but later than seven clear calendar days prior to the date of the AGM/general meeting, the Company may need to consider the adjournment of the AGM/general meeting in order to allow a sufficient period of notice.

The procedures for Shareholders to propose a person for election as a Director at an AGM/general meeting are available on the Company's website.

PROCEDURES FOR DIRECTING SHAREHOLDERS' ENQUIRIES TO THE BOARD

Shareholders may at any time send their enquiries and concerns to the Board in writing through the Company Secretary to the registered office of the Company at Unit 8506A, Level 85, International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong.

Shareholders may also make enquiries with the Board at the AGM/general meetings of the Company.

Shareholders' questions in relation to their shareholdings should be directed to the Company's Share Registrar, Computershare Hong Kong Investor Services Limited, at 17M Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong.

COMMUNICATION WITH SHAREHOLDERS AND INVESTORS

The Company endeavours to develop and maintain continuing relationships and effective communication with its Shareholders and investors. In an effort to facilitate and enhance the relationships and communication, the Company has adopted a Shareholder Communication Policy, which is available on the Company's website. The principles of the Shareholder Communication Policy are:

CORPORATE COMMUNICATIONS

The Company will generally communicate with Shareholders and the investing public through the following corporate communication materials:

- financial reports (interim and annual reports), quarterly production reports and sustainability reports;
- announcements, Shareholder circulars and other disclosures through the websites of the Hong Kong Stock Exchange and the Company; and

CORPORATE GOVERNANCE REPORT CONTINUED

– other corporate communications, presentations, publications and media releases of the Company.

The Company endeavours to use plain, non-technical language in all its communication materials provided to Shareholders and where possible the communication materials are made available in both English and Chinese.

INVESTOR RELATIONS

The Company may from time to time conduct investor/analyst briefings and presentations, road shows, site visits, or marketing activities for the financial community.

Communications and dialogues with Shareholders, investors, analysts, media or other parties will be conducted in compliance with the disclosure obligations and requirements under the Disclosure Framework, which aims to ensure equal, fair and timely dissemination of information.

CORPORATE WEBSITE

A dedicated 'Investors and Media Centre' section is available on the Company's website where all corporate communication materials including materials published on the website of the Hong Kong Exchanges and Clearing Limited (www.hkexnews.hk) is posted as soon as practicable after their release.

The following information is available on the Company's website:

- the articles of association of the Company;
- the terms of reference of the Audit and Risk Management Committee and the Governance, Remuneration and Nomination Committee;
- a summary of the procedures for Shareholders to convene a general meeting, to put forward proposals at the AGM, and to propose a person for election as a Director;
- a news archive of stock exchange announcements and media releases; and
- an event calendar setting out important dates and forthcoming events of the Company.

Information on the Company's website is updated on a regular basis. Shareholders are encouraged to subscribe to news updates.

SHAREHOLDER MEETINGS

Shareholders are encouraged to participate in AGM/general meetings or appoint proxies to attend and vote at meetings for and on their behalf if they are unable to attend.

Board members including the Chairman of the Board, and where appropriate, Chairmen and other members of the relevant Board committees or their delegates, appropriate management executives and representatives from the Company's external auditor will attend AGM/general meetings to answer Shareholders' questions.

In addition, separate resolutions are proposed at the AGM/general meetings on each substantially separate issue.

ENVIRONMENTAL POLICIES AND PERFORMANCE

Respect for the environment is a core part of the way MMG operates. The objective of the Company is to maximise recycling and reuse and to minimise the draw on natural resources, with water being the most significant natural resource used in our operations. The Company also seeks to minimise energy use and the use of resources in the generation of electricity.

The environmental management approach is based on the principles of plan, do, check, act and aligns to the principles of ISO14001. The approach involves identification, assessment and control of material risks across all phases of our business, from exploration through to development, operation and then closure. The Company works in partnership with its Stakeholders to understand the challenges and opportunities of its activities, and how best to manage them.

The MMG Environment Standard defines MMG's minimum requirements and provides the basis for sustainable environmental management through its deployment at its operations. These requirements are audited as part of an integrated assurance process.

Through the application of the MMG Operating Model, operations focus on essential environmental delivery work, supported by functional excellence that drives continual improvement of our management processes.

KEY STAKEHOLDER RELATIONSHIPS

The Company seeks Stakeholder relationships based on trust, transparency and mutual respect for culture, values and heritage. Understanding the needs, expectations and aspirations of communities impacted by its operations is vital for the Company to achieve its vision and growth objectives.

The Company's key relationships are with its employees, communities, suppliers, governments, Shareholders, non-government organisations, industry and customers.

Areas of interest vary between each Stakeholder group but cover topics including economic performance, safety and health management, employee development and well-being, environmental management and compliance and support for community and regional development.

Stakeholders interact with the Company through a variety of avenues including direct communication and meetings, receipt of newsletters and corporate publications, disclosures to the Hong Kong Stock Exchange and membership and representation on industry associations.

MMG has relationships with a range of customers globally for the sale of its products. The sales and marketing of all products is managed by a Group Sales and Marketing function that negotiates all terms and conditions at arm's length arrangements. All prices are referenced to LME or London Bullion Market Association market prices for the appropriate product sold. Further information is discussed in the Management Discussion and Analysis on pages 17 to 45 of this Annual Report.

Information on MMG's approach to environmental, social and governance issues will be reported in the 2019 MMG Sustainability Report available on the Company's website at www.mmg.com in the Second Quarter 2020.

COMPLIANCE WITH LAWS AND REGULATIONS

The Company has adopted the Corporate Legal Compliance Standard and other practices to ensure adherence to applicable legal and regulatory requirements and, in particular, those that have a significant impact on the operations of the Group. Our Governance, Remuneration and Nomination Committee is delegated by the Board to review and monitor the Group's policies and practices on compliance with legal and regulatory requirements and such policies and practices are regularly reviewed. Any changes in the applicable laws, rules and regulations are brought to the attention of relevant employees and business units from time to time.

CONSTITUTIONAL DOCUMENTS

There is no change to the Company's articles of association during the year ended 31 December 2019.

DELISTING FROM AUSTRALIAN SECURITIES EXCHANGE

The Company was voluntarily delisted from Australian Securities Exchange (ASX) at close of trading on 4 December 2019. The request to be removed from the official list was made by the Company having regard to the ongoing low trading volume of MMG's CHESS Depositary Interests, and a view that the financial, administrative and compliance obligations and costs associated with maintaining MMG's ASX Foreign Exempt Listing were no longer justified.

The Company maintains its primary listing of shares under the stock code of 1208 on the Hong Kong Stock Exchange and the trading of the Company's shares on the Hong Kong Stock Exchange continues as normal.

ESG APPROACH AND PERFORMANCE

MMG operates and develops copper, zinc and other base metals projects across Australia, the DRC and Peru. In 2019, MMG had four mining operations: Kinsevere, Las Bambas, Rosebery and Dugald River.

The Company is committed to responsible environmental and social performance and effective governance of its operations. This supports our growth strategy by helping to:

– manage reputational and regulatory risks;
– control costs and drive efficiencies;
– build strong stakeholder relationships; and
– attract and retain talented employees.

ESG REPORTING AND MATERIALITY

The Company conducts a GRI-aligned materiality assessment to ensure that ESG issues which matter most to our stakeholders are reported.

The MMG Sustainability Report provides an annual summary on our approach and performance across our material sustainability issues. Elements of our sustainability reports are externally assured in line with our commitments as a member of the ICMM.

Further, information on MMG's approach to health and safety, social development, environmental performance, key stakeholder relationships and compliance with laws and regulations will be reported in the 2019 MMG Sustainability Report available on the Company's website at www.mmg.com in the Second Quarter of 2020.

CORPORATE GOVERNANCE

The Company complies with the principles of good corporate governance as set out in the Corporate Governance Code (CG Code) of the Listing Rules and maintains policies to meet both Board requirements and all external reporting obligations.

The Company is committed to upholding a high standard of corporate governance practices through a quality Board, sound internal controls, and transparency and accountability to all shareholders. We understand that good governance is not just a matter for the Board and it is equally the responsibility of executive management to embed governance practices throughout the organisation.

As a result, we have the Audit and Risk Management, and the Governance, Remuneration and Nomination Board committees, which operate under clear Terms of Reference. We also have a number of executive management committees, including the Executive Committee who oversee the SHEC, Disclosure, Investment Review, Mineral Resources and Ore Reserves and Code of Conduct Committees.

In 2019 MMG released its Sustainable Development Framework, owned and endorsed by the Board and implemented across the business. The Framework aligns with the ICMM's ten sustainable development principles. The Board carries out identification, review and governance of SHEC-related material issues consistent with this framework. The Company's approach is informed by our Corporate Governance Policy, People Policy, Shareholder Communication Policy, SHEC Policy, and Quality and Materials Stewardship Policy.

The Company applies business-wide standards to define the minimum requirements to manage material risks, meet legal requirements and external reporting obligations, and to create and preserve competitive advantage and organisational effectiveness. Our assurance program focuses on verifying that the critical controls required to manage material risk events are implemented and effective. These standards provide the basis for sustainable operations and are aligned to the ICMM's Ten Principles of Sustainable Development and the eight ICMM Position Statements.

COMPLIANCE

The Governance, Remuneration and Nomination Committee is responsible for developing and reviewing the Company's policies and practices on corporate governance, the Code of Conduct, monitoring MMG's compliance with the Listing Rules and other applicable laws.

The SHEC Committee was a management committee that monitored our performance in line with the Group's policies, standards and regulatory requirements relating to safety, health, environment and community. The SHEC Committee has now been absorbed by the Executive Committee which assumes these obligations.

BUSINESS ETHICS

The Company's values and Code of Conduct set out our commitment to operating in a responsible manner. We expect all our employees, contractors and suppliers to integrate these standards of behaviour into their working practices. The Company Code of Conduct covers areas such as conflict of interest, fraud, anti-corruption and legal compliance and its application is overseen by our Code of Conduct Committee, chaired by the Chief Financial Officer. MMG engages an independent confidential whistleblower service which is available to all employees globally in their local language, and a Whistleblower Framework which forms part of the Corporate Legal Compliance Standard and also has an Anti-Corruption Standard.

In 2019, no significant non-compliances with the Company's Code of Conduct were identified.

DEVELOPING AND SUPPORTING OUR WORKFORCE AND PROTECTING LABOUR RIGHTS

The Company has one standard governing people and benefits matters globally, the People standard. This standard is supported with detailed Work Quality Requirements, systems and processes to ensure global standards and local requirements are met, which include policies related to compensation and dismissal, working hours, recruitment and promotion.

The Company is also aligned with all national legislation and legal requirements in the countries where our operations are located. The Company chooses the best people for each position and rewards them competitively with salary and benefits that are in line with market conditions and their contribution to our overall business success. The Company is committed to sharing its successes with our communities through local employment opportunities and by investing in training and education to help local residents transition to careers in mining or related fields.

The Company provides its people with the opportunity to develop their skills, expertise and experience to optimise their contribution to our business and to develop their careers. The Company has two broad streams of vocational training; operational training and competency verification; to drive safety, efficiencies and manage material business risks.

In addition, the Company enables employees' professional development to enhance leadership capabilities and support career pathways. The Company undertakes extensive workforce and community engagement on, and offers support to, individuals affected by any business decisions to downsize or close operations.

The Company aims to provide safe workplaces that are free of discrimination and harassment, and which foster diversity and inclusion. The Company also has a global Diversity and Inclusion Model led by the Executive Committee. The committee sets corporate targets, and, in turn, Executives sponsor regional Diversity and Inclusion Committees where local employees determine and action more initiatives that are specific to the region. MMG's approach to inclusion and diversity supports our comparative advantage in attracting and retaining talent, in addition to delivering business benefits associated with greater levels of collaboration.

The Company promotes good mental health practices in the workplace and supports our workers to be physically fit and well rested so that they are able to carry out their duties safely.

We are committed to upholding the International Labour Organisation's (ILO) Declaration of Fundamental Principles and Rights at Work and their Core Labour Standards and comply with local labour laws. We uphold the rights of our employees to freedom of association and collective representation and endeavour to have positive and constructive negotiations with elected representatives of these groups. We also uphold the ILO Principles regarding the elimination of all forms of forced and child labour.

In 2019, there were no confirmed non-compliance incidents or grievances in relation to labour practices that have had a significant impact on the Group.

COMMUNITY ENGAGEMENT

We recognise that strong stakeholder engagement from exploration through to the cessation of our mining activities is critical in ensuring that our business decisions are responsive to the needs and expectations of our host communities and governments. We aim to partner with our communities and strive to maintain socially and culturally inclusive and proactive communication with stakeholders regarding future plans and performance.

ESG APPROACH AND PERFORMANCE CONTINUED

MMG's commitment to the International Council on Mining and Metals (ICMM) Sustainable Development Principles, including the commitment to community dialogue and position on free, prior and informed consent regarding Indigenous people, guides our approach to stakeholder engagement. The Company's responsibilities regarding interactions and contribution to host communities are further defined in the Social Performance Standard.

In 2019, there were no confirmed non-compliance incidents or grievances in relation to human rights that have had a significant impact on the Group.

SUPPLY CHAIN

The Company's supplier engagement and contract award process includes a comprehensive assessment across a range of criteria including commercial, social, safety, environment, quality and technical capabilities. As part of the supplier selection process we also assess a range of non-financial criteria around supporting sustainable development in the regions where we work, including local community training and commitment to local employment.

As part of our supplier engagement process, we seek formal agreement from suppliers to comply with our Code of Conduct and Anti-Corruption Framework as well as all relevant Company Standards, policies and procedures, including the Supply, Fatal Risk Management, Safe Task Management, Social Performance and Environment Standards. In 2019, we regularly reviewed and reported on agreed contract performance measures, as well as identifying and actioning improvement opportunities.

In 2019, there were no confirmed non-compliance incidents or grievances in relation to supply chain management that have had a significant impact on the Group.

PRODUCT STEWARDSHIP

The Company aims to supply metal and metal concentrate products that consistently meet customer quality expectations and that are safe for people and the environment in their intended use. We have processes for managing customer complaints to facilitate timely and satisfactory resolution.

The Product Stewardship Procedure guides our activities to understand the characteristics of our products and manage their potential impacts on human health and the environment during transportation, storage and handling. Shipments of our copper, zinc and lead concentrates have to comply with international maritime legislation and our products are classified in line with the International Maritime Organisation's (IMO) MARPOL Convention Annex V and the International Maritime Solid Bulk Cargoes Code.

The Company's global customers also have a shared responsibility for managing impacts throughout the life cycle of the goods they make from downstream processing of our products.

In 2019, the Group was not aware of any significant incidents of non-compliance with regulations and voluntary codes concerning the provision and use of the Group's products and services that have had a significant impact on the Group.

HEALTH AND SAFETY

MMG's first value is safety and we continually strive to eliminate fatalities, incidents and injuries at our workplaces. The Company's standards and procedures collectively define the way work should be planned, assigned and executed to achieve safe outcomes. These standards include Fatal Risk, Occupational Health and Hygiene, Safe Task Management, contract management (Supply Standard), project management (Project Standard), plant and equipment maintenance (Production and Maintenance Standard), crisis and emergency management (People and Asset Protection Standard) and learning from events (SSHEC Reporting Standard). Our Total Recordable Injury Frequency (TRIF) was 1.58 per million hours worked in 2019.

Despite the Company's commitment to a safety-first culture and to ensuring that supporting behaviours and processes are in place across every area of our operations, we sadly report that we had one fatality in 2019 at Las Bambas operation in Peru. An employee of a transport contractor sustained fatal injuries following an uncontrolled road accident, as part of a convoy headed to Pillones train station.

In 2019, MMG received no significant safety related fines or non-monetary sanctions.

ENVIRONMENT

The Company is committed to minimising its environmental footprint and its use of natural resources. The Company's Environment Standard defines minimum requirements for the management of water, mineral and non-mineral wastes, land, biodiversity and cultural heritage, air, noise and vibration, and all sites are required to comply with these requirements.

The Company's approach to environmental management is based on the principle of continuous improvement and is aligned to the ISO14001. The approach involves identification, assessment and control of material environmental risks across all phases of our business, from exploration through to development, operation and closure. Further, the Environmental Standard sets the benchmark for the efficient use of resources and minimisation of environmental impacts from our operations that include mining, processing and transportation.

Site compliance with the requirements of the Environment Standard is internally audited as part of an integrated assurance process.

We acknowledge human induced climate change and its impacts on the environment, the economy and communities. We are committed to being part of the global solution including through taking actions to reduce emissions and the provision of minerals and metals required in a low carbon future.

Given that MMG does not currently mine energy materials, and the extent to which our operational energy requirements are met through either hydroelectricity or gas fired power, stakeholders have not identified greenhouse gas abatement as a material issue for our business. Our focus on energy efficiency, while driven predominantly by the economic benefits of reduced power requirements in mining and comminution, delivers a secondary benefit of greenhouse gas emission reduction. In addition to this, MMG has commitments at its Kinsevere and Las Bambas operations to support extensive reforestation of our neighbouring lands, which in turn delivers a carbon abatement outcome.

In 2019, there were no significant fines or penalties related to environmental management that have had a significant impact on the Group.

Information and data relating to the type and total air and greenhouse gas emissions, hazardous and non-hazardous waste produced, direct and indirect energy consumption and water consumption are listed in the 2019 Environmental Data section below and are managed in accordance with the Environmental Standard and core principles of ISO14001.

ESG APPROACH AND PERFORMANCE CONTINUED

2019 ENVIRONMENTAL DATA

Consistent with our internal reporting, energy consumption is listed in gigajoules (GJ), emissions to air and waste is reported in tonnes, and water is reported in megalitres (ML). For consistency, ratios are calculated on a per tonne of ore milled or per thousand tonnes of ore milled basis.

* Sepon data was included in MMG totals until 30 November 2018.

TABLE 1: TOTAL ENERGY CONSUMPTION (GJ)

SITE	2019	2018
Dugald River	920,219.74	740,423
Rosebery	752,690.28	691,248
Sepon*	-	2,138,046 (1 January to 30 November)
Las Bambas	11,231,172.98	9,081,012
Kinsevere	1,857,916.73	1,731,361
MMG Total	**14,761,999.74**	**14,382,089**

Note: Energy consumption made up of a mix of sources, including diesel, LPG, on grid electricity, explosives and others.

TABLE 2: ENERGY CONSUMPTION (GJ/TONNES MILLED)

SITE	2019	2018
Dugald River	0.47	0.42
Kinsevere	0.79	0.72
Rosebery	0.73	0.67
Sepon*	-	0.79 (1 January to 30 November)
Las Bambas	0.22	0.18
MMG Total	**0.26**	**0.25**

TABLE 3: DIRECT AND INDIRECT ENERGY CONSUMPTION (GJ)

SITE AND YEAR	DIRECT ENERGY CONSUMPTION	INDIRECT ENERGY CONSUMPTION
Dugald River		
2018	168,945	571,478
2019	171,106	624,105
Kinsevere		
2018	1,052,692	678,669
2019	1,155,708	630,544
Las Bambas		
2018	5,202,059	3,878,953
2019	6,306,985	4,193,816
Rosebery		
2018	216,407	474,841
2019	235,144	476,587
Sepon*		
2018	1,101,951	1,036,094 (1 January to 30 November)
2019	-	-
MMG Total		
2018	**7,754,535**	**6,640,035**
2019	**7,868,943**	**5,925,052**

TABLE 4: TOTAL GREENHOUSE GAS EMISSIONS (TONNES CO_2-E)

SITE AND YEAR	DIRECT GHG EMISSIONS	INDIRECT GHG EMISSIONS	TOTAL
Dugald River			
2018	11,207	125,408	136,615
2019	11,709	113,309	125,018
Kinsevere			
2018	62,464	154	62,619
2019	71,522	143	71,665
Las Bambas			
2018	360,109	271,656	631,765
2019	436,665	293,707	730,372
Rosebery			
2018	14,603	18,466	33,069
2019	15,807	25,153	40,960
Sepon*			
2018	162,862	161,026	323,889 (1 January to 30 November)
2019	-		-
MMG Total			
2018	**611,245**	**576,710**	**1,187,957**
2019	**535,703**	**432,312**	**968,015**

ESG APPROACH AND PERFORMANCE CONTINUED

TABLE 5: GREENHOUSE GAS (GHG) EMISSIONS (TONNES CO2-E/'000 TONNES MILLED)

SITE	2019	2018
Dugald River	63	78
Kinsevere	30.4	26
Rosebery	39.8	32
Sepon*	-	120 (1 January to 30 November)
Las Bambas	14.2	13
MMG Total	**17.1**	**21**

TABLE 6: AIR EMISSIONS (TONNES)

	2019	2018
Oxides of Nitrogen (NO^x)		
Dugald River	101	13
Kinsevere	5,681	2,075
Las Bambas	11,471	18,232
Rosebery	95	101
Sepon*	-	NA
MMG Total	**17,348**	**20,421**
Oxides of Sulphur (SO^x)		
Dugald River	0	0
Kinsevere	4	2
Las Bambas	7	7
Rosebery	0	0
Sepon*	-	NA
MMG Total	**11**	**9**
Particulate Matter (PM^{10})		
Dugald River	312	227
Kinsevere	421	208
Las Bambas	3,630	4,372
Rosebery	302	251
Sepon*	-	NA
MMG Total	**4,665**	**5,058**
Volatile Organic Compounds (VOCs)		
Dugald River	11	2
Kinsevere	445	157
Las Bambas	511	603
Rosebery	7	8
Sepon*	-	NA
MMG Total	**974**	**770**

TABLE 7: TOTAL HAZARDOUS WASTE (TONNES)

SITE	2019	2018
Dugald River	156.42	288
Kinsevere	174.60	66
Rosebery	505.875	473
Sepon*	-	259 (1 January to 30 November)
Las Bambas	2,201.50	2,893
MMG Total	**3,038.395**	**3,979**

TABLE 8: HAZARDOUS WASTE PRODUCED (TONNES/'000 TONNES MILLED)

SITE	2019	2018
Dugald River	0.08	0.164
Kinsevere	0.0741	0.0276
Rosebery	0.491	0.460
Sepon*	-	0.0964 (1 January to 30 November)
Las Bambas	0.0429	0.0585
MMG Total	**0.0536**	**0.0694**

TABLE 9: TOTAL NON-HAZARDOUS WASTE (TONNES)

SITE	2019	2018
Dugald River	2,427.05	3,397
Kinsevere	220.64	555
Rosebery	2,243.32	2,298
Sepon*	-	973 (1 January to 30 November)
Las Bambas	21,386.40	10,751
MMG Total	**26,277.41**	**17,974**

TABLE 10: NON-HAZARDOUS WASTE PRODUCED (TONNES/'000 TONNES MILLED)

SITE	2019	2018
Dugald River	1.2285	1.93
Kinsevere	0.0937	0.230
Rosebery	2.18	2.23
Sepon*	-	0.362 (1 January to 30 November)
Las Bambas	0.417	0.217
MMG Total	**0.464**	**0.314**

ESG APPROACH AND PERFORMANCE CONTINUED

TABLE 11: TOTAL WATER CONSUMPTION (ML)

SITE	2019	2018
Dugald River	2,607	777
Kinsevere	1,815	1,990
Rosebery	522	545
Sepon*	-	3,990 (1 January to 30 November)
Las Bambas	16,105	15,597
MMG Total	**23,987**	**22,898**

TABLE 12: TOTAL WATER CONSUMPTION (ML/'000 TONNES MILLED)

SITE	2019	2018
Dugald River	1.32	0.44
Kinsevere	0.76	0.83
Rosebery	0.51	0.53
Sepon*	-	1.48 (1 January to 30 November)
Las Bambas	0.31	0.32
MMG Total	**0.42**	**0.40**

INDEPENDENT AUDITOR'S REPORT

Deloitte. 德勤

TO THE MEMBERS OF MMG LIMITED
(incorporated in Hong Kong with limited liability)

OPINION

We have audited the consolidated financial statements of MMG Limited (the "Company") and its subsidiaries (collectively referred to as the "Group") set out on pages 98 to 180, which comprise the consolidated statement of financial position as at 31 December 2019, and the consolidated statement of profit or loss, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2019, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the Hong Kong Companies Ordinance.

BASIS FOR OPINION

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the HKICPA. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants (the "Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

INDEPENDENT AUDITOR'S REPORT CONTINUED

TO THE MEMBERS OF MMG LIMITED – CONTINUED

(incorporated in Hong Kong with limited liability)

KEY AUDIT MATTERS – CONTINUED

KEY AUDIT MATTERS	HOW OUR AUDIT ADDRESSED THE KEY AUDIT MATTERS
Impairment of goodwill and property, plant and equipment	

We identified the impairment of goodwill and property, plant and equipment as a key audit matter due to the significance of these balances in the Group's consolidated statement of financial position and the estimation of recoverable amount of each cash generating unit ("CGU") involves complex and subjective management estimates based on management's judgement of key variables and market conditions such as future commodity prices, future foreign exchange rates, future operating performance, the timing and approval of future capital and operating expenditure, and the discount rates.
 	
As at 31 December 2019, the Group has property, plant and equipment of US$10,394.2 million and goodwill of US$528.5 million, accounting for approximately 82.1% and 4.2% of the Group's total assets as at 31 December 2019 respectively, contained within its CGUs as disclosed in notes 2.7, 4.1(c), 14 and 16 to the consolidated financial statements.
 	
Las Bambas and Kinsevere operating performance during the year ended 31 December 2019 gave rise to impairment indicators, which resulted in management's impairment assessment procedures being focused on these CGUs. Following management's assessment, impairment of US$150 million has been recognised against the Kinsevere CGU during the year then ended. No impairment has been recognised against the remaining CGUs for the year ended 31 December 2019.
	Our procedures in relation to the impairment assessment of goodwill and property, plant and equipment included:
	
	– Testing key controls over the valuation of the Group's goodwill and property, plant and equipment, including those to determine asset impairments;
	– Working with valuation specialists to:
	  – Evaluate the appropriateness of the model used by management to calculate the fair value less cost of disposal of the individual CGUs;
	  – Assess and challenge the reasonableness of the key assumptions such as future commodity prices, future foreign exchange rates and discount rates used including agreeing them to external market data; and
	  – Challenge management's sensitivity analysis on key variables (such as commodity pricing).
	– Analysing the future projected cash flows used in the model to determine whether they are reasonable and supportable given the current macroeconomic climate and expected future performance of the CGU;
	– Evaluating the competence and objectivity of management's experts who assisted in the valuation; and
	– Assessing the appropriateness of the related disclosures included in note 14 to the consolidated financial statements

TO THE MEMBERS OF MMG LIMITED – CONTINUED

(incorporated in Hong Kong with limited liability)

KEY AUDIT MATTERS – CONTINUED

KEY AUDIT MATTERS	HOW OUR AUDIT ADDRESSED THE KEY AUDIT MATTERS
Accounting for uncertain tax matters	
We identified the accounting for uncertain tax matters as a key audit matter due to the significant judgement involved in the determination of the tax position and the estimates and assumptions in light of the number of jurisdictions in which the Group operates (i.e. Australia, Peru and Democratic Republic of Congo), including judgement concerning residency of key operations and holding companies, provisioning for tax exposures, application of transfer pricing rules, the recognition of deferred income tax assets and the taxation impacts of any corporate restructurings. This gives rise to complexity and uncertainty in respect of the calculation of income taxes and deferred tax assets and consideration of contingent liabilities associated with tax years open to audit. As at 31 December 2019, the Group operates across a number of jurisdictions and is subject to periodic challenges by local tax authorities on a range of tax matters during the normal course of business, including transfer pricing, indirect taxes, change of taxation laws, and transaction related tax matters as disclosed in notes 4.2(a) and 37 to the consolidated financial statements.	Our procedures in relation to the accounting for uncertain tax matters included: – Testing key controls relating to the accounting for and the disclosure of tax related transactions and matters; – Working with our tax specialists in Australia, Peru and Democratic Republic of Congo to evaluate the Group's tax obligations, review tax computations of the Group, obtain an understanding of the current status of tax audits and reviews and monitor developments in ongoing tax disputes; – Challenging management's process and assessment for identifying uncertain tax matters, provisioning for tax exposures and determining the recoverability of capitalised unused tax losses and tax receivables; – Reading recent rulings, correspondence with local tax authorities and the advices from management's external tax advisors with the assistance from our tax specialists, to evaluate whether the tax provisions had been appropriately recorded or adjusted to reflect the latest developments; and – Assessing the appropriateness of the related disclosures included in notes 4.2(a) and 37 to the consolidated financial statements.

TO THE MEMBERS OF MMG LIMITED – CONTINUED
(incorporated in Hong Kong with limited liability)

KEY AUDIT MATTERS – CONTINUED

KEY AUDIT MATTERS	HOW OUR AUDIT ADDRESSED THE KEY AUDIT MATTERS
Going concern basis	
We identified the going concern basis as a key audit matter as it is dependent on the quantum of positive cash flows generated from the Group's mining operations for the 12 months following the approval of the annual financial statements and the refinancing of its debts. The Group management has prepared a cash flow forecast which involves inherent complex and subjective management judgements and estimates based on management's input of key variables and market conditions. As set out in note 2.1(a) to the consolidated financial statements, notwithstanding the fact that the Group expects to continue to generate positive operating cash flows for the 12 months following the approval of the annual financial statements, with benefit of recent and forecast improvements in commodity prices, the Group's ability to transfer cash generated in certain regions to the rest of the Group is subject to satisfying certain conditions and the Group has debts with an aggregate principal amount of US$780.8 million as at 31 December 2019 maturing within the next 12 months which will need to be refinanced or repaid and replaced. As set out in notes 2.1(a) and 33.1(e) to the consolidated financial statements, the Group has various funding options available to it should a need arise, including the financial support from its major shareholder	Our procedures in relation to the going concern basis of the Group included: – Testing key controls over the cash flow forecasts performed by the management and associated disclosures; – Challenging the key assumptions in management's forecast cash flows for the next 12 months (base case and downside scenarios); – Comparing the cash flow forecasts against the budget approved by the board of directors of the Company; – Assessing the historical accuracy of forecasts prepared by the Group management; – Agreeing the Group's committed debt facilities to supporting documents; – Evaluating stress tests for a range of reasonably possible scenarios on management's cash flow and covenant compliance forecasts for the 12 months following the approval of the annual financial statements; – Challenging management's plans for mitigating any identified exposures, including their ability to amend the terms of their existing financing arrangements or obtain additional sources of financing; – Obtaining a letter from the Company's major shareholder which confirmed its financial support to the Group should the Group be unable to pay its debts; and – Assessing the appropriateness of the disclosures included in note 2.1(a) to the consolidated financial statements.

TO THE MEMBERS OF MMG LIMITED – CONTINUED

(incorporated in Hong Kong with limited liability)

OTHER INFORMATION

The directors of the Company are responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

RESPONSIBILITIES OF DIRECTORS AND THOSE CHARGED WITH GOVERNANCE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The directors of the Company are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with HKFRSs issued by the HKICPA and the Hong Kong Companies Ordinance, and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion solely to you, as a body, in accordance with section 405 of the Hong Kong Companies Ordinance, and for no other purpose. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with HKSAs, we exercise professional judgement and maintain professional skepticism throughout the audit. We also:

– Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

– Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

INDEPENDENT AUDITOR'S REPORT
CONTINUED

TO THE MEMBERS OF MMG LIMITED – CONTINUED
(incorporated in Hong Kong with limited liability)

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS – CONTINUED

– Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

– Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

– Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

– Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in the independent auditor's report is Tsang Yiu Chung.

Deloitte Touche Tohmatsu
Certified Public Accountants
Hong Kong

4 March 2020

FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

	NOTES	YEAR ENDED 31 DECEMBER 2019 US$ MILLION	2018 US$ MILLION
Continuing operations			
Revenue	5	3,032.3	3,670.2
Other income	6	14.0	20.6
Expenses (excluding depreciation and amortisation)	7	(1,584.8)	(1,939.6)
Earnings before interest, income tax, depreciation and amortisation – EBITDA		**1,461.5**	**1,751.2**
Depreciation and amortisation expenses	7	(969.6)	(918.1)
Impairment expense	14	(150.0)	-
Earnings before interest and income tax – EBIT		**341.9**	**833.1**
Finance income	8	11.2	6.8
Finance costs	8	(523.1)	(533.7)
(Loss)/profit before income tax		**(170.0)**	**306.2**
Income tax expense	9	(25.3)	(169.6)
(Loss)/profit for the year from continuing operations		**(195.3)**	**136.6**
Profit for the year from discontinued operation	10	**-**	**0.8**
(Loss)/profit for the year		**(195.3)**	**137.4**
(Loss)/profit for the year attributable to:			
Equity holders of the Company		**(230.4)**	**68.3**
– From continuing operations		(230.4)	64.8
– From discontinued operation	10	-	3.5
Non-controlling interests		**35.1**	**69.1**
– From continuing operations		35.1	71.8
– From discontinued operation	10	-	(2.7)
		(195.3)	**137.4**
(Loss)/earnings per share for (loss)/profit attributable to equity holders of the Company			
Basic (loss)/earnings per share	11	**US (2.86) cents**	**US 0.85 cents**
– From continuing operations		US (2.86) cents	US 0.81 cents
– From discontinued operation		-	US 0.04 cents
Diluted (loss)/earnings per share	11	**US (2.86) cents**	**US 0.84 cents**
– From continuing operations		US (2.86) cents	US 0.80 cents
– From discontinued operation		-	US 0.04 cents

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	YEAR ENDED 31 DECEMBER	
	2019 US$ MILLION	2018 US$ MILLION
(Loss)/profit for the year	**(195.3)**	**137.4**
Total comprehensive (loss)/income for the year	**(195.3)**	**137.4**
Total comprehensive (loss)/income for the year attributable to:		
Equity holders of the Company	**(230.4)**	**68.3**
– From continuing operations	(230.4)	64.8
– From discontinued operation	-	3.5
Non-controlling interests	**35.1**	**69.1**
– From continuing operations	35.1	71.8
– From discontinued operation	-	(2.7)
	(195.3)	**137.4**

The accompanying notes are an integral part of these consolidated financial statements.

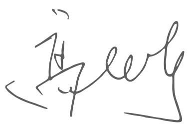
CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	NOTES	AT 31 DECEMBER 2019 US$ MILLION	2018 US$ MILLION
ASSETS			
Non-current assets			
Property, plant and equipment	14	10,394.2	10,897.7
Right-of-use assets	15	140.6	-
Intangible assets	16	567.5	596.0
Inventories	19	106.4	75.8
Deferred income tax assets	20	180.4	178.1
Other receivables	21	210.3	231.7
Other financial assets	22	3.1	3.3
Total non-current assets		**11,602.5**	**11,982.6**
Current assets			
Inventories	19	382.2	203.9
Trade and other receivables	21	361.6	412.7
Current income tax assets		101.3	54.3
Cash and cash equivalents	23	217.5	601.9
Total current assets		**1,062.6**	**1,272.8**
Total assets		**12,665.1**	**13,255.4**
EQUITY			
Capital and reserves attributable to equity holders of the Company			
Share capital	24	2,912.2	2,910.8
Reserves and retained profits	25	(1,900.0)	(1,653.7)
		1,012.2	**1,257.1**
Non-controlling interests	18	1,665.7	1,639.2
Total equity		**2,677.9**	**2,896.3**

The accompanying notes are an integral part of these consolidated financial statements.

	NOTES	AT 31 DECEMBER 2019 US$ MILLION	2018 US$ MILLION
LIABILITIES			
Non-current liabilities			
Borrowings	26	6,853.7	7,446.4
Lease liabilities	27	138.3	-
Provisions	28	471.3	416.8
Other financial liabilities	29	135.7	136.6
Deferred income tax liabilities	20	880.0	933.4
Total non-current liabilities		**8,479.0**	**8,933.2**
Current liabilities			
Borrowings	26	774.6	685.0
Lease liabilities	27	22.5	-
Provisions	28	117.4	214.0
Trade and other payables	30	591.3	508.1
Current income tax liabilities		2.4	18.8
Total current liabilities		**1,508.2**	**1,425.9**
Total liabilities		**9,987.2**	**10,359.1**
Net current liabilities		**(445.6)**	**(153.1)**
Total equity and liabilities		**12,665.1**	**13,255.4**

The accompanying notes are an integral part of these consolidated financial statements.



GAO XIAOYU
CEO AND EXECUTIVE DIRECTOR

XU JIQING
NON-EXECUTIVE DIRECTOR

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

US$ MILLION	SHARE CAPITAL (NOTE 24)	TOTAL RESERVES (NOTE 25)	RETAINED PROFITS/ (ACCUMULATED LOSSES) (NOTE 25)	TOTAL	NON-CONTROLLING INTERESTS (NOTE 18)	TOTAL EQUITY
	ATTRIBUTABLE TO EQUITY HOLDERS OF THE COMPANY					
At 1 January 2019	**2,910.8**	**(1,898.0)**	**244.3**	**1,257.1**	**1,639.2**	**2,896.3**
HKFRS 16 adjustment on retained profits (Note 3)	-	-	(15.7)	**(15.7)**	(8.6)	**(24.3)**
Restated balance at 1 January 2019	**2,910.8**	**(1,898.0)**	**228.6**	**1,241.4**	**1,630.6**	**2,872.0**
(Loss)/profit for the year	-	-	(230.4)	**(230.4)**	35.1	**(195.3)**
Total comprehensive (loss)/ income for the year	**-**	**-**	**(230.4)**	**(230.4)**	**35.1**	**(195.3)**
Employee share options exercised and vested	1.4	(0.2)	-	**1.2**	-	**1.2**
Employee share options lapsed	-	(0.9)	0.9	**-**	-	**-**
Total transactions with owners	**1.4**	**(1.1)**	**0.9**	**1.2**	**-**	**1.2**
At 31 December 2019	**2,912.2**	**(1,899.1)**	**(0.9)**	**1,012.2**	**1,665.7**	**2,677.9**

US$ MILLION	SHARE CAPITAL (NOTE 24)	TOTAL RESERVES (NOTE 25)	RETAINED PROFITS (NOTE 25)	TOTAL	NON-CONTROLLING INTERESTS (NOTE 18)	TOTAL EQUITY
	ATTRIBUTABLE TO EQUITY HOLDERS OF THE COMPANY					
At 1 January 2018	**2,874.1**	**(1,892.4)**	**201.7**	**1,183.4**	**1,759.6**	**2,943.0**
Profit for the year	-	-	68.3	**68.3**	69.1	**137.4**
Total comprehensive income for the year	**-**	**-**	**68.3**	**68.3**	**69.1**	**137.4**
Provision of surplus reserve	-	19.3	(19.3)	**-**	-	**-**
Redemption of convertible redeemable preference shares	-	-	-	**-**	(142.0)	**(142.0)**
Disposal of a subsidiary	-	-	(7.7)	**(7.7)**	(20.3)	**(28.0)**
Dividends paid to non-controlling interests from discontinued operation	-	-	-	**-**	(27.2)	**(27.2)**
Employee share options/ performance awards exercised and vested	36.7	(27.5)	-	**9.2**	-	**9.2**
Employee share options lapsed	-	(1.3)	1.3	**-**	-	**-**
Employee long-term incentives	-	3.9	-	**3.9**	-	**3.9**
Total transactions with owners	**36.7**	**(5.6)**	**(25.7)**	**5.4**	**(189.5)**	**(184.1)**
At 31 December 2018	**2,910.8**	**(1,898.0)**	**244.3**	**1,257.1**	**1,639.2**	**2,896.3**

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

	NOTES	YEAR ENDED 31 DECEMBER 2019 US$ MILLION	2018 US$ MILLION
Cash flows from operating activities			
Receipts from customers		3,470.8	4,262.1
Payments to suppliers and employees		(2,090.4)	(2,392.9)
Payments for exploration expenditure		(37.7)	(47.5)
Income tax paid		(197.6)	(90.2)
Net cash generated from operating activities	31	**1,145.1**	**1,731.5**
Cash flows from investing activities			
Purchase of property, plant and equipment	31	(476.3)	(332.1)
Purchase of intangible assets	16	(0.1)	(5.4)
Proceeds from repayments of loan to a related party		-	120.0
Proceeds from disposal of subsidiary, net	10	-	113.9
Payments of support package associated with disposal of Century mine		(8.1)	(8.9)
Proceeds from disposal of financial assets		-	3.2
Proceeds from disposal of property, plant and equipment		3.7	4.4
Net cash used in investing activities		**(480.8)**	**(104.9)**
Cash flows from financing activities			
Proceeds from borrowings	26	225.0	370.0
Repayments of borrowings	26	(736.4)	(1,228.8)
Payments on redemption of convertible redeemable preference shares		-	(338.0)
Proceeds from shares issued upon exercise of employee share options		1.2	9.2
Repayment of lease liabilities	27	(40.7)	-
Dividends paid to non-controlling interests from discontinued operation		-	(27.2)
Interest and financing costs paid on external borrowings		(369.3)	(366.6)
Interest and financing costs paid on related party borrowings		(99.2)	(376.3)
Withholding taxes paid in respect of financing arrangements		(40.6)	(16.7)
Interest received		11.3	13.6
Net cash used in financing activities		**(1,048.7)**	**(1,960.8)**
Net decrease in cash and cash equivalents		**(384.4)**	**(334.2)**
Cash and cash equivalents at 1 January		601.9	936.1
Cash and cash equivalents at 31 December	23	**217.5**	**601.9**

The accompanying notes are an integral part of these consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. GENERAL INFORMATION

MMG Limited (the "Company") is a limited liability company and was incorporated in Hong Kong on 29 July 1988. The address of its registered office is Units 8506A, Level 85, International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong. The principal place of business of the Company is disclosed in the Corporate Information section to the Group's 2019 Annual Report.

The Company is an investment holding company listed on the main board of The Stock Exchange of Hong Kong Limited ("HKEx"). The Company was listed on the Australian Securities Exchange ("ASX") until it was delisted from the ASX on 4 December 2019.

The Company and its subsidiaries (the "Group") are engaged in the exploration, development and mining of copper, zinc, gold, silver and lead deposits around the world.

The consolidated financial statements for the year ended 31 December 2019 are presented in United States dollars ("US$") unless otherwise stated and were approved for issue by the Board of Directors of the Company (the "Board") on 4 March 2020.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below and in Note 3. These policies have been consistently applied to all the years presented, unless otherwise stated.

2.1 BASIS OF PREPARATION

The consolidated financial statements of the Group have been prepared in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") – a collective term that includes all applicable individual Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards ("HKAS") and Interpretations issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"). These consolidated financial statements have been prepared under the historical cost convention, except for financial assets and financial liabilities at fair value through profit or loss, which are measured at fair value.

The preparation of financial statements in accordance with HKFRSs requires the use of certain critical accounting estimates. It also requires management to exercise their judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 4.

(a) Going Concern

The consolidated financial statements have been prepared on the going concern basis which assumes the continuity of normal business activity and the realisation of assets and the settlement of liabilities in the normal course of business. Management continues to closely monitor the liquidity position of the Group, which includes the sensitised analysis of forecast cash balances for key financial risks (including commodity and foreign exchange risks) over the short and medium term to ensure adequate liquidity is maintained.

For the year ended 31 December 2019, the Group generated a net loss of US$195.3 million (2018: net profit of US$136.6 million) from continuing operations. The loss result reflects operational challenges at Kinsevere, with a US$150.0 million impairment expense recorded in relation to the copper oxide operation which is approaching the end of life, lower commodity prices and lower sales volumes following intermittent community road blockades near the Las Bambas mine site in Peru.

At 31 December 2019, the Group had net current liabilities of US$445.6 million (2018: US$153.1 million), generated operating cashflows of US$1,145.1 million (2018: US$1,731.5 million) and a total cash outflow of US$384.4 million (2018: US$334.2 million) after investing and financing cash flows. Cash flow forecasts, which assume the continuity of normal business activity, indicate that the Group will have sufficient liquidity to meet its operational, existing contractual debt service and capital expenditure requirements for the 12 month period from the approval of the consolidated financial statements.

In addition, the Directors of the Company (the "Directors") note the following considerations, relevant to the Group's ability to continue as a going concern:

- At 31 December 2019, total cash and cash equivalents of US$217.5 million were held by the Group;

- The strong ongoing support of the Group's major shareholder, China Minmetals Corporation ("CMC"). This has been demonstrated by an agreement approved with Top Create Resources Limited (a subsidiary of CMC) in December 2019, whereby the maturity of the existing US$100.0 million working capital facility was extended from January 2020 to a revised maturity date of April 2021. At 31 December 2019 this facility was undrawn (2018: US$100 million drawn).
- The ongoing trading support of the China Minmetals Non-ferrous Metals Co., Ltd ("CMN") and joint venture partner CITIC Metal Peru Investment Limited ("CITIC") each as direct or indirect off-takers of Las Bambas production. This has been demonstrated by an agreement entered into with each party for early payment on cargos already shipped and invoiced as well as prepayments for inventory held at both port and site. Early payment and prepayments are permitted up to an aggregate amount of US$200.0 million until 31 December 2020, allocated to each party in their respective off-take proportions;
- At 31 December 2019, the Group (excluding the Las Bambas Joint Venture Group) had available debt facility of US$300.0 million (2018: US$300.0 million) represented by a revolving credit facility provided by Industrial and Commercial Bank of China Ltd ("ICBC"), Melbourne Branch, maturing in December 2020, for general corporate purposes. At 31 December 2019, US$180.0 million (2018: nil) was drawn, with US$120.0 million (2018: US$300.0 million) undrawn and available;
- At 31 December 2019, the Las Bambas Joint Venture Group had available undrawn debt facilities of US$350.0 million (2018: US$350.0 million). The US$350.0 million Bank of China Limited, Sydney Branch ("BOC Sydney") working capital revolving facility matured in March 2019 and was replaced in August 2019 by US$175.0 million BOC Sydney revolving credit facility and US$175.0 million ICBC, Luxembourg Branch ("ICBC Luxembourg") revolving credit facility. Both these replacement facilities are scheduled to mature during August 2022; and
- In the event forecast cash flow is not achieved or that existing or new debt facilities are insufficient or not obtained within time, the Group has the support of its major shareholder, CMC. In this circumstance, support to the Group may be in the form of providing additional debt facilities, deferral of debt service and repayment obligations in relation to existing shareholder loans from CMC, or through further equity contributions.

As a result, the Directors are of the view that the Group will be able to meet its debts as and when they fall due and accordingly the Directors have prepared the consolidated financial statements on a going concern basis.

(b) Adoption of new standards and amendments to HKFRSs for the first time in 2019

HKFRS 16	Leases

Further details on impact of the adoption of HKFRS 16 and the consequent new accounting policies have been disclosed in Notes 2.8 and 3.

(c) Amendments to existing standards effective and adopted in 2019 but not relevant or significant to the Group

HK(IFRIC) - Int 23	Uncertainty over income tax treatments
Amendments to HKFRS 9	Prepayment features with negative compensation
Amendments to HKAS 19	Plan amendment, curtailment or settlement
Amendments to HKAS 28	Long-term interests in associates and joint ventures
Amendments to HKFRS	Annual improvements to HKFRSs 2015–2017 cycle

(d) New standards and amendments to standards that have been issued but not yet effective or early adopted by the Group

The Group has not early adopted the following new standards and amendments to standards that have been issued but are not effective for financial year 2019. The Group does not expect them to have a material impact to the Group's financial results.

Amendments to HKAS 1 and HKAS 8	Definition of Material[(a)]
Amendments to HKFRS 9, HKAS 39 and HKFRS 7	Interest Rate Reform[(a)]
HKFRS 17	Insurance Contracts[(b)]
Amendments to HKFRS 3	Definition of a Business[(c)]
Amendments to HKFRS 10 and HKAS 28	Sale or contribution of assets between an investor and its associate or joint venture[(d)]

Effective for the Group for annual period beginning on:

(a) 1 January 2020

(b) 1 January 2021

(c) business combinations and asset acquisitions for which the acquisition date is on or after the beginning of the first annual period beginning on or after 1 January 2020

(d) to be determined

2.2 CONSOLIDATION

(a) Acquisition method of accounting for non-common control combination

The Group applies the acquisition method of accounting to account for business combinations other than common control combinations. The purchase consideration for the acquisition of a subsidiary is the fair value of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the Group. The purchase consideration includes the fair value of any asset or liability resulting from a contingent consideration arrangement and the fair value of any pre-existing equity interest in the subsidiaries. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date, which is the date on which control is obtained. On an acquisition-by-acquisition basis, the Group recognises any non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the recognised amounts of the acquiree's identifiable net assets.

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date; any gains or losses arising from such remeasurement are recognised in profit or loss or other comprehensive income, as appropriate.

The excess of purchase consideration, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired are recorded as goodwill. If the total of purchase consideration, non-controlling interest recognised and previously held interest measured are less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the difference is recognised directly in the consolidated statement of profit or loss.

(b) Subsidiaries

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The Group has power over an entity when it has existing rights to direct the relevant activities that significantly affect the entity's returns. The subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

Inter-company transactions, balances, income and expenses on transactions between Group companies are eliminated. Profits and losses resulting from inter-company transactions that are recognised in assets are also eliminated. Accounting policies of subsidiaries are consistent with the policies adopted by the Group.

(c) Transactions with non-controlling interests

Transactions with non-controlling interests that do not result in loss of control are accounted for as equity transactions – that is, as transactions with the owners in their capacity as owners. The difference between fair value of any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

When the Group loses control of a subsidiary, a gain or loss is recognised in profit or loss and is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary and any non-controlling interests. All amounts previously recognised in other comprehensive income in relation to that subsidiary are accounted for as if the Group had directly disposed of the related assets or liabilities of the subsidiary (i.e. reclassified to profit or loss or transferred to another category of equity as specified/permitted by applicable HKFRSs). The fair value of any investment retained in the former subsidiary at the date when the control is lost is regarded as the fair value on initial recognition for subsequent accounting under HKFRS 9, when applicable, the cost on initial recognition of an investment in an associate or a joint venture.

When the Group ceases to have control, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value is the initial carrying amount for the purposes of subsequent accounting for the retained interest as an associate, joint arrangement or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognised in other comprehensive income are reclassified to profit or loss.

(d) Separate financial statements

Investments in subsidiaries are accounted for at cost less impairment. Cost is adjusted to reflect changes in consideration arising from contingent consideration amendments. Cost also includes directly attributable costs of the investment. The results of subsidiaries are accounted for by the Company on the basis of dividend received and receivable.

2.3 SEGMENT REPORTING

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Executive Committee of the Company.

2.4 FOREIGN CURRENCY TRANSLATION

(a) Functional and presentation currency

Items included in the financial statements of each Group entity are measured using the currency of the primary economic environment in which the entity operates (functional currency). The functional currency of the Company is US$, which is also the presentation currency of the Group.

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or reporting date where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year-end exchange rates are recognised in the consolidated statement of profit or loss.

2.5 PROPERTY, PLANT AND EQUIPMENT

Cost

Property, plant and equipment is stated at historical cost less accumulated depreciation and impairment losses, if any. Historical cost includes expenditure that is directly attributable to the acquisition of the items and costs incurred in bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. The cost of property, plant and equipment includes the estimated cost of mine rehabilitation, restoration and dismantling.

Depreciation and amortisation

The major categories of property, plant and equipment are depreciated over the estimated useful lives of the assets on a unit of production or reducing balance basis as indicated below. The useful lives below are subject to the lesser of the asset categories' useful life and the life of the mine:

- Freehold land – Not depreciated or unit of production (tonnes mined) as applicable;
- Buildings – straight line over the useful life of the asset as applicable which do not exceed 40 years;
- Plant and machinery – Units-of-production (tonnes mined or milled) or straight line over the useful life of the asset as applicable which do not exceed 20 years;
- Mine property and development assets – Units-of-production (tonnes mined or milled);
- Exploration and evaluation assets – Not depreciated; and
- Construction in progress – Not depreciated.

Depreciation and amortisation commence when an asset is available for use.

The units-of-production method is applied based on assessments of proven and probable Ore Reserves and a portion of Mineral Resources available to be mined or processed by the current production equipment to the extent that such resources are considered to be economically recoverable. Resource and Reserves estimates are reviewed annually.

(a) Exploration and evaluation assets

Exploration and evaluation activities include expenditure to identify potential Mineral Resources, determine the technical feasibility and assess the commercial viability of the potential Mineral Resources.

Exploration and evaluation costs that are incurred before the Group has obtained the legal right to explore an area, or are incurred up to and including the pre-feasibility phase, are recognised in the consolidated statement of profit or loss. Subsequent exploration and evaluation costs are capitalised as exploration and evaluation asset.

Exploration and evaluation costs that relate to an area of interest acquired as part of an asset acquisition or business combination are capitalised and the exploration and evaluation asset is measured at fair value on acquisition.

Exploration and evaluation assets are treated as tangible assets and classified as part of property, plant and equipment. As the assets are not yet ready for use they are not depreciated.

Exploration and evaluation assets are carried forward if the rights to the area of interest are current and the expenditures are expected to be recouped through successful development and exploitation of the area of interest, or alternatively by the sale of the asset. Exploration and evaluation assets shall no longer be classified as such when the technical feasibility and commercial viability of extracting a mineral resource are demonstrable.

The assets are monitored for indications of impairment and an assessment is performed where an indicator of impairment exists. For the purpose of the impairment testing, exploration and evaluation assets are allocated to cash-generating units (CGU) to which the exploration activity relates.

(b) Development expenditure

Once the technical feasibility and commercial viability of the development of an area of interest are demonstrable, exploration and evaluation assets attributable to that area of interest are first tested for impairment and then reclassified to construction in progress within property, plant and equipment.

The following assets are classified directly as mine property and development assets from the commencement of development:

- Mineral rights balances representing identifiable exploration and evaluation assets including Mineral Resources and Ore Reserves acquired as part of a business combination and recognised at fair value at the date of acquisition; and
- Mine rehabilitation, restoration and dismantling assets.

All subsequent expenditure to develop the mine to the production phase is capitalised and classified as construction in progress. On completion of development, construction in progress balances are reclassified to land and buildings, plant and machinery or mine property and development categories of property, plant and equipment as appropriate.

(c) Overburden and waste removal

Overburden and other waste removal costs incurred in the development phase of a mine before production commences are initially capitalised as part of construction in progress. At the completion of development, costs are transferred to the mine property and development category of property, plant and equipment.

The Group defers a portion of waste removal costs incurred during the production phase of an open-pit operation as part of determining the cost of inventories. Current period waste mining expenses are allocated between current period inventory and deferred waste assets based on the ratio of waste tonnes mined to ore tonnes mined (waste to ore ratio). The amount of deferred waste asset is calculated for each separate component of the ore body identified based on mine plans. Current period expenses are deferred to the extent that the current period waste to ore ratio exceeds the life-of-mine waste to ore ratio for the identified component of ore body. Deferred waste assets are categorised in the mine property and development category of property, plant and equipment and are amortised over the life of the component on a units-of-production basis. Changes to estimates are accounted for prospectively.

(d) Other expenditure

When further development expenditure is incurred in respect of the mine property after the commencement of the production phase, or additional property, plant and equipment are acquired, such expenditure is capitalised and carried forward only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably.

Major spare parts are carried as property, plant and equipment when an entity expects to use them during more than one period or when they can be used only in connection with an item of property, plant and equipment. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are expensed in the consolidated statement of profit or loss during the accounting period in which they are incurred.

(e) Disposal of property, plant and equipment

On disposal of an item of property, plant and equipment, the difference between the disposal proceeds and the carrying amount of the asset is recognised as a gain or loss in the consolidated statement of profit or loss within other income.

2.6 INTANGIBLE ASSETS

(a) Goodwill

Goodwill arises on the acquisition of subsidiaries and represents the excess of the purchase consideration over the interest of the Group in the fair value of the identifiable assets, liabilities and contingent liabilities of the acquiree and the non-controlling interest in the acquiree.

Goodwill is not amortised and is tested for impairment annually (refer to Note 2.7). For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the CGUs, or groups of CGUs, that is expected to benefit from the synergies of the acquisition. Each unit or group of units to which the goodwill is allocated, represents the lowest level within the entity at which the goodwill is monitored for internal management purposes. Goodwill is monitored at the operating segment level.

(b) Software development

Development costs that are directly attributable to the design, testing and deployment of identifiable and unique software products controlled by the Group are recognised as intangible assets when the following criteria are met:

- It is technically feasible to complete the software product so that it will be available for use;
- Management intends to complete the software product and use or sell it;
- There is an ability to use or sell the software product;
- It can be demonstrated how the software product will generate probable future economic benefits;
- Adequate technical, financial and other resources to complete the development and to use or sell the software product are available; and
- The expenditure attributable to the software product during its development can be reliably measured.

Directly attributable costs include direct materials, employee costs, services and an appropriate portion of relevant overheads.

Other development expenditure that does not meet these criteria and costs associated with maintaining computer software programs is recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period.

Software development assets are amortised over their estimated useful lives, which do not exceed seven years.

2.7 IMPAIRMENT OF NON-FINANCIAL ASSETS

All intangible assets that have an indefinite useful life, for example goodwill, or are not ready for use are tested annually for impairment or more frequently if events or changes in circumstances indicate a potential impairment.

Other non-financial assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

An impairment loss is recognised for the amount by which the carrying amount of the asset exceeds its recoverable amount. The recoverable amount is the higher of the fair value less costs of disposal and value in use of an asset. For the purposes of impairment assessment, assets are grouped at the lowest levels for which there are separately identifiable cash flows.

Any impairment loss related to goodwill is recognised immediately as an expense and is not subsequently reversed. Any impairment loss related to non-financial assets other than goodwill is reviewed and may be reversed at subsequent reporting dates. A reversal of previously recognised impairment loss is limited to the lesser of the amount that would not cause the carrying amount to exceed its recoverable amount or the carrying amount that would have been determined (net of accumulated depreciation) had no impairment loss been recognised.

2.8 LEASES

A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

For contracts entered into or modified on or after 1 January 2019, the Group assesses whether a contract is or contains a lease based on the definition under HKFRS 16 Leases at inception or modification date. The contracts are not reassessed unless the terms and conditions of the contract subsequently change.

For a contract that contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

The Group applies the short-term lease recognition exemption to leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option. It also applies the recognition exemption for lease of low-value assets. Lease payments on short-term leases and leases of low-value assets are recognised as an expense on a straight-line basis over the lease term.

(a) Right-of-use assets

Except for short-term leases and leases of low value assets, the Group recognises right-of-use assets at the commencement date of the lease (i.e. the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities.

The cost of right-of-use asset includes:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentives received;
- any initial direct costs incurred by the Group; and
- an estimate of costs to be incurred by the Group in dismantling and removing the underlying assets, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease.

Right-of-use asset in which the Group is reasonably certain to obtain ownership of the underlying leased asset at the end of the lease term is depreciated from commencement date to the end of the useful life.

Otherwise, right-of-use asset is depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term. The Group presents right-of-use assets as a separate line item on the consolidated statement of financial position.

(b) Lease liabilities

At the commencement date of a lease, the Group recognises and measures the lease liability at the present value of lease payments that are unpaid at that date. In calculating the present value of lease payments, the Group uses the incremental borrowing rate ("IBR") at the lease commencement date if the interest rate implicit in the lease is not readily determinable.

The lease payments include:

– fixed payments (including in-substance fixed payments) less any lease incentives receivable;
– variable lease payments that depend on an index or a rate;
– amounts expected to be paid under residual value guarantees;
– the exercise price of a purchase option reasonably certain to be exercised by the Group; and
– payments of penalties for terminating a lease, if the lease term reflects the Group exercising the option to terminate.

Variable lease payments that reflect changes in market rental rates are initially measured using the market rental rates at the commencement date. Variable lease payments that do not depend on an index or a rate are not included in the measurement of lease liabilities and right-of-use assets and are recognised as expense in the period on which the event or condition that triggers the payment occurs.

After the commencement date, lease liabilities are adjusted by interest accretion and lease payments. The Group remeasures lease liabilities (and makes a corresponding adjustment to the related right-of-use assets) whenever:

– the lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the related lease liability is remeasured by discounting the revised lease payments using a revised discount rate at the date of reassessment.
– the lease payments change due to changes in rental rates, in which case the related lease liability is remeasured by discounting the revised lease payments using the initial discount rate.

(c) Lease modifications

The Group accounts for a lease modification as a separate lease if:

– the modification increases the scope of the lease by adding the right to use one or more underlying assets; and
– the consideration for the leases increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract.

For a lease modification that is not accounted for as a separate lease, the Group remeasures the lease liability based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification.

(d) Significant judgements

The Group applies significant judgement and estimates in accounting for leases under HKFRS 16. These include:

– Determining whether a contract contains a lease component:

  Certain contracts require management to exercise judgement in applying HKFRS 16 requirements to determine whether an identified asset exists for which MMG utilises substantially all the economic benefits and whether MMG may have a right to use or direct use of that asset. Management conclusion as to whether a lease component exists or not may thus be subjective.

– Determining the discount rate to calculate present value of lease liability:

  HKFRS 16 requires management to discount future lease payments in order to calculate the lease liability at commencement date. HKFRS 16 requires management to utilise the interest rate implicit in the lease as the discount rate. However, if such a rate is not readily available, HKFRS 16 allows for using an IBR. The Group considered the relevant requirements of

HKFRS 16 and has applied the IBR approach to discounting the leases at inception (1 January 2019) and subsequently during the year as well. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of similar value to the right-of-use assets in a similar economic environment. Management undertakes its best effort in determining such a rate, using internally and externally available data. IBR rates applied can significantly impact the value of the right-of-use of asset and the lease liability. In respect of any future new leases (or upon certain changes in existing leases) IBR would be determined for those leases based on the circumstances existing as of that date.

– Determining the lease term of contracts with renewal options:

The Group determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease, if it is reasonably certain not to be exercised. Where the Group has an option to lease the assets for additional terms, management applies judgement at commencement of the lease in evaluating whether it is reasonably certain to exercise the option to renew, considering the economic environment, business needs and financial impacts. Re-assessment of management's assumption on exercising the extension option is undertaken upon the occurrence of either a significant event or significant change in circumstances that is within the control of the Group and affects the assessment. Including or excluding the terms covered under the options as above may significantly impact the value of the right-of-use of asset and the lease liability.

2.9 FINANCIAL ASSETS

Classification

Classification of financial assets depends on the Group's business model for managing its financial assets and the contractual terms of the cash flows. The Group classifies its financial assets as:

– financial assets measured at amortised cost, or

– financial assets measured at fair value.

Gains or losses of assets measured at fair value will be recognised either through profit or loss ("FVTPL") or through other comprehensive income ("FVTOCI"). For financial assets measured at FVTOCI, impairment allowances are recognised in profit or loss with corresponding adjustment to other comprehensive income without reducing the carrying amounts of these financial assets.

(a) Amortised cost

A financial asset shall be measured at amortised cost if it is held within a business model the objective of which is to hold financial assets in order to collect contractual cash flows and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

(b) Financial assets at fair value through other comprehensive income (FVOCI)

A financial asset shall be measured at fair value through other comprehensive income if it is held within a business model objective of which is achieved by both collecting contractual cashflows and selling financial assets and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

(c) Financial assets at fair value through profit or loss (FVTPL)

A financial asset shall be measured at FVTPL unless it is measured at amortised cost or at fair value through other comprehensive income.

Recognition and measurements

Regular purchases and sales of financial assets are recognised on the trade-date being the date on which the Group commits to purchase or sell the asset. Investments are initially recognised at fair value plus transaction costs for all financial assets not carried at FVTPL. Financial assets carried at fair value through profit or loss are initially recognised at fair value and transaction costs are expensed in the consolidated statement of profit or loss. Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred and the Group has transferred substantially all risks and rewards of ownership. Financial assets at fair value through profit or loss are subsequently carried at fair value. Financial assets at amortised cost are measured at initial recognition minus the principal repayments, plus or minus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount and, for financial assets, adjusted for any loss allowance.

Gains or losses arising from changes in the fair value of the financial assets at fair value through profit or loss are presented in the consolidated statement of profit or loss within expenses in the period in which they arise. The net gain or loss recognised in profit or loss arising from changes in the fair value of the financial assets at fair value through profit or loss excludes any dividend income. Dividend income from financial assets at fair value through profit or loss is recognised in the consolidated statement of profit or loss as part of other income when the right of the Group to receive payment is established, the Group is probable to obtain the economic benefits associated with it and the amount can be measured reliably.

Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the statement of financial position when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the company or the counterparties.

Impairment of financial assets

The Group applies an expected credit loss ("ECL") approach in respect of receivables classified as financial assets at amortised cost, which is assessed on an individual basis for each counterparty at the end of each reporting period. The Group reviews credit risk with respect to the counterparty, likelihood or risk of default and forward-looking reasonable and supportable documentation in assessing a loss allowance for the respective financial asset at the end of each reporting period. The Group's consideration of credit risk takes into account, among other things, the instrument type, credit risk rating, date of initial recognition, remaining term to maturity and geographical location of the debtor. A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Credit loss is measured at the present value of such difference in cash flows, discounted using the effective interest rate determined at initial recognition. The Group measures the loss allowance equal to 12-month ECL ("12m ECL"). In the event when there has been a significant increase in credit risk since initial recognition, the Group recognises lifetime ECL. The Group writes off a financial asset when there is information indicating that the counterparty is in severe financial difficulty and there is no realistic prospect of recovery.

2.10 FINANCIAL GUARANTEE CONTRACT

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument.

For a financial guarantee contract, the Group is required to make payments only in the event of a default by the debtor in accordance with the terms of the instrument that is guaranteed. Accordingly, the expected loss is the present value of the expected payments to reimburse the holder for a credit loss that it incurs less any amounts that the Group expects to receive from the holder, the debtor or any other party.

For ECL on financial guarantee contracts for which the effective interest rate cannot be determined, the Group will apply a discount rate that reflects the current market assessment of the time value of money and the risks that are specific to the cash flows but only if, and to the extent that, the risks are taken into account by adjusting the discount rate instead of adjusting the cash shortfalls being discounted.

For financial guarantee contracts, the loss allowances are recognised at the higher of the amount of the loss allowance determined in accordance with HKFRS 9; and the amount initially recognised less, where appropriate, cumulative amount of income recognised over the guarantee period. Other financial liabilities are classified

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

as financial liabilities at fair value through profit or loss.

2.11 INVENTORIES

Inventories comprise raw materials, stores and consumables, work in progress and finished goods. Inventories are stated at the lower of cost and net realisable value.

Net realisable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and less applicable variable selling expenses.

Costs are assigned to individual items of inventory based on weighted average costs. Costs include the costs of direct materials, overburden removal, mining, processing, labour, related transportation costs to the point of sale, an appropriate proportion of related production overheads, mine rehabilitation costs incurred in the extraction process and other fixed and variable costs directly related to mining activities. They exclude borrowings costs.

2.12 TRADE AND OTHER RECEIVABLES

Trade receivables are recognised initially at transaction price and subsequently measured at fair value through profit or loss. The terms of sales contracts with third parties contain provisional pricing arrangements whereby the selling price for contained metal is based on prevailing spot prices during a specified future date range after shipment to the customer (quotation period). In case of such provisional pricing arrangements, the Group re-estimates the fair value of the final sales price adjustment continually by reference to forward market prices. Related trade receivable balances are recognised at fair value through profit and loss. Refer to Note 2.20 for details.

Other receivables are measured at amortised cost using the effective interest method, less provision for impairment. If collection of trade and other receivables is expected in one year or less, trade and other receivables are classified as current assets. If not, they are presented as non-current assets.

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. On derecognition of a financial asset measured at amortised cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognised in profit or loss.

2.13 CASH AND CASH EQUIVALENTS

Cash and cash equivalents include cash in hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less, and bank overdrafts.

2.14 FINANCIAL LIABILITIES AND EQUITY

Financial liabilities and equity instruments issued by the Group are classified according to the substance of the contractual arrangements entered into and the definitions of a financial liability and an equity instrument.

(a) Financial liabilities

Financial liabilities are initially measured at fair value, and are subsequently measured at amortised cost, using the effective interest method. The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognised in the consolidated statement of profit or loss over the period of the borrowings using the effective interest method.

Borrowings are classified as current unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting date.

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

(b) Equity instruments

Equity instruments are any contract that evidences a residual interest in the assets of the Group after deducting all of its liabilities. Subsequent to initial recognition, the equity instrument is not remeasured. Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

2.15 MINE REHABILITATION, RESTORATION AND DISMANTLING OBLIGATIONS

Provisions are made for the estimated cost of rehabilitation, restoration and dismantling relating to areas disturbed during the mine's operations up to the reporting date but not yet rehabilitated. Provision has been made in full for all the disturbed areas at the reporting date based on current estimates of costs to rehabilitate such areas, discounted to their present value based on expected future cash flows. The estimated cost of rehabilitation includes the current cost of recontouring, top soiling and revegetation to meet legislative requirements. Changes in estimates are dealt with on a prospective basis as they arise.

Uncertainty exists as to the amount of rehabilitation obligations that will be incurred due to the impact of changes in environmental legislation, and many other factors, including future developments, changes in technology, price increases and changes in interest rates. The amount of the provision relating to mine rehabilitation, restoration and dismantling obligations is recognised at the commencement of the mining project and/or construction of the assets where a legal or constructive obligation exists at that time.

The provision is recognised as a liability, separated into current (estimated costs arising within 12 months) and non-current components, based on the expected timing of these cash flows. A corresponding asset is included in mine property and development assets, only to the extent that it is probable that future economic benefits associated with the restoration expenditure will flow to the entity, otherwise a corresponding expense is recognised in the profit or loss. The capitalised cost of this asset is recognised in property, plant and equipment and is amortised over the life of the mine.

At each reporting date, the rehabilitation liability is remeasured in line with changes in discount rates, and timing or amounts of the costs to be incurred. Rehabilitation, restoration and dismantling provisions are adjusted for changes in estimates. Adjustments to the estimated amount and timing of future rehabilitation and restoration cash flows are a normal occurrence in light of the significant judgements and estimates involved. Changes in the liability relating to mine rehabilitation, restoration and dismantling obligations are added to or deducted from the related asset (where it is probable that future economic benefits will flow to the entity), other than the unwinding of discount on provisions, which is recognised as a finance cost in the consolidated statement of profit or loss. Changes to capitalised cost result in an adjustment to future depreciation charges.

The provisions referred to above do not include any amounts related to remediation costs associated with unforeseen circumstances.

2.16 PROVISIONS AND CONTINGENT LIABILITIES

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and the amount has been reliably estimated.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to the passage of time is recognised as an interest expense.

A provision for onerous contracts is recognised when the expected benefits to be derived by the Group from a contract are lower than the unavoidable cost of meeting its obligations under the contract. The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract.

A provision is recognised for the amount expected to be paid under short-term or long-term bonus entitlements if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the Director or employee and the obligation can be estimated reliably.

Contingent liabilities are possible obligations that arise from past events and whose existence will only be confirmed by the occurrence of one or more future events not wholly within the control of the Group. Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote.

2.17 CURRENT AND DEFERRED INCOME TAX

The tax expense recognised for the year comprises current and deferred tax. Tax is recognised in the consolidated statement of profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, respectively.

The current income tax charge is calculated on the basis of the tax laws enacted or subsequently enacted at the reporting date in the jurisdictions or where a stability agreement is applicable where the Company's subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is recognised on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred income tax is not accounted for if it arises from initial recognition of an asset or a liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the reporting date or where a stability agreement is applicable and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Deferred income tax is provided on temporary differences arising on investments in subsidiaries, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities, and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the taxable entity or different taxable entities where there is an intention and agreement with tax authorities to settle the balances on a net basis.

Tax consolidation – Australia

The majority of the Australian subsidiaries of the Company are an income tax consolidated group and are taxed as a single entity. MMG Australia Limited is the head company of the Australian tax consolidated group.

The subsidiaries in the Australian tax consolidated group account for their own current and deferred tax amounts. These tax amounts are measured as if each entity in the tax consolidated group continues to be a stand-alone tax payer in its own right. In addition to its own current and deferred tax amounts, the head entity recognises the current tax liabilities (or assets) and the deferred tax assets arising from unused tax losses and unused tax credits assumed from the other entities in the tax consolidated group.

Assets or liabilities arising under tax funding agreements between entities within the tax consolidated group entities are utilised as amounts receivable from or payable to other entities within the tax consolidated group.

2.18 TRADE AND OTHER PAYABLES

Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

Trade and other payables are classified as current liabilities if payment is due within one year or less. If not, they are presented as non-current liabilities.

2.19 EMPLOYEE BENEFITS

(a) Employee leave entitlements

Employee entitlements to annual leave are recognised when they are accrued by employees. A provision is made for the estimated liability for annual leave as a result of services rendered by employees up to the reporting date. Employee entitlements to sick leave and maternity leave are not recognised until the time of leave.

(b) Pension obligations – defined contribution plans

Arrangements for staff retirement benefits are made in accordance with local regulations and customs.

For defined contribution plans, the Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as an employee benefit expense when they are due. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in future payment is available.

(c) Long-term employee benefits

Long-term employee benefit obligations are measured at the present value of expected future payments to be made. Long-term benefits include post-employment defined benefit plan in Democratic Republic of the Congo ("DRC") and long service leave in Australia.

Post-employment defined benefit plan

Defined benefit obligation under the plan is measured at the present value of expected future payments to be made in respect of services provided by employees up to the end of the reporting period using the projected unit credit method and recorded as non-current liabilities. Consideration is given to expected future salary increase and historic attrition rates. Expected future payments are discounted using market yields at the reporting date on national government bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows. Re-measurements, if any, as a result of changes in actuarial assumptions are recognised in the consolidated statement of comprehensive income. Changes in the present value of the defined benefit obligation resulting from plan amendments are recognised as past service costs. Current and past service costs related to post-employment benefits are recognised immediately in the consolidated statement of profit and loss while unwinding of the liability at discount rates used are recorded as financial cost.

Long service leave

Long service leave is a period of paid leave granted to an employee in recognition of a long period of service to an employer. The liability for long service leave is recognised in the provision for employee benefits and measured as the present value of expected future payments to be made. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on national government bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows. The Group applies simplified method of accounting as required by HKAS 19 Employee Benefits and all past service costs and actuarial gains and losses (where applicable) are recognised immediately.

(d) Share-based compensation

The Group operates multiple equity-settled, share-based compensation plans, under which the entity receives services from employees as consideration for equity instruments of the Group. The fair value of the employee services received in exchange for the grant of the options or performance shares is recognised as an expense. The total amount to be expensed over the vesting period is determined by reference to the fair value of the options/performance shares granted, excluding the impact of any non-market service and performance vesting conditions (for example, profitability and remaining employees of the entity over a specified period). Non-market vesting conditions are included in assumptions about the number of options/performance shares that are expected to vest. The total amount expensed is recognised over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied. At each reporting date, the Group revises its estimates of the number of options/performance shares that are expected to vest based on the non-market vesting conditions. It recognises the impact of the revision of original estimates, if any, in the consolidated statement of profit or loss with a corresponding adjustment to equity.

The proceeds received net of any directly attributable transaction costs are credited to share capital when the options are exercised. Options which lapse or are cancelled prior to their exercisable date are deleted from the register of outstanding options and the amount previously recognised in share-based payment reserve will be transferred to retained profits.

2.20 REVENUE RECOGNITION

Revenue is recognised when persuasive evidence of an arrangement exists, usually in the form of an executed sales agreement, indicating there has been a transfer of control and completion of distinctive performance obligations separately identified by the Group. Transaction price under the agreement is allocated to the various performance obligations and revenue is recognised in line with satisfaction of each performance obligation.

Revenue is presented net of value-added tax, returns, rebates and discounts and after eliminating sales within the Group.

(a) Sale of goods

Sale of goods is recognised upon transfer of control, which for majority of the products is the bill of lading date when the commodity is delivered for shipment. Where the incoterms are '*Cost, Insurance and Freight*' (CIF), the Group identifies shipping service associated with sales as a performance obligation separate to the sale of goods. The Group allocates the transaction price of the relevant sale transaction to the distinct performance obligation related to shipping of goods and recognises the corresponding revenue over the period of the performance obligation that depicts the pattern of the transfer of control over time in accordance with the freight terms and conditions. Allocation of transaction price to delivery services is based on best estimate of a similar stand-alone service.

Revenue is reported net of discounts and pricing adjustments. Royalties paid and payable are separately reported as expenses. Revenues from the sale of significant by-products, such as gold and silver, are included in sales revenue.

Price adjustments in case of provisionally priced sales

The Group has certain provisionally priced sales where the contract terms for the Group's concentrate sales allow for a price adjustment based on a final assay of the goods determined after discharge. The Group assesses such provisional pricing to be a variable consideration and recognises revenue at an amount representing the Group's estimate for the expected final consideration. This amount is based on the most recently determined estimate of product assays. The Group applies judgement regarding likelihood of significant reversals to ensure that revenue is only recognised to the extent that it is highly probable that significant reversal will not occur. Any adjustments to the final price are recognised as revenue.

Changes in fair value of provisionally priced sales

The terms of sales contracts with third parties contain provisional pricing arrangements whereby the selling price for contained metal is based on prevailing spot prices during a specified future date range after shipment to the customer (quotational period). Adjustment to the sales price occurs based on movements in quoted market prices up to the completion of the quotational period. The period between provisional invoicing and quotational period completion is typically between 30 and 120 days.

In case of such provisional pricing arrangements, the Group re-estimates the fair value of the final sales price adjustment continually by reference to forward market prices. Such fair value adjustments do not form part of the revenue recognised from customers and are governed under HKFRS 9. Related receivable balances are recognised at fair value through profit and loss.

(b) Interest and dividend income

Interest income is recognised on a time-proportion basis, using the effective interest method. Dividend income is recognised when right to receive dividend is established.

2.21 DIVIDEND DISTRIBUTION

Dividend distribution to the Company's shareholders is recognised as a liability in the Group's and the Company's financial statements in the period in which the dividends are approved by the Company's Shareholders or the Board, as appropriate.

3. CHANGES IN ACCOUNTING POLICIES

The following notes explain the impact of the adoption of HKFRS 16 on the Group's consolidated financial statements.

3.1 NATURE OF THE EFFECT OF ADOPTION OF HKFRS 16

Prior to the adoption of HKFRS 16, the Group classified each of its leases (as lessee) at the inception date as either a finance lease or an operating lease. A lease was classified as a finance lease if it transferred substantially all of the risks and rewards incidental to ownership of the leased asset to the Group; otherwise it was classified as an operating lease.

The Group primarily had operating leases for office buildings and certain vehicles and equipment. In an operating lease, the leased property was not capitalised and the lease payments were recognised as operating lease rental expense in profit or loss on a straight-line basis over the lease term. Any prepaid rent was recognised under prepayments in "Trade and Other Receivables". The Group did not have any significant finance lease. In addition, the Group reviewed significant contracts under the requirements of HK(IFRIC) - Int 4 *Determining whether an Arrangement Contains a Lease* and concluded that the contracts did not contain a lease.

Upon adoption of HKFRS 16, the Group applied a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets.

In respect of the operating leases as noted above, the Group recognised right-of-use assets and lease liabilities (except for short-term leases and leases of low-value assets).

The Group did not elect to use the transition practical expedient which would have allowed the standard to be applied only to contracts that were previously identified as leases applying HKAS 17 and HK(IFRIC) - Int 4 at the date of initial application. Consequently, a HKFRS 16 based review was undertaken for all relevant significant contracts, including contracts which had previously been assessed as not having embedded leases under HK(IFRIC) - Int 4. Where lease components were identified, the Group recognised right-of-use assets and lease liabilities for these (except if they were short-term or low-value).

The right-of-use assets for most leases were recognised based on the carrying amount as if the standard had always been applied, apart from the use of IBR at the date of initial application. In some leases, the right-of-use assets were recognised based on the amount equal to the lease liabilities (adjusted, where required, for prepaid rentals). Lease liabilities were recognised based on the present value of the remaining lease payments, discounted using the IBR at the date of initial application. The IBR utilised ranged from 3.46% to 14.97% depending on the term of each lease, nature and value of underlying asset and the economic environment in which the respective lessee operates.

The Group also applied the available practical expedients wherein it:

- Used a single discount rate to a portfolio of leases with reasonably similar characteristics;
- Applied the short-term leases exemptions to leases with a lease term that ends within 12 months at the date of initial application;
- Excluded the initial direct costs from the measurement of the right-of-use assets at the date of initial application; and
- Used hindsight in determining the lease term where the contract contains options to extend or terminate the lease.

For the amended accounting policies for leases, refer to Note 2.8.

3.2 IMPACT OF ADOPTION OF HKFRS 16

On transition, at 1 January 2019, the Group recognised lease liabilities of US$171.3 million, right-of-use assets of US$135.7 million and net deferred tax assets of US$11.3 million, which resulted in a reduction in opening retained profits of US$24.3 million.

The lease liabilities at 1 January 2019 can be reconciled to the operating lease commitments at 31 December 2018 as follows:

	US$ MILLION
Operating lease commitments at 31 December 2018	37.8
Less: recognition exemption – short-term leases and low value assets	(0.8)
Less: non-lease components	(4.2)
Add: equipment with right-of-use under various contracts per HKFRS 16	220.0
Lease liabilities discounted at relevant IBR	(81.5)
Lease liabilities at 1 January 2019	**171.3**
Analysed as:	
Current	25.9
Non-current	145.4
Right-of-use assets recognised upon application of HKFRS 16 (Note 15)	135.7
Right-of-use assets at 1 January 2019	**135.7**
Net deferred tax assets at 1 January 2019 (Note 20)	**11.3**
Impact to opening retained profits at 1 January 2019	**(24.3)**
– Attributable to equity holders of the Company (Note 25)	(15.7)
– Attributable to non-controlling interests	(8.6)

4. CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

In preparing these consolidated financial statements, management has made estimates and judgements that affect the application of the Group's accounting policies. Estimates and judgements are reviewed on an ongoing basis based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below. Also refer to Note 2.8 for significant assumptions on application of HKFRS 16.

4.1 ESTIMATES

(a) Mine rehabilitation, restoration and dismantling obligations

Provision is made for the anticipated costs of future restoration, rehabilitation and dismantling of mining areas from which natural resources have been extracted in accordance with the accounting policy in Note 2.15. These provisions include future cost estimates associated with reclamation, plant closures, waste site closures, monitoring, demolition, decontamination, water purification and permanent storage of historical residues. These future cost estimates are discounted to their present value. The calculation of these provision estimates requires assumptions such as the application of environmental legislation, the scope and timing of planned activities, available technologies, engineering cost estimates and discount rates. A change in any of the assumptions used may have a material impact on the carrying value of mine rehabilitation, restoration and dismantling provisions. For non-operating sites, changes to estimated costs are recognised immediately in the consolidated statement of profit or loss.

(b) Mineral Resources and Ore Reserves estimates

The estimated quantities of economically recoverable Mineral Resources and Ore Reserves are based upon interpretations of geological and geophysical models and require assumptions to be made regarding factors such as estimates of short and long-term exchange rates, estimates of short and long-term commodity prices, future capital requirements and future operating performance. Changes in reported Reserves and Resources estimates can impact the carrying value of property, plant and equipment through depreciation, provisions for mine rehabilitation, restoration and dismantling obligations, the recognition of deferred tax assets, as well as the amount of depreciation and amortisation charged to the consolidated statement of profit or loss. The changes are effective from next financial year following Board approval of the revised Reserves and Resources estimates.

(c) Recoverability of non-financial assets

The recoverable amount of each of the Group's cash-generating units is determined as the higher of the asset's fair value less costs of disposal and its value in use in accordance with the accounting policy in Notes 2.7 and 14. These calculations require the use of estimates and assumptions including discount rates, exchange rates, commodity prices, exploration potential, future capital requirements and future operating performance.

(d) Deferral of waste removal costs

The Group defers a portion of waste removal costs incurred during the production phase of an open-pit operation as part of determining the cost of inventories. The amount of deferred waste asset is calculated for each separate component of the ore body identified based on mine plans. In respect of the Las Bambas mine site, management had initially considered the Ferrobamba pit as a single component. As of 1 January 2019, management has reassessed various mine phases of the Ferrobamba pit as separate components for the purpose of capitalising and amortising deferred waste assets. The change from a pit to phase basis results in better alignment between the cost of the waste removal activity and the benefits of this activity. The change in calculation methodology has resulted in additional capitalisation of US$89 million and a higher EBIT by US$38 million.

4.2 JUDGEMENTS

(a) Taxes

The Group is subject to tax in a number of jurisdictions. Some of these are in countries that carry higher levels of sovereign risk. Management continually assesses the levels of sovereign risk in determining whether political and administrative changes and reforms in laws, regulations or taxation may impact the Group's future performance.

Significant judgement is required in determining the tax position and the estimates and assumptions in relation to the provision for taxes and the recovery of tax assets, having regard to the nature and timing of their origination and compliance with the relevant tax legislation. There are some tax matters for which the ultimate tax determination is uncertain during the ordinary course of business, which could have a significant impact on the Group. A number of these matters exist at Minera Las Bambas S.A., and some of these are subject to an indemnity within the Share Purchase Agreement for the purchase of the Las Bambas asset in 2014. At 31 December 2019, the Group is progressing indemnity claims with Glencore plc and its subsidiaries ("Glencore") in the United Kingdom courts totalling US$84 million. Where the final outcome of these tax matters is different from the amounts that were initially recorded, such differences will impact the balances in the accounting period in which such determination is made. As outlined in Note 37, the Group is subject to tax matters with uncertain outcomes, which could result in further claims in the future by the Group.

In addition, Minera Las Bambas S.A. is currently subject to a number of audits and reviews by the Peruvian taxation authority in relation to value added taxes ("VAT"), withholding taxes and income taxes. Some of these matters relate to Glencore's period of ownership and may be subject to potential indemnity claims. For some of the tax matters under audit in Peru, Minera Las Bambas S.A. intends to appeal and not to pay any assessed amount if unfavourable assessment resolutions were ultimately issued. The timing of resolution and potential economic outflow of the unresolved tax matters are uncertain. For those uncertain tax matters the Group presently has, they are either incapable of being measured reliably or there is remote possibility of economic outflow at the reporting date. As such, no provision has been reflected in the consolidated financial statements for such tax matters. Additionally, for certain tax matters under audit in Peru, as noted above, no disclosure of an estimate of financial effect of the subject matter has been made in the financial statements as in the opinion of the management, such disclosure may seriously prejudice the position of the Group in dealing with these matters.

Where income tax and withholding tax obligations have been assessed and deemed to have probable future economic outflows capable of reliable measurement, the Group has provided for these as a provision.

Deferred tax assets are recognised for deductible temporary differences and unused tax losses only if it is probable that future taxable profits will be available to utilise those temporary differences and losses, and the tax losses continue to be available having regard to the nature and timing of their origination and compliance with the relevant tax legislation associated with their recoupment.

5. SEGMENT INFORMATION

HKFRS 8 "*Operating Segments*" requires operating segments to be identified on the basis of internal reports about operations of the Group that are regularly reviewed by the chief operating decision-maker ("CODM") in order to allocate resources to the segment and assess its performance.

The Company's Executive Committee has been identified as the CODM. The Executive Committee reviews the Group's internal reporting of these operations in order to assess performance and allocate resources.

The Group's reportable segments are as follows:

Las Bambas	The Las Bambas mine is a large open-pit, scalable, long-life copper and molybdenum mining operation with prospective exploration options. It is located in the Cotabambas, Apurimac region of Peru.
Kinsevere	Kinsevere is an open-pit copper mining operation located in the Haut-Katanga Province of the DRC.
Dugald River	The Dugald River mine is an underground zinc mining operation located near Cloncurry in North West Queensland. The Dugald River mine achieved commercial production on 1 May 2018.
Rosebery	Rosebery is an underground polymetallic base metal mining operation located on Tasmania's west coast.
Other	Includes exploration projects, mine sites under care and maintenance and corporate entities in the Group.

A segment result represents the EBIT by each segment. This is the measure reported to the CODM for the purposes of resource allocation and assessment of segment performance. Other information provided, except as disclosed in the following paragraph, to the CODM is measured in a manner consistent with that in these consolidated financial statements.

Segment assets exclude current income tax assets, deferred income tax assets and net inter-segment receivables. Segment liabilities exclude current income tax liabilities, deferred income tax liabilities and net inter-segment loans. The excluded assets and liabilities are presented as part of the reconciliation to total consolidated assets or liabilities.

Sepon is an open-pit copper mining operation located in Southern Laos. It was one of the Group's reportable segments until it was disposed of on 30 November 2018. Refer to Note 10 for more details. Accordingly, although the operating results for the period from 1 January 2018 to 30 November 2018 of Sepon are still reflected in the respective segment results, its assets and liabilities ceased to be consolidated by the Group from 30 November 2018 onwards.

The segment revenue and results for the year ended 31 December 2019 are as follows:

	FOR THE YEAR ENDED 31 DECEMBER 2019					
US$ MILLION	**LAS BAMBAS**	**KINSEVERE**	**DUGALD RIVER**	**ROSEBERY**	**OTHER UNALLOCATED ITEMS/ ELIMINATIONS**	**GROUP**
Revenue by metal:						
– Copper	1,771.1	406.7	-	6.2	3.8	2,187.8
– Zinc	-	-	277.7	143.0	-	420.7
– Lead	-	-	39.1	42.7	-	81.8
– Gold	129.7	-	-	42.9	-	172.6
– Silver	74.5	-	19.2	38.0	-	131.7
– Molybdenum	37.7	-	-	-	-	37.7
Revenue from contracts with customers	**2,013.0**	**406.7**	**336.0**	**272.8**	**3.8**	**3,032.3**
EBITDA	**1,237.1**	**44.8**	**108.7**	**125.9**	**(55.0)**	**1,461.5**
Depreciation and amortisation expenses (Note 7)	(696.4)	(138.5)	(55.9)	(70.7)	(8.1)	(969.6)
EBIT (underlying)	**540.7**	**(93.7)**	**52.8**	**55.2**	**(63.1)**	**491.9**
Finance income (Note 8)						11.2
Finance costs (Note 8)						(523.1)
Income tax expense (underlying)						(70.3)
Loss for the year (underlying)						**(90.3)**
Impairment of Kinsevere assets (Note 14)	-	(150.0)	-	-	-	(150.0)
Tax impact associated with impairment (Note 14)	-	45.0	-	-	-	45.0
Loss for the year						**(195.3)**
Other segment information:						
Additions to non-current assets (excluding deferred tax assets, inventories and financial instruments)	449.6	49.7	31.3	32.3	3.7	**566.6**

The segment assets and liabilities at 31 December 2019 are as follows:

	AT 31 DECEMBER 2019					
US$ MILLION	LAS BAMBAS	KINSEVERE	DUGALD RIVER	ROSEBERY	OTHER UNALLOCATED ITEMS/ ELIMINATIONS	GROUP
Segment assets	10,412.7	644.1	671.7	307.1	347.8[1]	**12,383.4**
Current/deferred income tax assets						281.7
Consolidated assets						**12,665.1**
Segment liabilities	5,566.9	238.3	463.6	165.8	2,670.2[2]	**9,104.8**
Current/deferred income tax liabilities						882.4
Consolidated liabilities						**9,987.2**
Segment non-current assets	9,963.9	554.5	612.5	308.6	163.0	**11,602.5**

The segment revenue and results for the year ended 31 December 2018 are as follows:

	FOR THE YEAR ENDED 31 DECEMBER 2018							
US$ MILLION	**LAS BAMBAS**	**KINSEVERE**	**DUGALD RIVER**	**ROSEBERY**	**OTHER UNALLOCATED ITEMS/ ELIMINATIONS**	**CONTINUING OPERATIONS SUBTOTAL**	**DISCONTINUED OPERATION (SEPON) (NOTE 10)**	**GROUP**
Revenue by metal:								
– Copper	2,317.4	516.4	-	6.2	(0.8)	2,839.2	433.6	3,272.8
– Zinc	-	-	203.7	175.6	-	379.3	-	379.3
– Lead	-	-	29.8	55.5	-	85.3	-	85.3
– Gold	129.4	-	-	45.2	-	174.6	-	174.6
– Silver	83.0	-	13.8	46.2	-	143.0	-	143.0
– Molybdenum	48.8	-	-	-	-	48.8	-	48.8
Revenue from contracts with customers	**2,578.6**	**516.4**	**247.3**	**328.7**	**(0.8)**	**3,670.2**	**433.6**	**4,103.8**
EBITDA (excluding gain on disposal of subsidiaries)	**1,341.2**	**203.0**	**87.6**	**171.6**	**(52.2)**	**1,751.2**	**138.6**	**1,889.8**
Depreciation and amortisation expenses (Note 31)	(641.5)	(153.2)	(40.7)	(73.8)	(8.9)	(918.1)	(159.1)	(1,077.2)
EBIT (excluding gain on disposal of subsidiaries)	**699.7**	**49.8**	**46.9**	**97.8**	**(61.1)**	**833.1**	**(20.5)**	**812.6**
Gains on disposal of subsidiaries (Note 10)						-	27.9	27.9
Finance income (Note 31)						6.8	6.7	13.5
Finance costs (Note 31)						(533.7)	(6.2)	(539.9)
Income tax expense						(169.6)	(7.1)	(176.7)
Profit for the year						**136.6**	**0.8**	**137.4**
Other segment information:								
Additions to non-current assets (excluding deferred tax assets, inventories and financial instruments)	243.2	57.1	17.6	11.5	2.2	331.6	4.8	**336.4**

The segment assets and liabilities at 31 December 2018 are as follows:

	AT 31 DECEMBER 2018					
US$ MILLION	LAS BAMBAS	KINSEVERE	DUGALD RIVER	ROSEBERY	OTHER UNALLOCATED ITEMS/ ELIMINATIONS	GROUP
Segment assets	10,643.6	855.8	713.3	341.4	468.9[1]	**13,023.0**
Current/deferred income tax assets						232.4
Consolidated assets						**13,255.4**
Segment liabilities	5,924.4	156.7	490.1	151.9	2,683.8[2]	**9,406.9**
Current/deferred income tax liabilities						952.2
Consolidated liabilities						**10,359.1**
Segment non-current assets	10,067.1	772.0	634.2	310.7	198.6	**11,982.6**

1. Included in segment assets of US$347.8 million (2018: US$468.9 million) for the other segment is cash of US$98.6 million (2018: US$93.9 million) mainly held at Group treasury entities and trade receivables of US$114.7 million (2018: US$172.9 million) for MMG South America Company Limited ("MMG SA") in relation to copper concentrate sales.
2. Included in segment liabilities of US$2,670.2 million (2018: US$2,683.8 million) for the other segment are borrowings of US$2,261.3 million (2018: US$2,361.3 million) and bank guarantee financial liabilities of US$135.7 million (2018: US$136.6 million), which are managed at Group level.

6. OTHER INCOME

	2019 US$ MILLION	2018 US$ MILLION
Gain on early redemption of convertible redeemable preference shares	-	12.6
(Loss)/gain on disposal of property, plant and equipment	(0.6)	2.4
Sundry income[1]	14.6	5.6
Total other income	**14.0**	**20.6**

1. Sundry income in 2019 includes the recognition of insurance claim income (US$12.0 million).

7. EXPENSES

(Loss)/profit before income tax includes the following specific expenses related to continuing operations:

	2019 US$ MILLION	2018 US$ MILLION
Changes in inventories of finished goods and work in progress	(263.9)	(4.8)
Write-down of inventories to net realisable value	44.5	59.3
Employee benefit expenses[1]	235.1	230.7
Contracting and consulting expenses[3]	503.4	500.2
Energy costs	243.3	254.1
Stores and consumables costs	386.6	373.0
Depreciation and amortisation expenses[2]	933.6	882.6
Operating lease rental	-	22.9
Other production expenses[3]	138.1	142.9
Cost of goods sold	**2,220.7**	**2,460.9**
Other operating expenses	51.8	40.3
Royalty expenses	105.1	126.9
Selling expenses[3]	114.8	117.3
Operating expenses including depreciation and amortisation[4]	**2,492.4**	**2,745.4**
Exploration expenses[1,2,3]	37.7	47.5
Administrative expenses[1,3]	23.3	35.8
Auditor's remuneration	1.6	1.6
Foreign exchange gains – net	(3.0)	(12.3)
Loss on financial assets at fair value through profit or loss	0.3	2.4
Other expenses[1,2,3]	2.1	37.3
Total expenses	**2,554.4**	**2,857.7**

1. In aggregate US$67.8 million (2018: US$89.7 million) employee benefit expenses by nature is included in the administrative expenses, exploration expenses, and other expenses categories. Total employee benefit expenses attributable to continuing operations were US$302.9 million (2018: US$320.4 million) (Note 13).
2. In aggregate US$36.0 million (2018: US$35.5 million) depreciation and amortisation expenses are included in exploration expenses and other expenses categories. Total depreciation and amortisation expenses attributable to continuing operations were US$969.6 million (2018: US$918.1 million).
3. The expense under these categories include certain amounts in respect of lease and non-lease contracts which were not recognised as right of use assets on the statement of financial position following the guidance as per HKFRS 16 or where the contracts were low value for a lease assessment under HKFRS 16 requirements. Expenditure in respect of contracts assessed as leases but which did not qualify for recognition as right of use assets included US$40.9 million in respect of variable lease payments, US$1.0 million for short-term leases and US$1.0 million for low-value leases.
4. Operating expenses attributable to continuing operations include mining and processing costs, royalties, selling expenses (including transportation) and other costs incurred by operations.

8. FINANCE INCOME AND FINANCE COSTS

	2019 US$ MILLION	2018 US$ MILLION
Finance income		
Interest income on cash and cash equivalents	11.2	6.8
	11.2	**6.8**
Finance costs		
Interest expense on bank borrowings	(370.9)	(372.5)
Interest expense on related party borrowings (Note 32(a))	(94.7)	(109.3)
Withholding taxes in respect of financing arrangements	(15.0)	(16.7)
Unwinding of discount on lease liabilities	(16.0)	-
Unwinding of discount on provisions (Note 28)	(15.7)	(18.8)
Other finance cost on external borrowings	(6.0)	(18.9)
Other finance cost on related party borrowings (Note 32(a))	(4.8)	(6.5)
Finance costs – total	**(523.1)**	**(542.7)**
Less: Borrowing costs capitalised in relation to qualifying assets[1]	-	9.0
Finance costs – net of capitalised borrowing costs	**(523.1)**	**(533.7)**

1. Borrowing costs were capitalised at 5.6% per annum in 2018, representing the average interest rate on borrowings related to Dugald River project. Borrowing costs ceased to be capitalised to the Dugald River project upon its achievement of commercial production on 1 May 2018.

9. INCOME TAX EXPENSE

Hong Kong profits tax is provided at a rate of 16.5% where there are net assessable profits derived for the year. The income tax rates applicable for the main jurisdictions in which the Group operates are: Australia (30.0%), Peru (32.0%) and the DRC (30.0%). Tax rates for some jurisdictions are covered by historical legal agreements with governments. Taxation on profits arising from other jurisdictions has been calculated on the estimated assessable profits for the year at the rates prevailing in the relevant jurisdictions.

The Group recognises deferred income tax assets if it is probable that future taxable amounts will be available to utilise those deductible temporary differences and unused tax losses in the foreseeable future. Management will continue to assess the recognition of deferred income tax assets in future reporting periods.

	2019 US$ MILLION	2018 US$ MILLION
Current income tax expense – Overseas income tax	(69.7)	(78.4)
Deferred income tax expense – Overseas income tax	44.4	(91.2)
Income tax expense	**(25.3)**	**(169.6)**

There is no deferred tax impact relating to items of other comprehensive income (2018: nil).

The tax on the Group's (loss)/profit before income tax from continuing operations differs from the prima facie amount that would arise using the applicable tax rate to (loss)/profit of the consolidated companies as follows:

	2019 US$ MILLION	2018 US$ MILLION
(Loss)/profit before income tax	(170.0)	306.2
Calculated at domestic tax rates applicable to losses or profits in the respective countries	69.5	(80.3)
Net non-taxable/(non-deductible) amounts	1.6	(38.7)
Utilisation of tax losses/deductible temporary differences previously not recognised	-	33.5
Under-provision in prior years	(38.6)	(16.0)
Non-creditable withholding tax	(57.8)	(59.6)
Others	-	(8.5)
Income tax expense	**(25.3)**	**(169.6)**

10. DISPOSAL OF SUBSIDIARIES AND RESULTS OF DISCONTINUED OPERATION

10.1 SALE OF SEPON

On 30 November 2018, the Group completed the sale of MMG Laos Holdings Limited to Chifeng Jilong Gold Mining Co., Limited, for total consideration of US$275.0 million. MMG Laos Holding Limited owns the Group's previously held 90% interest in Lane Xang Minerals Limited ("LXML"), which in turn owns the Sepon mine in Laos People's Democratic Republic. The results of the Sepon mine were classified as a discontinued operation during 2018.

	2018 US$ MILLION
Consideration received in cash and cash equivalents[1]	247.5
Deferred consideration (recognised as non-current other receivable)[2]	22.2
Total fair value of consideration	**269.7**
Net assets disposed attributable to equity holders of the Company	(238.8)
Less: transaction costs	(3.0)
Gain on disposal (pre-tax)	**27.9**
Deferred tax balances disposed attributable to equity holders of the Company	(13.7)
Gain on disposal (post-tax)	**14.2**
Loss for the year from discontinued operation – net of income tax	**(13.4)**
Net profit for the year from discontinued operation	**0.8**
Net profit for the year from discontinued operation attributable to:	
– Equity holders of the Company	3.5
– Non-controlling interests	(2.7)
	0.8

1. The net cash proceeds received from the disposal during 2018 was US$113.9 million, which consists of the partial sale consideration of US$247.5 million, less cash and cash equivalents disposed in LXML of US$132.4 million and transaction costs of US$1.2 million.
2. The total sale consideration of US$275.0 million includes US$27.5 million of deferred consideration receivable at the earlier of 31 December 2021, or following satisfaction of certain post-closing conditions. The deferred consideration was measured at its fair value of US$22.2 million on the date of disposal.

10.2 CENTURY SUPPORT PACKAGE PAYMENTS

During the year ended 31 December 2019, the Group has made support package payments of US$8.1 million (2018: US$8.9 million) to New Century Resources Limited ("New Century"), which is in line with the agreed terms of sale for the Century mine in 2017.

11. (LOSS)/EARNINGS PER SHARE

Basic (loss)/earnings per share is calculated by dividing the (loss)/profit attributable to equity holders of the Company by the weighted average number of ordinary shares on issue during the year.

Diluted earnings per share for the year ended 31 December 2018 was calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares. For the Company's share options and performance awards on issue, a calculation was performed to determine the number of shares that could have been acquired at fair value (determined at the average market share price of the Company's shares) based on the monetary value of the subscription rights attached to outstanding share options and performance awards. The number of shares calculated as above was compared with the number of shares that would have been issued assuming the exercise of the share options and performance awards.

The calculation of diluted loss per share for the year ended 31 December 2019 does not assume conversion of all dilutive potential ordinary shares because it will otherwise result in a decrease in loss per share.

	2019 US$ MILLION	2018 US$ MILLION
(Loss)/profit attributable to equity holders of the Company in the calculation of basic and diluted (loss)/earnings per share	**(230.4)**	**68.3**
– From continuing operations	(230.4)	64.8
– From discontinued operation	-	3.5
Underlying (loss)/profit attributable to equity holders of the Company in the calculation of basic and diluted (loss)/earnings per share[1]	**(125.4)**	**68.3**
– From continuing operations[1]	(125.4)	64.8
– From discontinued operation	-	3.5

1. The underlying loss attributable to equity holders of the Company excludes non-recurring items recorded during 2019 relating to the impairment of Kinsevere assets of US$105.0 million (post-tax) (Note 14).

	NUMBER OF SHARES '000	
	2019	2018
Weighted average number of ordinary shares used in the calculation of the basic (loss)/earnings per share	**8,053,521**	**8,019,434**
Shares deemed to be issued in respect of long-term incentive equity plans	-	77,067
Weighted average number of ordinary shares used in the calculation of the diluted (loss)/earnings per share	8,053,521	8,096,501
Basic (loss)/earnings per share	**US (2.86) cents**	**US 0.85 cents**
– From continuing operations	US (2.86) cents	US 0.81 cents
– From discontinued operation	-	US 0.04 cents
Diluted (loss)/earnings per share	**US (2.86) cents**	**US 0.84 cents**
– From continuing operations	US (2.86) cents	US 0.80 cents
– From discontinued operation	-	US 0.04 cents
Basic (loss)/earnings per share pre impairment expense	**US (1.56) cents**	**US 0.85 cents**
– From continuing operations	US (1.56) cents	US 0.81 cents
– From discontinued operation	-	US 0.04 cents
Diluted (loss)/earnings per share pre impairment expense	**US (1.56) cents**	**US 0.84 cents**
– From continuing operations	US (1.56) cents	US 0.80 cents
– From discontinued operation	-	US 0.04 cents

12. DIVIDENDS

The Directors did not recommend the payment of an interim or final dividend for the year ended 31 December 2019 (2018: nil).

13. EMPLOYEE BENEFIT EXPENSES, INCLUDING DIRECTORS' EMOLUMENTS

	2019 US$ MILLION	2018 US$ MILLION
Salaries and other benefits	290.2	308.6
Retirement scheme contributions (a)	12.7	11.8
Total employee benefit expenses (Note 7)	**302.9**	**320.4**

(a) Retirement schemes

The Group provides retirement benefits to all eligible Hong Kong employees under the Mandatory Provident Fund (MPF Scheme). Under the MPF Scheme, the Group and its employees make monthly contributions to the MPF Scheme at 5% of the employees' salaries as defined under the Mandatory Provident Fund legislation. Contributions of both the Hong Kong subsidiaries and their employees are subject to a maximum of HK$1,500 per month and thereafter contributions are voluntary and are not subject to any limitation. The MPF Scheme is administered by an independent trustee and its assets are held separately from those of the Group.

The Group provides a superannuation contribution for all Australian-based employees to their nominated superannuation fund. This contribution is to provide benefits for employees and their dependants in retirement, and for relevant employees, disabilities or death. In accordance with the applicable regulation in Australia, the Group is required to contribute at a minimum rate of 9.5% of ordinary time earnings of the Australian-based employee.

The Group provides for retirement benefits to those employees who reach statutory retirement age in the DRC in accordance with the Collective Bargaining Agreement with its employees at the Kinsevere mine. A provision for the retirement benefit is recognised which is measured as the present value of the expected future payments to be made taking into consideration the period of employee service and their job position at the reporting date.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

14. PROPERTY, PLANT AND EQUIPMENT

US$ MILLION	LAND AND BUILDINGS	PLANT AND MACHINERY	MINE PROPERTY AND DEVELOPMENT	EXPLORATION AND EVALUATION	CONSTRUCTION IN PROGRESS	TOTAL
At 1 January 2019						
Cost	833.0	4,377.7	8,949.7	206.4	236.9	14,603.7
Accumulated depreciation, amortisation and impairment	(138.1)	(1,227.1)	(2,234.4)	(106.4)	-	(3,706.0)
Net book amount at 1 January 2019	**694.9**	**3,150.6**	**6,715.3**	**100.0**	**236.9**	**10,897.7**
Year ended 31 December 2019						
At the beginning of the year	694.9	3,150.6	6,715.3	100.0	236.9	10,897.7
Additions (Note 31(b))	0.8	65.0	322.1	-	175.1	563.0
Depreciation and amortisation	(65.2)	(297.7)	(549.7)	-	-	(912.6)
Impairment expense	-	-	(150.0)	-	-	(150.0)
Disposals, net	-	(1.1)	(2.8)	-	-	(3.9)
Transfers, net	13.2	47.2	84.0	-	(144.4)	-
At the end of the year	**643.7**	**2,964.0**	**6,418.9**	**100.0**	**267.6**	**10,394.2**
At 31 December 2019						
Cost	844.1	4,565.0	9,645.3	206.4	267.6	15,528.4
Accumulated depreciation, amortisation and impairment	(200.4)	(1,601.0)	(3,226.4)	(106.4)	-	(5,134.2)
Net book amount at 31 December 2019	**643.7**	**2,964.0**	**6,418.9**	**100.0**	**267.6**	**10,394.2**

US$ MILLION	LAND AND BUILDINGS	PLANT AND MACHINERY	MINE PROPERTY AND DEVELOPMENT	EXPLORATION AND EVALUATION	CONSTRUCTION IN PROGRESS	TOTAL
At 1 January 2018						
Cost	825.0	4,443.0	8,608.8	207.8	1,416.6	15,501.2
Accumulated depreciation, amortisation and impairment	(128.4)	(1,233.3)	(1,477.3)	(106.7)	(573.4)	(3,519.1)
Net book amount at 1 January 2018	**696.6**	**3,209.7**	**7,131.5**	**101.1**	**843.2**	**11,982.1**
Year ended 31 December 2018						
At the beginning of the year	696.6	3,209.7	7,131.5	101.1	843.2	11,982.1
Additions[1](Note 31(b))	1.3	81.5	102.8	-	145.4	331.0
Depreciation and amortisation	(51.1)	(368.8)	(625.6)	-	-	(1,045.5)
Disposals, net	(0.2)	(2.3)	(0.2)	-	-	(2.7)
Transfers, net	58.6	387.3	255.1	-	(747.1)	(46.1)[2]
Subtotal	**705.2**	**3,307.4**	**6,863.6**	**101.1**	**241.5**	**11,218.8**
Disposal of Sepon Mine, net	(10.3)	(156.8)	(148.3)	(1.1)	(4.6)	(321.1)
At the end of the year	**694.9**	**3,150.6**	**6,715.3**	**100.0**	**236.9**	**10,897.7**
At 31 December 2018						
Cost	833.0	4,377.7	8,949.7	206.4	236.9	14,603.7
Accumulated depreciation, amortisation and impairment	(138.1)	(1,227.1)	(2,234.4)	(106.4)	-	(3,706.0)
Net book amount at 31 December 2018	**694.9**	**3,150.6**	**6,715.3**	**100.0**	**236.9**	**10,897.7**

1. During 2018, the Group capitalised borrowing costs of US$9.0 million on qualifying assets, which form part of the additions to the cost of property, plant and equipment. The cash payment of interest capitalised is included within 'Interest and financing costs paid on external borrowings' in the consolidated statement of cash flows.
2. Represents the transfer to inventory upon commissioning of Dugald River project in 2018.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

IMPAIRMENT TESTING OF NON-CURRENT ASSETS AND GOODWILL

In accordance with the Group's accounting policies and processes, the Group performs its impairment testing annually at 31 December. Cash Generating Units ("CGUs") are reviewed at each reporting period to determine whether there is an indication of impairment or impairment reversal. Where an indicator of impairment or impairment reversal exists, a formal estimate of the recoverable amount is made at the reporting period.

Las Bambas is subject to impairment testing due to Goodwill being attributed to the CGU which requires an annual impairment assessment. Indicators of impairment were noted for Las Bambas, as a result of the significant disruptions to concentrate logistics experienced throughout the year the year. Intermittent community blockades of the public road near the mine site resulted in restricted concentrate sales during the year and to a lesser extent impacted mine production, resulting in lower earnings in 2019.

Indicators of impairment were also noted for Kinsevere, primarily due to the lower operational performance experienced during the year and expected for the remaining life of the copper oxide mining operation. In addition, the political and legislative environment in the DRC was a further indicator of impairment during the period.

(i) Approach

An impairment is recognised when the carrying amount exceeds the recoverable amount. The recoverable amount of each CGU has been estimated using its fair value less costs of disposal ("Fair Value"). The Fair Value estimates are considered to be level 3 fair value measurements (as defined by accounting standards) as they are derived from valuation techniques that include inputs that are not based on observable market data. The Group considers the inputs and the valuation approach to be consistent with the approach taken by market participants.

Estimates of quantities of recoverable minerals, production levels, operating costs and capital requirements are sourced from the Group's planning process, including Life of Asset ("LOA") plans, three-year budgets, periodic forecasts and CGU specific studies. Expected operating performance improvements reflecting the Group's objectives to maximise free cash flow, optimise operational activity, apply technology, improve capital and labour productivity and other production efficiencies are also included along with the expected costs to realise the initiatives.

All Reserves and Resources have been included in the valuations at justifiable reasonable conversion rates, supported by proof of concept studies. Exploration targets are included in the valuation as applicable.

(ii) Key assumptions

The key assumptions impacting the discounted cash flow models used to determine the Fair Value include:

– Commodity prices;
– Operating costs;
– Capital requirements;
– Real post-tax discount rates;
– Foreign exchange rates;
– Reserves and Resources and exploration targets;
– Optimisation of operational activity and productivity; and
– Rehabilitation timing.

In determining some of the key assumptions, management considered external sources of information where appropriate.

Commodity price and exchange rate assumptions are based on the latest internal forecasts benchmarked to analyst consensus forecasts. The long-term cost assumptions are based on actual costs adjusted for planned operational changes and input cost assumptions over the life of mine.

The long-term price assumed for copper is US$3.21 (2018: US$3.15) per pound and for zinc is US$1.23 (2018: US$1.21) per pound, unchanged from 2018 but re-based to 31 December 2019.

The long term AUD:USD exchange rate has been included as 0.75 (2018: 0.78).

The real post-tax discount rates used in the Fair Value estimates for each of the CGU's are 7% for Las Bambas (2018: 8%), 10% for Kinsevere (2018: 11%), and 6% for Dugald River (2018: 7%). The change in discount rate was driven primarily by lower return expectations in both debt and equity markets based on observable market data.

(iii) Valuation methodology

Las Bambas

The Las Bambas Fair Value is determined through the 2019 LoA discounted cash flows and also supported by comparable transaction multiples. The valuation contains the current operation and further regional exploration targets included in the initial valuation to acquire the mine in 2014. The cash flows assume additional capital investment in the processing plant as well as expected cost reductions from operational improvement programs underway. Future cash flow forecasts include estimates for the cost of obtaining access to land where the rights do not currently exist. The cash flows also include the estimated impact for potential intermittent community disruptions over the life of the mine.

Management continues to progress dialogue with local communities and the Government of Peru to ensure the continuity of road access in the future. This includes continuing to deliver on the Company's obligations in relation to social and community development programs and supporting the Government of Peru to progress public investment projects which will improve the condition of the public road which Las Bambas' uses for the transport of concentrate to the port, this is expected to reduce disruptions of road usage into the future.

The impairment assessment of the Las Bambas' CGU at 31 December 2019 did not result in the recognition of impairment.

Kinsevere

Kinsevere has experienced below plan operational and financial performance in 2019. This is primarily due to lower than expected ore mined grades and tonnes as the copper oxide operation approaches the end of life in 2024. In addition, performance in the current period was impacted by unplanned plant shutdowns and instability in solvent extraction experienced in the first half of the year.

In respect of the political and legislative environment in DRC, as disclosed in the consolidated financial statements for the year ended 31 December 2018, the DRC Government passed significant changes to the DRC 2002 Mining Code (2018 Mining Code) in March 2018. In light of the adverse impact the 2018 Mining Code represents to Kinsevere mine, the Group along with other industry participants has continued to engage in discussion with the DRC Government seeking to negate or reduce negative financial outcomes. During 2019, the DRC Government continued the progressive implementation of elements of the 2018 Mining Code and Mining Regulations (which have included increased royalty rates, import duties, repatriation of revenues, environmental taxes and Special Tax on Excess Profit or STEP).

Whilst there has been recent progress including agreement with the DRC Government on a substantial amount of historical value added tax ("VAT") receivable, uncertainties continue to exist in relation to the recovery of historic and future VAT balances.

An impairment write-down of US$150 million pre-tax (US$105 million on a post-tax basis) was recognised in relation to the Kinsevere CGU at 31 December 2019. This has resulted in a reduction to the carrying value of the oxide related assets to more accurately reflect the remaining life of the current oxide operation. The impairment write-down was recognised pursuant to detailed assessments of the recoverable value, based on the 2019 LoA discounted cash flows.

Kinsevere's LoA 2019 valuation takes into consideration the operational challenges, the impact from the 2018 Mining Code, as well as management's best estimate of risks associated with other political and legislative matters. The valuation contains the current oxide operation, as well as a next phase of potential development at Kinsevere, which includes the development of an integrated sulphide and cobalt circuit. A feasibility study for this phase is at an advanced stage, with a final investment decision expected in the second half of 2020. Should it proceed, this development is expected to extend the life of the operation to approximately 2031, adding significant value to MMG's in-country operations and enhancing the Company's optionality for future potential investments in the DRC.

Following the impairment loss, the carrying value of the CGU amounted to US$387 million as at 31 December 2019. The next phase of development as outlined above, is essential to the future of Kinsevere and realisation of such carrying value.

Dugald River

The Dugald River development project was impaired in December 2015 by US$573.6 million, pre-tax. The impairment was recognised as a result of further weakening in commodity prices, and industry changes in the region having an adverse effect on the valuation of the project.

The Group revised the Dugald River project plan in 2016 and identified cost savings and consistent improvements in the operational and technical stability of the project resulting in approval for external funding to complete the revised project. Following the commissioning of the processing plant at 1 May 2018, the operation and ramp-up of production activities to design capacity has continued. Notwithstanding the continued ramp-up to design capacity, the operational performance of Dugald River has remained slightly below plan in 2019, impacted by severe weather events in early 2019 and lower zinc grade. The 2019 LoA includes a continued ramp-up in throughput to 2.0Mtpa, underpinned by significant improvement in mining throughput rates. Considering the relatively early stage of the operation, it is too premature to consider the higher throughput scenario to be sustainable in the impairment reversal assessment for Dugald River. Considering these factors, as well as the sensitivity of its Fair Value to zinc price, operating costs and ore grade, no reversal of impairment has been recognised as at 31 December 2019. The Group will continue to monitor and assess if a reversal of impairment is required in future periods.

Rosebery

The Rosebery Fair Value is determined through the 2019 LoA discounted cashflows. No indicators of impairment were noted for Rosebery and the Fair Value currently supports the carrying value of the CGU. Consequently, no impairment was recognised.

(iv) Sensitivity analysis

Commodity prices, the level of production activity as well as the success of converting Reserves and Resources and increasing the resource estimates over the lives of mines are key assumptions in the determination of Fair Value. Due to the number of factors that could impact production activity, such as processing throughput, changing ore grade and/or metallurgy and revisions to mine plans in response to physical or economic conditions, no quantified sensitivity has been determined. Changes to these assumptions may however result in an impact on the Fair Value and result in impairment in future.

A sensitivity analysis is presented below for both Las Bambas and Kinsevere. The sensitivities assume that the specific assumption moves in isolation, whilst all other assumptions are held constant. In reality, a change in one of the aforementioned assumptions may accompany a change in another assumption which may have an offsetting impact. Action is also usually taken to respond to adverse changes in economic assumptions that may mitigate the impact of any such change.

Las Bambas

The key assumptions to which the calculation of Fair Value for Las Bambas is most sensitive are copper price, operating costs, land access (including permitting delays and the amount and timing of exploration potential to be realised) and discount rate. An adverse change of 5% in copper price over the remaining mine life would decrease the recoverable amount by approximately US$1,010 million. An increase of 1% to the discount rate would decrease the recoverable amount by approximately US$844 million. An adverse change of 5% in operating costs would decrease the recoverable amount by approximately US$448 million. The impact of delays in land access or the amount or timing of exploration potential realised would result in a revision to the mine plan in response to these conditions. The occurrence of one or more of the above assumptions in isolation, without a change in other assumptions which may have an offsetting impact, would result in the carrying value of Las Bambas exceeding the recoverable value.

Kinsevere

The key assumptions to which the calculation of Fair Value for Kinsevere is most sensitive are copper price, the successful expansion of the processing plant to process sulphide ore and cobalt, discount rate, the application of the 2018 Mining Code as outlined above and operational performance. An adverse change of 5% in copper price over the remaining mine life would further decrease the recoverable amount by approximately US$70 million. An increase of 1% to the discount rate would further decrease the recoverable amount by approximately US$26 million. In the event that the below plan operational performance at Kinsevere continues there is likely to be further impairment to the carrying value of Kinsevere. In the event that the next phase of the development of Kinsevere does not progress to execution, there is likely to be a further impairment to the assets of Kinsevere.

15. RIGHT-OF-USE ASSETS

US$ MILLION	LAND AND BUILDING	PLANT AND MACHINERY	TOTAL
At 1 January 2019	-	-	-
HKFRS 16 adjustment to opening balances (Note 3)	10.6	125.1	135.7
Restated net book amount at 1 January 2019	**10.6**	**125.1**	**135.7**
Additions	2.9	30.4	33.3
Depreciation	(3.2)	(25.2)	(28.4)
At 31 December 2019	**10.3**	**130.3**	**140.6**
At 31 December 2019			
Cost	13.5	155.5	169.0
Accumulated depreciation	(3.2)	(25.2)	(28.4)
Net book amount at 31 December 2019	**10.3**	**130.3**	**140.6**

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

16. INTANGIBLE ASSETS

US$ MILLION	GOODWILL	SOFTWARE DEVELOPMENT	TOTAL
At 1 January 2019			
Cost	739.9	213.8	953.7
Accumulated amortisation and impairment	(211.4)	(146.3)	(357.7)
Net book amount at 1 January 2019	**528.5**	**67.5**	**596.0**
Year ended 31 December 2019			
At the beginning of the year	528.5	67.5	596.0
Additions	-	0.1	0.1
Amortisation	-	(28.6)	(28.6)
At the end of the year	**528.5**	**39.0**	**567.5**
At 31 December 2019			
Cost	739.9	207.8	947.7
Accumulated amortisation and impairment	(211.4)	(168.8)	(380.2)
Net book amount at 31 December 2019	**528.5**	**39.0**	**567.5**
At 1 January 2018			
Cost	739.9	208.4	948.3
Accumulated amortisation and impairment	(211.4)	(114.6)	(326.0)
Net book amount at 1 January 2018	**528.5**	**93.8**	**622.3**
Year ended 31 December 2018			
At the beginning of the year	528.5	93.8	622.3
Additions	-	5.4	5.4
Amortisation	-	(31.7)	(31.7)
At the end of the year	**528.5**	**67.5**	**596.0**
At 31 December 2018			
Cost	739.9	213.8	953.7
Accumulated amortisation and impairment	(211.4)	(146.3)	(357.7)
Net book amount at 31 December 2018	**528.5**	**67.5**	**596.0**

17. INVESTMENT IN SUBSIDIARIES

The following is a list of the principal subsidiaries of the Group at 31 December 2019 and 2018:

NAME OF COMPANY	PLACE OF INCORPORATION/ OPERATION	PRINCIPAL ACTIVITIES	PARTICULARS OF ISSUED OR PAID-UP CAPITAL	PROPORTION OF ISSUED CAPITAL HELD BY THE COMPANY			
				2019		2018	
				DIRECTLY	INDIRECTLY	DIRECTLY	INDIRECTLY
MMG Australia Limited	Australia	Mineral exploration and production, management and employment services	490,000,000 Ordinary Shares at A$[1]1 a share	-	100%	-	100%
MMG Dugald River Pty Ltd	Australia	Holds Dugald River Assets	301,902,934 Ordinary Shares at A$1 a share	-	100%	-	100%
MMG Exploration Pty Ltd	Australia	Investment holding	1 Ordinary Share at A$1 a share	-	100%	-	100%
MMG Management Pty Ltd	Australia	Treasury and management services	1 Ordinary Share at A$1 a share	-	100%	-	100%
Topstart Limited[2]	British Virgin Islands	Investment holding	1,386,611,594 Ordinary Shares at US$1 a share	100%	-	100%	-
Anvil Mining Limited	British Virgin Islands	Investment holding	100 Class A Common Shares at US$1	-	100%	-	100%
MMG Resources Inc.	Canada	Mineral exploration	200 Common Shares at C$[1]1 a share	-	100%	-	100%
MMG Kinsevere SARL	DRC	Mineral exploration and production	15,339,967 Ordinary Shares at US$22,831 a share	-	100%	-	100%
MMG Exploration Holdings Limited	Hong Kong	Mineral exploration and holding company	1 Ordinary Share providing a share capital of HK$[1]1	100%	-	100%	-

NAME OF COMPANY	PLACE OF INCORPORATION/ OPERATION	PRINCIPAL ACTIVITIES	PARTICULARS OF ISSUED OR PAID-UP CAPITAL	PROPORTION OF ISSUED CAPITAL HELD BY THE COMPANY			
				2019		2018	
				DIRECTLY	INDIRECTLY	DIRECTLY	INDIRECTLY
MMG Finance Limited	Hong Kong	Administration and treasury services	1 Ordinary Share providing a share capital of HK$1	100%	-	100%	-
MMG South America Company Limited	Hong Kong	Holding company	1,880,000 Ordinary Shares providing a share capital of HK$1,880,000	100%	-	100%	-
MMG South America Management Company Limited	Hong Kong	Holding investments in Peru	1,200 Ordinary Shares providing a share capital of HK$28,046,249,501	-	62.5%	-	62.5%
MMG Netherlands B.V.	Netherlands	Investment holding	5,000 Ordinary Shares at EUR[1]1 a share	-	62.5%	-	62.5%
Minera Las Bambas S.A.	Peru	Mineral exploration and production	2,890,004,037 Common Shares at PEN[1]1 a share	-	62.5%	-	62.5%
Album Investment Pte Ltd	Singapore	Investment holding	488,211,901 Ordinary Shares at S$[1]1 a share	-	100%	-	100%
Album Resources Pte Ltd	Singapore	Investment holding	488,211,901 Ordinary Shares at S$1 a share	-	100%	-	100%
MMG Swiss Finance AG	Switzerland	Investment holding and financial services	100,000 Ordinary Shares at CHF[1]1 a share	-	62.5%	-	62.5%

1. A$, C$, HK$, S$, PEN, CHF and EUR stand for Australian dollar, Canadian dollar, Hong Kong dollar, Singapore dollar, Peruvian Sol, Swiss Franc and Euro respectively.
2. None of the subsidiaries had debt securities on issue during the year (2018: Topstart which issued US$338.0 million convertible redeemable preference shares (CRPS) in 2013, had redeemed all of the issued CRPS on 8 January 2018).

18. PRINCIPAL SUBSIDIARIES WITH MATERIAL NON-CONTROLLING INTERESTS

The Group had total non-controlling interests of US$1,665.7 million at 31 December 2019 (2018: US$1,639.2 million) which relate to the Las Bambas Joint Venture Group.

The summarised financial information is shown on a 100% basis. It represents the amounts shown in the Las Bambas joint Venture Group's financial statements prepared in accordance with HKFRSs under Group's accounting policies, before inter-company eliminations.

	AS AT 31 DECEMBER	
US$ MILLION	**2019**	**2018**
Summarised Statement of Financial Position		
Assets	**10,854.4**	**11,133.4**
Current	890.5	1,066.3
Non-current	9,963.9	10,067.1
Liabilities	**(6,412.6)**	**(6,762.4)**
Current	(1,066.4)	(1,014.8)
Non-current	(5,346.2)	(5,747.6)
Net assets	**4,441.8**	**4,371.0**

	YEAR ENDED 31 DECEMBER	
	2019	**2018**
Summarised Statement of Comprehensive Income		
Revenue	2,013.0	2,578.6
Profit and other comprehensive income for the year	93.6	191.4
Total comprehensive income attributable to non-controlling interests	35.1	71.8

	YEAR ENDED 31 DECEMBER	
	2019	**2018**
Summarised Statement of Cash Flows		
Net decrease in cash and cash equivalents	(378.3)	(239.0)
Cash and cash equivalents at 1 January	469.2	708.2
Cash and cash equivalents at 31 December	**90.9**	**469.2**

19. INVENTORIES

	2019 US$ MILLION	2018 US$ MILLION
Non-current		
Work in progress	**106.4**	**75.8**
Current		
Stores and consumables	116.8	126.5
Work in progress	40.8	45.0
Finished goods	224.6	32.4
	382.2	**203.9**
Total	**488.6**	**279.7**

20. DEFERRED INCOME TAX

The movements in deferred income tax assets/(liabilities) during the years are as follows:

US$ MILLION	PROPERTY, PLANT AND EQUIPMENT	PROVISIONS	TAX LOSSES	OTHERS	TOTAL
At 1 January 2018	**(1,149.7)**	**125.7**	**319.7**	**41.8**	**(662.5)**
(Charged)/credited to profit or loss – continuing operations (Note 9)	(13.0)	60.1	(167.9)	29.6	(91.2)
Credited/(charged) to profit or loss – discontinued operation	20.1	-	(6.5)	-	13.6
Derecognition of deferred tax balances associated with disposal of subsidiaries	(5.2)	-	(10.0)	-	(15.2)
At 31 December 2018	**(1,147.8)**	**185.8**	**135.3**	**71.4**	**(755.3)**
HKFRS 16 adjustments to opening balances (Note 3)	-	-	-	11.3	11.3
Credited/(charged) to profit or loss (Note 9)	206.8	2.4	(108.4)	(56.4)	44.4
At 31 December 2019	**(941.0)**	**188.2**	**26.9**	**26.3**	**(699.6)**

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current income tax assets against current income tax liabilities and when the deferred income taxes relate to income tax levied by the same taxation authority on either the taxation entity or different taxation entities, and there is an intention to settle the balances on a net basis. The following amounts, determined after appropriate offsetting, are shown in the consolidated statement of financial position:

	2019 US$ MILLION	2018 US$ MILLION
Deferred income tax assets	180.4	178.1
Deferred income tax liabilities	(880.0)	(933.4)
	(699.6)	**(755.3)**

The Group only recognises deferred income tax assets for deductible temporary differences and unused tax losses if it is probable that future taxable amounts will be available to utilise those temporary differences and tax losses in the foreseeable future. Management will continue to assess the recognition of deferred income tax assets in future reporting periods. At 31 December 2019 and 2018, the Group had unrecognised deferred tax losses and temporary differences as follows:

	2019 US$ MILLION	2018 US$ MILLION
Tax losses (tax effected)	31.6	34.4
Deductible temporary differences (tax effected)	44.3	45.2
At 31 December	**75.9**	**79.6**

21. TRADE AND OTHER RECEIVABLES

	2019 US$ MILLION	2018 US$ MILLION
Non-current other receivables		
Prepayments	1.9	3.7
Other receivables – government taxes (net of provisions)[1]	57.3	93.9
Sundry receivables[2]	151.1	134.1
	210.3	**231.7**
Current trade and other receivables		
Trade receivables[3] (Notes 33.1(c), (e), 33.3 and 33.4)	240.6	285.5
Prepayments	37.4	22.3
Other receivables – government taxes[1]	50.9	76.7
Sundry receivables	32.7	28.2
	361.6	**412.7**

1. The government taxes amount mainly consists of VAT receivables associated with the Group's operations in Peru and the DRC.
2. Sundry receivables include amounts relating to tax matters of MLB during Glencore's period of ownership.
3. At 31 December 2019 and 2018, trade receivables of the Group mainly related to the mining operations. 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. All the trade receivables at 31 December 2019 and 2018 were within 6 months from the date of invoice. At 31 December 2019, there was no trade receivable past due (2018: US$20.9 million). At 31 December 2019, the Group's trade receivables included an amount of US$103.5 million (2018: US$140.5 million) (Note 32(d)), which was due from a related company of the Group. The carrying amounts of the Group's trade receivables are all denominated in US$.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

22. OTHER FINANCIAL ASSETS

	2019 US$ MILLION	2018 US$ MILLION
Non-current financial assets (Notes 33.1(c), (e), 33.3 and 33.4)		
Financial assets at fair value through profit or loss – listed[1]	3.1	3.3
	3.1	**3.3**

1. Financial assets at fair value through profit or loss are listed investments outside Hong Kong and their carrying values are equal to their market values.

23. CASH AND CASH EQUIVALENTS

	2019 US$ MILLION	2018 US$ MILLION
Cash at bank and in hand	216.3	301.9
Short-term bank deposits[1]	1.2	300.0
Total[2] (Notes 33.1(c), (e), 33.3 and 33.5)	**217.5**	**601.9**

1. The weighted average effective interest rate on short-term bank deposits at 31 December 2018 was 2.77%. These deposits have an average 19 days to maturity from 31 December 2018.
2. Total cash and cash equivalents include US$90.9 million (2018: US$469.2 million) of cash held limited for use by Las Bambas Joint Venture Group and US$13.0 million (2018: US$24.1 million) of cash held limited for use by Dugald River project.

The carrying amounts of the cash and cash equivalents are denominated in the following currencies:

	2019 US$ MILLION	2018 US$ MILLION
US dollars	197.5	592.1
Australian dollars	7.7	6.3
Peruvian sol	10.0	1.3
Hong Kong dollars	0.3	0.3
Others	2.0	1.9
	217.5	**601.9**

24. SHARE CAPITAL

	NUMBER OF ORDINARY SHARES		SHARE CAPITAL	
	2019 '000	2018 '000	2019 US$ MILLION	2018 US$ MILLION
Issued and fully paid:				
At 1 January	8,051,998	7,963,134	2,910.8	2,874.1
Employee share options exercised[1]	2,789	27,588	1.4	11.7
Employee performance awards vested	-	61,276	-	25.0
At 31 December	**8,054,787**	**8,051,998**	**2,912.2**	**2,910.8**

1. During the year ended 31 December 2019, a total of 2,788,423 new shares were issued as a result of employee share options exercised at a weighted average exercise price of HK$2.46 per share under the Company's 2013 and 2016 Share Option Schemes (Note 35). The weighted average share price during the year is HK$2.47.

25. RESERVES AND RETAINED PROFITS

US$ MILLION	SPECIAL CAPITAL RESERVE	EXCHANGE TRANSLATION RESERVE	MERGER RESERVE[1]	SURPLUS RESERVE	SHARE-BASED PAYMENT RESERVE	TOTAL RESERVES	RETAINED PROFITS/ (ACCUMU-LATED LOSSES)	TOTAL
At 1 January 2019	9.4	2.7	(1,946.9)	19.3	17.5	(1,898.0)	244.3	(1,653.7)
HKFRS 16 adjustment to retained profits (Note 3)	-	-	-	-	-	-	(15.7)	(15.7)
Restated balance at 1 January 2019	9.4	2.7	(1,946.9)	19.3	17.5	(1,898.0)	228.6	(1,669.4)
Loss for the year	-	-	-	-	-	-	(230.4)	(230.4)
Total comprehensive loss for the year	-	-	-	-	-	-	(230.4)	(230.4)
Employee share options exercised and vested	-	-	-	-	(0.2)	(0.2)	-	(0.2)
Employee share options lapsed	-	-	-	-	(0.9)	(0.9)	0.9	-
Total transactions with owners	-	-	-	-	(1.1)	(1.1)	0.9	(0.2)
At 31 December 2019	9.4	2.7	(1,946.9)	19.3	16.4	(1,899.1)	(0.9)	(1,900.0)

1. Merger reserve represents the excess of investment cost in entities that have been accounted for under merger accounting for common control combinations in accordance with AG5 (Accounting Guideline 5 issued by the HKICPA) against their share capital.

US$ MILLION	SPECIAL CAPITAL RESERVE	EXCHANGE TRANSLATION RESERVE	MERGER RESERVE[1]	SURPLUS RESERVE	SHARE-BASED PAYMENT RESERVE	TOTAL RESERVES	RETAINED PROFITS	TOTAL
At 1 January 2018	9.4	2.7	(1,946.9)	-	42.4	(1,892.4)	201.7	(1,690.7)
Profit for the year	-	-	-	-	-	-	68.3	68.3
Other comprehensive income	-	-	-	-	-	-	-	-
Total comprehensive income for the year	**-**	**-**	**-**	**-**	**-**	**-**	**68.3**	**68.3**
Provision of surplus reserve[2]	-	-	-	19.3	-	**19.3**	(19.3)	**-**
Disposal of a subsidiary	-	-	-	-	-	**-**	(7.7)	**(7.7)**
Employee long-term incentives	-	-	-	-	3.9	**3.9**	-	**3.9**
Employee share options exercised and vested	-	-	-	-	(27.5)	**(27.5)**	-	**(27.5)**
Employee share options lapsed	-	-	-	-	(1.3)	**(1.3)**	1.3	**-**
Total transactions with owners	**-**	**-**	**-**	**19.3**	**(24.9)**	**(5.6)**	**(25.7)**	**(31.3)**
At 31 December 2018	**9.4**	**2.7**	**(1,946.9)**	**19.3**	**17.5**	**(1,898.0)**	**244.3**	**(1,653.7)**

Distributable reserves

At 31 December 2019 and 2018, the Company did not have any distributable reserves available for distribution to shareholders.

26. BORROWINGS

	2019 US$ MILLION	2018 US$ MILLION
Non-current		
Loan from a related party (Note 32(d))	2,261.3	2,261.3
Bank borrowings, net	4,592.4	5,185.1
	6,853.7	**7,446.4**
Current		
Loan from a related party (Note 32(d))	-	100.0
Bank borrowings, net	774.6	585.0
	774.6	**685.0**
Analysed as:		
– Secured	5,250.6	5,842.1
– Unsecured	2,441.3	2,361.2
	7,691.9	**8,203.3**
Prepayments – finance charges	(63.6)	(71.9)
	7,628.3	**8,131.4**
Borrowings (excluding: prepayments) were repayable as follows:		
– Within one year	780.8	691.4
– More than one year but not exceeding two years	1,309.8	600.8
– More than two years but not exceeding five years	2,685.9	3,445.5
– More than five years	2,915.4	3,465.6
	7,691.9	**8,203.3**
Prepayments – finance charges	(63.6)	(71.9)
Total (Notes 33.1(c) and 33.3)	**7,628.3**	**8,131.4**

An analysis of the carrying amounts of the total borrowings (excluding prepayments) by type and currency is as follows:

	2019 US$ MILLION	2018 US$ MILLION
US dollars		
– At floating rates	5,430.6	5,942.0
– At fixed rates	2,261.3	2,261.3
	7,691.9	**8,203.3**

The effective interest rate of borrowings during the year ended 31 December 2019 was 5.0% (2018: 5.7%) per annum.

At 31 December 2019, certain borrowings of the Group were secured as follows:

(a) Approximately US$4,852.07 million (2018: US$5,396.48 million) from China Development Bank, ICBC, 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 Minera Las Bambas S.A. ("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. Approximately US$469.0 million (2018: US$699.0 million) of these borrowings are guaranteed on a several basis by China Minmetals Non-ferrous Metals Holding Company Limited ("CMNH") and China Minmetals Corporation Limited ("CMCL"), Guoxin International Investment Corporation Limited and CITIC Corporation Limited in proportion to the respective shareholdings of MMG SA, Elion Holdings Corporation Limited and Citic Metal Peru Investment Limited in the Las Bambas Joint Venture Group.

(b) Approximately US$398.56 million (2018: US$445.56 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.

RECONCILIATION OF BORROWINGS ARISING FROM FINANCING ACTIVITIES

				NON-CASH CHANGES		
US$ MILLION	NOTES	1 JANUARY 2019	FINANCING CASHFLOW	EFFECTIVE INTEREST	OTHER CHANGES	31 DECEMBER 2019
Loans from a related party	32(d)	**2,361.3**	(100.0)[1]	-	-	2,261.3
Bank borrowings	26	**5,770.1**	(411.4)[1]	-	8.3[2]	5,367.0
Accrued interest[5]	30	**57.5**	(472.3)	465.6	-	50.8
		8,188.9	**(983.7)**	**465.6**	**8.3**	**7,679.1**

				NON-CASH CHANGES		
US$ MILLION	NOTES	1 JANUARY 2018	FINANCING CASHFLOW	EFFECTIVE INTEREST	OTHER CHANGES	31 DECEMBER 2018
Loan from a related party	32(d)	**2,261.3**	100.0[1]	-	-	**2,361.3**
Bank borrowings	26	**6,722.4**	(958.8)[1]	-	6.5[2]	**5,770.1**
Convertible redeemable preference shares		**208.8**	(338.0)[3]	-	129.2[4]	**-**
Accrued interest[5]	30	**313.4**	(730.3)	474.4	-	**57.5**
		9,505.9	**(1,927.1)**	**474.4**	**135.7**	**8,188.9**

1. Net bank borrowings financing cashflow is made up of repayments of and proceeds from borrowings in the Consolidated Statement of Cash Flows.
2. Other changes include the amortisation of capitalised prepayments on borrowings.
3. US$338.0 million of repayment represent the redemption payment of CRPS.
4. Other changes include allocation of payment to the equity component of the CRPS (US$142.0 million), net of gain on revaluation of the liability (US$12.6 million) (Note 6).
5. Accrued interest includes both interest on external bank borrowings and related party borrowings.

27. LEASE LIABILITIES

AT 31 DECEMBER 2019	US$ MILLION
Non-current	
Lease liabilities	138.3
Current	
Lease liabilities	22.5
Total (Note 33.1)	**160.8**
Lease liabilities were repayable as follows:	
– Within one year	22.5
– More than one year but not exceeding two years	16.0
– More than two years but not exceeding five years	33.8
– More than five years	88.5
	160.8

Refer to Note 33.1(e) for maturity profile of the undiscounted lease liabilities. In respect of such lease liabilities, the Group generally does not have any early termination options. However, in case of certain leases the Group has extension option exercisable at the discretion of the Group. Such extension options allow for operational flexibility in managing the Group's assets. Where the Group assesses at lease commencement date that it is reasonably certain to exercise the extension options, rentals during the extension period are included in determination of lease liability. The undiscounted potential estimated exposure in respect of future lease payments for extension options which the Group is not reasonably certain to exercise is presented as follows:

AT 31 DECEMBER 2019	US$ MILLION
– Within one year	0.6
– More than one year but not exceeding two years	2.8
– More than two years but not exceeding five years	6.6
– More than five years	47.5
Total	**57.5**

As presented under financing cashflows in the consolidated statement of cashflows, cash outflows for lease payments of US$40.7 million include repayment of principal (US$24.7 million) and interest (US$16.0 million).

In respect of lease contracts not recognised as right of use assets in line with HKFRS 16 requirements (refer to Note 7), payments of US$42.9 million have been presented under operating cash flows.

28. PROVISIONS

	2019 US$ MILLION	2018 US$ MILLION
Non-current		
Employee benefits	12.0	9.3
Workers' compensation	0.4	0.5
Mine rehabilitation, restoration and dismantling (a)	419.6	370.5
Other provisions	39.3	36.5
Total non-current provisions	**471.3**	**416.8**
Current		
Employee benefits	22.4	28.5
Workers' compensation	0.2	0.2
Mine rehabilitation, restoration and dismantling (a)	10.7	8.1
Other provisions	84.1	177.2
Total current provisions	**117.4**	**214.0**
Aggregate		
Employee benefits	34.4	37.8
Workers' compensation	0.6	0.7
Mine rehabilitation, restoration and dismantling (a)	430.3	378.6
Other provisions	123.4	213.7
Total provisions	**588.7**	**630.8**

(a) Mine rehabilitation, restoration and dismantling

	2019 US$ MILLION	2018 US$ MILLION
At 1 January	378.6	637.9
Additional provisions recognised	38.2	(3.5)
Payments made	(1.2)	(0.4)
Disposal of Sepon Mine	-	(256.2)
Unwinding of discount on provisions (Note 8)	15.7	19.4
Exchange rate differences	(1.0)	(18.6)
At 31 December	**430.3**	**378.6**

Provision is made in these consolidated financial statements for the anticipated costs of the mine rehabilitation obligations under the mining leases and exploration licences.

29. OTHER FINANCIAL LIABILITES

	2019 US$ MILLION	2018 US$ MILLION
Non-current other financial liabilities		
Bank guarantee liabilities (Note 37)[1]	135.7	136.6
Total (Notes 33.1(c), (e), 33.3 and 33.4)	**135.7**	**136.6**

1. Bank guarantees liabilities associated with the disposal of the Century mine in 2017, for the benefit of New Century.

30. TRADE AND OTHER PAYABLES

The analysis of the trade and other payables is as follows:

	2019 US$ MILLION	2018 US$ MILLION
Current trade and other payables		
Trade payables[1]		
– Less than 6 months	306.9	228.0
– More than 6 months	3.1	3.7
	310.0	231.7
Related party interest payable (Note 32(d))	41.5	41.9
Other payables and accruals[2]	239.8	234.5
Total (Notes 33.1 (c), (e) and 33.3)	**591.3**	**508.1**

1. At 31 December 2019, the Group's trade payables included an amount of US$1.3 million (2018: US$0.7 million) (Note 32(d)), which was due to a related company of the Group. The ageing analysis of the trade payables is based on the creditors' invoice date.
2. At 31 December 2019, the Group's other payables and accruals included an amount of US$9.3 million (2018: US$15.6 million) accrued interest on external bank borrowings.

31. NOTES TO CONSOLIDATED STATEMENT OF CASH FLOWS

(a) Reconciliation of (loss)/profit for the year to net cash generated from operating activities is as follows:

	2019 US$ MILLION	2018 US$ MILLION
(Loss)/profit for the year	**(195.3)**	**137.4**
Adjustments for:		
Finance income (Note 8)	(11.2)	(13.5)
Finance costs (Note 8)	523.1	539.9
Depreciation and amortisation expenses (Note 7)	969.6	1,077.2
Impairment expense (Note 14)	150.0	-
Loss/(gain) on disposal of property, plant and equipment (Note 6)	0.6	(2.4)
Gain on disposal of subsidiaries (Note 10)	-	(27.9)
Gain on revaluation of convertible redeemable preference shares (Note 6)	-	(12.6)
Gain on disposal of royalty rights	-	(2.1)
Loss on financial assets at fair value through profit or loss (Note 7)	0.3	2.4
Share-based payment	-	3.9
Changes in working capital:		
Inventories	(208.6)	16.3
Trade and other receivables	66.8	(178.6)
Trade payables and accruals, provisions and other payables	22.1	91.1
Tax assets and tax liabilities	(172.3)	100.4
Net cash generated from operating activities	**1,145.1**	**1,731.5**

(b) In the Consolidated Statement of Cash Flows, purchase of property, plant and equipment comprises:

	2019 US$ MILLION	2018 US$ MILLION
Total additions (Note 14)	563.0	331.0
Less: non-cash (additions)/reduction		
Transfer from provision for mine rehabilitation, restoration and dismantling[1]	(37.2)	22.1
Less: cash flows reported in "Interest and financing costs paid"		
Capitalised interest (Note 14)	-	(9.0)
Less: non-cash additions	(49.5)	(12.0)
Purchase of property, plant and equipment	**476.3**	**332.1**

1. The transfer from provision for mine rehabilitation, restoration and dismantling included the impact of exchange rate differences on foreign currency provisions for mine rehabilitation, restoration and dismantling for operating sites. Refer to note 28(a) for details.

32. SIGNIFICANT RELATED PARTY TRANSACTIONS

The Group is controlled by CMN through China Minmetals H.K. (Holdings) Limited ("Minmetals HK"), which is a subsidiary of CMN. At 31 December 2019, 72.6% of the Company's shares are held by CMN and 27.4% are widely held by the public. The Directors consider the ultimate holding company is CMC, a stated-owned company incorporated in the People's Republic of China ("PRC"), of which CMN is a subsidiary.

For the purposes of the related party transaction disclosures, the Directors believe that meaningful information in respect of related party transactions has been adequately disclosed. In addition to the related party information and transactions disclosed elsewhere in the consolidated financial statements, the following is a summary of significant related party transactions entered into in the ordinary course of business between the Group and its related parties during the year.

(a) Transactions with CMC and its group companies (other than those within the Group)

	2019 US$ MILLION	2018 US$ MILLION
Revenue		
Sales of non-ferrous metals[1,2]	1,257.0	1,686.5
Purchases		
Purchases of consumables and services[3]	(13.3)	(10.4)
Finance costs – net		
Finance costs (Note 8)	(99.5)	(115.8)

1. During the pre-commissioning phase in 2018, US$50.9 million sales of zinc concentrate were made by Dugald River Project to CMC Group, which was capitalised to property, plant and equipment in accordance with requirements under HKAS 16. Dugald River mine was commissioned on 1 May 2018.
2. US$113.5 million of the related party sales of non-ferrous metals in 2018 were attributable to discontinued operation.
3. US$0.9 million of the related party purchases of consumables and services in 2018 were attributable to discontinued operation.

(b) Transactions and balances with other state-owned enterprises

During the year ended 31 December 2019, the Group's significant transactions with other state-owned enterprises (excluding CMC and its subsidiaries) are sales of non-ferrous metals and purchases of consumables and services and the related receivables and payables balances. These transactions were based on terms as set out in the underlying agreements, on statutory rates or market prices or actual cost incurred, or as mutually agreed.

(c) Key management compensation

Key management includes Directors (executive and non-executive) and members of the Executive Committee. The key management personnel remuneration for the Group was as follows:

	2019 US$ MILLION	2018 US$ MILLION
Salaries and other short-term employee benefits	6.5	7.3
Short-term incentives and discretionary bonus	1.9	3.2
Long-term incentives	1.0	2.0
Post-employment benefits	0.3	0.3
	9.7	**12.8**

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

(d) Year-end balances

	2019 US$ MILLION	2018 US$ MILLION
Amounts payable to related parties		
Loan from Top Create[1] (Note 26)	2,261.3	2,261.3
Loan from Top Create – working capital facility (Note 26)[2]	-	100.0
Interest payable to Top Create[1] (Note 30)	41.5	41.9
Trade payable to CMN (Note 30)	1.3	0.7
	2,304.1	**2,403.9**
Amounts receivable from related parties		
Trade receivables from CMN (Note 21)	103.5	140.5
	103.5	**140.5**

1. The loan amount from Top Create represents the amounts drawn by the Company on 22 July 2014 (US$1,843.8 million) and 16 February 2015 (US$417.5 million) pursuant to a facility agreement dated 22 July 2014 between MMG SA and Top Create. In accordance with that agreement, a loan facility of up to US$2,262.0 million was made available to MMG SA, for a period of four years commencing on the date of the first drawdown of the loan. The loan is repayable at the end of the eleven year term, with loan repayments falling due in three separate tranches in July 2021 (US$700.0 million), July 2023 (US$700.0 million), and July 2025 (US$862.0 million). The facility incurs interest at a separate all-in fixed rate for each of the repayment tranches of between 3.70% and 4.50% per annum, which is repayable annually.
2. The loan amount from Top Create represents amounts drawn by MMG Finance Limited (a subsidiary of the Group) on 25 July 2018, pursuant to a revolving credit facility agreement dated 1 June 2017, between MMG Finance Limited and Top Create Limited. This facility is unsecured and incurs interest at LIBOR plus 1.50%. Funds drawn under the facility at 31 December 2018 were repaid in January 2019. In January 2020, the facility was extended to a revised maturity date of April 2021.

33. FINANCIAL AND OTHER RISK MANAGEMENT

33.1 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 foreign exchange contracts 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, and silver 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.

The following table details the sensitivity of the Group's financial assets (excluding commodity price contracts) 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 all other variables were held constant, the Group's post-tax loss/profit would have changed as set out below:

COMMODITY	2019 COMMODITY PRICE MOVEMENT	2019 DECREASE IN LOSS US$ MILLION	2019 INCREASE IN LOSS US$ MILLION	2018 COMMODITY PRICE MOVEMENT	2018 INCREASE IN PROFIT US$ MILLION	2018 DECREASE IN PROFIT US$ MILLION
Copper	10%	44.0	(44.0)	10%	37.5	(37.5)
Zinc	10%	4.0	(4.0)	10%	4.5	(4.5)
Total		**48.0**	**(48.0)**		**42.0**	**(42.0)**

(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 have been disclosed in Note 23 while the details of the Group's borrowings are set out in Note 26.

The Group regularly monitors its interest rate risk to ensure that there are no undue exposures to significant interest rate movements. Any decision to hedge interest rate risk is assessed periodically in light of the Group's overall exposure, the prevailing interest rate market and any funding counterparty requirements. Regular reporting which summarises the Group's debt and interest rates is provided to the Executive Committee. At 31 December 2019 and 2018, if the interest rate had increased/(decreased) by 100 basis points with all other variables held constant, post-tax (loss)/profit would have changed as follows:

US$ MILLION	2019 -100 BASIS POINTS (INCREASE)/ DECREASE IN LOSS	2019 +100 BASIS POINTS (INCREASE)/ DECREASE IN LOSS	2018 -100 BASIS POINTS (DECREASE)/ INCREASE IN PROFIT	2018 +100 BASIS POINTS (DECREASE)/ INCREASE IN PROFIT
Financial assets				
Cash and cash equivalents	(1.5)	1.5	(4.2)	4.2
Financial liabilities				
Borrowings	36.9	(36.9)	41.6	(41.6)
Total	**35.4**	**(35.4)**	**37.4**	**(37.4)**

(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$. The majority of revenue received by the Group is in US$. 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

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

US$ MILLION	NOTES	US$	PEN	A$	HK$	OTHERS	TOTAL
At 31 December 2019							
Financial assets							
Cash and cash equivalents	23	197.5	10.0	7.7	0.3	**2.0**	**217.5**
Trade receivables	21	240.6	-	-	-	**-**	**240.6**
Other receivables		48.9	106.8	5.5	-	**15.3**	**176.5**
Other financial assets	22	3.1	-	-	-	**-**	**3.1**
Financial liabilities							
Trade and other payables	30	(412.6)	(100.5)	(53.5)	-	**(24.7)**	**(591.3)**
Other financial liabilities	29	-	-	(135.7)	-	**-**	**(135.7)**
Borrowings	26	(7,628.3)	-	-	-	**-**	**(7,628.3)**
Lease liabilities	27	(145.0)	(0.2)	(15.1)	(0.4)	**(0.1)**	**(160.8)**
		(7,695.8)	**16.1**	**(191.1)**	**(0.1)**	**(7.5)**	**(7,878.4)**

US$ MILLION	NOTES	US$	PEN	A$	HK$	OTHERS	TOTAL
At 31 December 2018							
Financial assets							
Cash and cash equivalents	23	592.1	1.3	6.3	0.3	**1.9**	**601.9**
Trade receivables	21	285.5	-	-	-	**-**	**285.5**
Other receivables		51.3	146.4	5.8	-	**25.5**	**229.0**
Other financial assets	22	3.3	-	-	-	**-**	**3.3**
Financial liabilities							
Trade and other payables	30	(339.6)	(88.4)	(63.6)	-	**(16.5)**	**(508.1)**
Other financial liabilities	29	-	-	(136.6)	-	**-**	**(136.6)**
Borrowings	26	(8,131.4)	-	-	-	**-**	**(8,131.4)**
		(7,538.8)	**59.3**	**(188.1)**	**0.3**	**10.9**	**(7,656.4)**

Based on the Group's net monetary assets and financial liabilities at 31 December 2019 and 2018, a movement of the US$ against the principal non-functional currencies as illustrated in the table below, with all other variables held constant, would cause changes in post-tax (loss)/profit as follows:

	2019		2018	
	WEAKENING OF US DOLLAR	STRENGTHENING OF US DOLLAR	WEAKENING OF US DOLLAR	STRENGTHENING OF US DOLLAR
US$ MILLION	(INCREASE)/ DECREASE IN LOSS	(INCREASE)/ DECREASE IN LOSS	(DECREASE)/ INCREASE IN PROFIT	(DECREASE)/ INCREASE IN PROFIT
10% movement in Australian dollar (2018: 10%)	(13.4)	13.4	(13.2)	13.2
10% movement in Peruvian sol (2018: 10%)	1.1	(1.1)	4.0	(4.0)
Total	**(12.3)**	**12.3**	**(9.2)**	**9.2**

(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 Note 21, and 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 as disclosed in Note 21 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 2019 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 equivalent that are deposited with financial institutions with high credit rating to be low credit risk financial assets.

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:

	2019	2018
CMN	36.4%	36.3%
CITIC Metal	16.9%	16.1%
Trafigura	14.0%	14.6%

The Group's largest debtor at 31 December 2019 was CMN, with a balance of US$60.4 million (2018: CMN with US$140.5 million) and the five largest debtors accounted for 77.6% (2018: 92.3%) 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	2019	2018
Asia	157.7	228.0
Europe	65.7	48.8
Australia	5.6	6.1
Other	11.6	2.6
	240.6	**285.5**

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS 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 non-derivative financial 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 non-derivative 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 2019						
Financial assets						
Cash and cash equivalents (Note 23)	217.5	-	-	-	**217.5**	**217.5**
Trade receivables (Note 21)	240.6	-	-	-	**240.6**	**240.6**
Other receivables	83.6	92.9	-	-	**176.5**	**176.5**
Other financial assets (Note 22)	3.1	-	-	-	**3.1**	**3.1**
Financial liabilities						
Trade and other payables (Note 30)	(591.3)	-	-	-	**(591.3)**	**(591.3)**
Other financial liabilities (Note 29)	-	-	-	(135.7)	**(135.7)**	**(135.7)**
Borrowings (including interest)	(1,157.0)	(1,650.5)	(3,388.5)	(3,392.9)	**(9,588.9)**	**(7,628.3)**
Lease liabilities (including interest)	(36.5)	(28.5)	(64.0)	(128.6)	**(257.6)**	**(160.8)**
	(1,240.0)	**(1,586.1)**	**(3,452.5)**	**(3,657.2)**	**(9,935.8)**	**(7,878.4)**
At 31 December 2018						
Financial assets						
Cash and cash equivalents (Note 23)	601.9	-	-	-	**601.9**	**601.9**
Trade receivables (Note 21)	285.5	-	-	-	**285.5**	**285.5**
Other receivables	104.9	124.1	-	-	**229.0**	**229.0**
Other financial assets (Note 22)	3.3	-	-	-	**3.3**	**3.3**
Financial liabilities						
Trade and other payables (Note 30)	(508.1)	-	-	-	**(508.1)**	**(508.1)**
Other financial liabilities (Note 29)	-	-	-	(136.6)	**(136.6)**	**(136.6)**
Borrowings (including interest)	(1,064.9)	(940.0)	(4,209.2)	(4,156.6)	**(10,370.7)**	**(8,131.4)**
	(577.4)	**(815.9)**	**(4,209.2)**	**(4,293.2)**	**(9,895.7)**	**(7,656.4)**

Available debt facilities

At 31 December 2019:

1. The Group (excluding the Las Bambas Joint Venture Group) had available to it undrawn debt facilities of US$220.0 million (2018: US$300.0 million). This was represented by US$120.0 (2018: US$300.0 million) that was undrawn and available under a US$300.0 million revolving credit facility provided by ICBC, Melbourne Branch and available for general corporate purposes; together with US$100.0 million (2018: nil) that was undrawn and available under a US$100.0 million working capital facility provided by Top Create Resources Limited. The facility provided by ICBC, Melbourne Branch is due to mature in December 2020, and the facility provided by Top Create Resources Limited is due to mature in April 2021.

2. The Las Bambas Joint Venture Group had available to it undrawn debt facilities of US$350.0 million (2018: US$350.0 million). This was represented by a US$175.0 million revolving credit facility provided by BOC Sydney, and a US$175.0 million revolving credit facility provided by ICBC, Luxembourg Branch, both established in August 2019. These facilities are available for general corporate purposes and mature in August 2022. They replaced a US$350.0 million working capital facility provided by BOC Sydney, which matured in March 2019.

The Group's available external debt facilities are subject to covenant compliance requirements. All the covenant requirements in respect of the Group's borrowings were in compliance at 31 December 2019. 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.

33.2 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 continues to result in an increased tax burden on mining companies.

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.

33.3 FAIR VALUES OF FINANCIAL INSTRUMENTS

The fair values of cash and cash equivalents and short-term monetary financial assets and financial liabilities approximate their carrying values. The fair values of other monetary financial assets and liabilities are either based upon market prices, where a market exists, or have been determined by discounting the expected future cash flows by the current interest rate for financial assets and financial liabilities with similar risk profiles.

The fair values of listed equity investments have been valued by reference to market prices prevailing at the reporting date.

The carrying values of trade and other receivables less impairment provisions and trade payables are a reasonable approximation of their fair values due to the short-term nature of trade receivables and payables. The fair values of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the consolidated entity for similar financial instruments.

The carrying amounts and fair values of financial assets and liabilities by category and class at 31 December 2019 and 2018 are:

US$ MILLION	NOTES	AMORTISED COST (ASSETS)	FINANCIAL ASSETS/ LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS	AMORTISED COST (LIABILITIES)	TOTAL CARRYING VALUE	TOTAL FAIR VALUE
At 31 December 2019						
Financial assets						
Cash and cash equivalents	23	217.5	-	-	**217.5**	**217.5**
Trade receivables	21	-	240.6	-	**240.6**	**240.6**
Other receivables		176.5	-	-	**176.5**	**176.5**
Other financial assets	22	-	3.1	-	**3.1**	**3.1**
Financial liabilities						
Trade and other payables	30	-	-	(591.3)	**(591.3)**	**(591.3)**
Other financial liabilities	29	-	(135.7)	-	**(135.7)**	**(135.7)**
Borrowings	26	-	-	(7,628.3)	**(7,628.3)**	**(7,628.3)**
Lease liabilities	27	-	-	(160.8)	**(160.8)**	**(160.8)**
		394.0	**108.0**	**(8,380.4)**	**(7,878.4)**	**(7,878.4)**

US$ MILLION	NOTES	AMORTISED COST (ASSETS)	FINANCIAL ASSETS/ LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS	AMORTISED COST (LIABILITIES)	TOTAL CARRYING VALUE	TOTAL FAIR VALUE
At 31 December 2018						
Financial assets						
Cash and cash equivalents	23	601.9	-	-	**601.9**	**601.9**
Trade receivables	21	-	285.5	-	**285.5**	**285.5**
Other receivables		229.0	-	-	**229.0**	**229.0**
Other financial assets	22	-	3.3	-	**3.3**	**3.3**
Financial liabilities						
Trade and other payables	30	-	-	(508.1)	**(508.1)**	**(508.1)**
Other financial liabilities	29	-	(136.6)	-	**(136.6)**	**(136.6)**
Borrowings	26	-	-	(8,131.4)	**(8,131.4)**	**(8,131.4)**
		830.9	**152.2**	**(8,639.5)**	**(7,656.4)**	**(7,656.4)**

33.4 FAIR VALUE ESTIMATION

The table below analyses financial instruments carried at fair value, by the valuation method. The different levels have been defined as follows:

- quoted prices (unadjusted) in active markets for identical assets or liabilities (level 1);
- inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices) (level 2); and
- inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) (level 3).

The following table presents the Group's financial assets and liabilities that are measured at fair value at 31 December 2019 and 2018.

US$ MILLION	NOTES	LEVEL 1	LEVEL 2	LEVEL 3	TOTAL
At 31 December 2019					
Trade receivables	21	-	240.6	-	**240.6**
Financial assets at fair value through profit and loss – listed[1]	22	3.1	-	-	**3.1**
Other financial liabilities[2]	29	-	-	(135.7)	**(135.7)**
		3.1	**240.6**	**(135.7)**	**108.0**
At 31 December 2018					
Trade receivables	21	-	285.5	-	**285.5**
Financial assets at fair value through profit and loss – listed[1]	22	3.3	-	-	**3.3**
Other financial liabilities[2]	29	-	-	(136.6)	**(136.6)**
		3.3	**285.5**	**(136.6)**	**152.2**

1. The fair values of financial instruments traded in active markets are based on quoted market prices at the reporting date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's-length basis. Instruments included in level 1 comprise investments in listed stock exchanges.
2. Reflecting the bank guarantees associated with the disposal of the Century mine in 2017. The amount of possible cash outflow is regularly assessed by the management and is the significant unobservable input to the fair value determination. The management considers the fair value at 31 December 2019 is the maximum amount payable stipulated under the bank guarantee agreement.

There were no transfers between levels 1, 2 and 3 during the year.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

33.5 CAPITAL RISK MANAGEMENT

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 set out below, with gearing 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.

MMG GROUP	2019 US$ MILLION	2018 US$ MILLION
Total borrowings (excluding prepaid finance charges)[1] (Note 26)	7,691.9	8,203.3
Less: cash and cash equivalents (Note 23)	(217.5)	(601.9)
Net debt	**7,474.4**	**7,601.4**
Total equity	2,677.9	2,896.3
Net debt + Total equity	**10,152.3**	**10,497.7**
Gearing ratio	**0.74**	**0.72**

1. Borrowings at an MMG Group level reflect 100% of borrowings of the Las Bambas Joint Venture Group. The Las Bambas Joint Venture Group's borrowings have not been reduced to reflect the MMG Group's 62.5% equity interest in that entity. 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 (2018: 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.

34. DIRECTORS' AND SENIOR MANAGEMENT'S EMOLUMENTS

(a) Directors' emoluments

The remuneration of every Director for the year ended 31 December 2019 is set out below:

	FOR THE YEAR ENDED 31 DECEMBER 2019					
NAME OF DIRECTOR	FEES US$'000	SALARIES US$'000	OTHER BENEFITS[1] US$'000	SHORT-TERM INCENTIVE PLANS[2] US$'000	LONG-TERM INCENTIVE PLANS[3] US$'000	TOTAL US$'000
Mr GAO Xiaoyu	-	1,553	16	802	616	2,987
Mr XU Jiqing[4]	-	586	14	-	104	704
Mr JIAO Jian	152	-	9	-	-	161
Mr LEUNG Cheuk Yan	149	-	-	-	-	149
Dr Peter William CASSIDY	156	-	2	-	-	158
Ms Jennifer Anne Seabrook[5]	135	-	2	-	-	137
Professor PEI Ker Wei[6]	149	-	-	-	-	149
Mr GUO Wenqing (Chairman)	-	-	-	-	-	-
Mr ZHANG Shuqiang	141	-	2	-	-	143
Mr Peter Ka Keung CHAN[7]	14	-	-	-	-	14
	896	**2,139**	**45**	**802**	**720**	**4,602**

1. Other benefits include statutory superannuation, pension contributions and non-monetary benefits. Not all benefits apply to each executive; benefits are applied variably based on contractual obligations.
2. Short-term incentive ("STI") plans include at-risk, performance-linked remuneration, STI plans and discretionary bonuses.

   The STI plan is an annual cash award determined by performance against Group financial and safety targets and individual performance. For operational roles, additional components include performance targets related to production rates, unit costs, and operational safety.

   Participation in the at-risk incentive plans is offered to participants as a percentage of their fixed remuneration according to seniority and their ability to influence the performance of the Group. All employees on long-term employment contracts are eligible to participate in a STI plan. The incentive plans' provision for STIs was re-assessed at the reporting date.
3. Long-term incentive ("LTI") plans are performance-linked remuneration LTI plans, and are mostly consist of 2017, 2018 and 2019 Long-Term Incentive Equity plans ("LTIEP"), which are Performance Awards Scheme vesting at the conclusion of three performance years. The vesting of LTI plans is conditional upon the achievement of certain performance conditions as set out in the respective letters of grant, including amongst others, achievement of financial, resources growth and market-related performance targets at the conclusion of the respective vesting period.

   Participation in the at-risk incentive plans is offered to participants as a percentage of their fixed remuneration according to seniority and their ability to influence the performance of the Group. The LTI plans are limited to senior managers invited to participate by the Board. The incentive plans' provision for LTI plans was re-assessed at the reporting date. The values attributed to the LTI plans are estimated values based on an assessment of the likely outcomes for each LTI plans and may be adjusted based on the actual outcome. The values attributed to the LTI plans are subject to Board approval at end of the vesting period.
4. Resigned as the Executive General Manager – Commercial and was redesignated from an Executive Director to a Non-Executive Director of the Company on 1 January 2020. His interests in the 2017, 2018 and 2019 LTIEP lapsed on the same day.
5. Resigned as the Independent Non-Executive Director of the Company on 22 October 2019.
6. Resigned as the Independent Non-Executive Director of the Company on 4 December 2019.
7. Appointed as the Independent Non-Executive Director of the Company on 4 December 2019.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

The remuneration of every Director for the year ended 31 December 2018 is set out below:

	FOR THE YEAR ENDED 31 DECEMBER 2018					
NAME OF DIRECTOR	FEES US$'000	SALARIES US$'000	OTHER BENEFITS[1] US$'000	SHORT-TERM INCENTIVE PLANS[2] US$'000	LONG-TERM INCENTIVE PLANS[3] US$'000	TOTAL US$'000
Mr GAO Xiaoyu[4]	94	694	46	554	-	1,388
Mr JIAO Jian[5]	68	1,135	23	-	(696)	530
Mr XU Jiqing	-	617	65	429	500	1,611
Mr LEUNG Cheuk Yan	160	-	-	-	-	160
Dr Peter William CASSIDY	167	-	2	-	-	169
Ms Jennifer Anne Seabrook	173	-	2	-	-	175
Professor PEI Ker Wei	160	-	-	-	-	160
Mr GUO Wenqing (Chairman)	-	-	-	-	-	-
Mr ZHANG Shuqiang	151	-	1	-	-	152
	973	**2,446**	**139**	**983**	**(196)**	**4,345**

1. Other benefits include statutory superannuation, pension contributions and non-monetary benefits. Not all benefits apply to each executive; benefits are applied variably based on contractual obligations.
2. STI plans include at-risk, performance-linked remuneration, STI plans and discretionary bonuses.

   The STI plan is an annual cash award determined by performance against Group financial and safety targets and individual performance. For operational roles, additional components include performance targets related to production rates, unit costs, and operational safety.

   Participation in the at-risk incentive plans is offered to participants as a percentage of their fixed remuneration according to seniority and their ability to influence the performance of the Group. All employees on long-term employment contracts are eligible to participate in a STI plan. The incentive plans' provision for STIs was re-assessed at the reporting date.
3. LTI plans are performance-linked remuneration LTI plans, and are mostly consist of 2016, 2017 and 2018 Long-Term Incentive Equity plans. The 2016 LTIE plan is Share Option Scheme vesting at the conclusion of three performance years. The 2017 and 2018 LTIE plan are Performance Awards Scheme vesting at the conclusion of three performance years. The vesting of LTI plans is conditional upon the achievement of certain performance conditions as set out in the respective letters of grant, including amongst others, achievement of financial, resources growth and market-related performance targets at the conclusion of the respective vesting period.

   Participation in the at-risk incentive plans is offered to participants as a percentage of their fixed remuneration according to seniority and their ability to influence the performance of the Group. The LTI plans are limited to senior managers invited to participate by the Board. The incentive plans' provision for LTI plans was re-assessed at the reporting date. The values attributed to the LTI plans are estimated values based on an assessment of the likely outcomes for each LTI plans and may be adjusted based on the actual outcome. The values attributed to the LTI plans are subject to Board approval at end of the vesting period.
4. Mr Gao Xiaoyu was re-designated from a Non-executive Director to an Executive Director and was appointed as Chief Executive Officer on 1 August 2018.
5. Mr Jiao Jian was re-designated from an Executive Director to a Non-executive Director and resigned as Chief Executive Officer on 1 August 2018.

(b) Five highest-paid individuals

The five individuals whose emoluments were the highest in the Group for the year include one Director (2018: 1) whose emoluments are reflected in the analysis presented above and four (2018: 4) senior executives whose remuneration by band are set out in the "Senior management remuneration by band" section in this Note.

Details of the emoluments payable to all five individuals during the year are as follows:

	2019 US$'000	2018 US$'000
Salaries and other short-term employee benefits	4,472	3,914
Short-term incentives and discretionary bonus	2,026	2,341
Long-term incentives	1,126	2,439
Post-employment benefits	281	264
	7,905	**8,958**

During the year, Mr Guo Wenqing waived emoluments and no emoluments were paid or payable by the Group to the Directors or any of the five highest-paid individuals as an inducement to join or upon joining the Group or as compensation for loss of office.

(c) Senior management remuneration by band

The emoluments fell within the following bands:

	NUMBER OF INDIVIDUALS	
	2019	2018
HK$1 - HK$500,000 (US$1 - US$63,800)	1	-
HK$1,000,001 - HK$1,500,000 (US$127,601 - US$191,400)	1	-
HK$4,000,001 - HK$4,500,000 (US$510,391 - US$574,190)	-	1
HK$5,500,001 - HK$6,000,000 (US$701,791 - US$765,590)	1	-
HK$7,000,001 - HK$7,500,000 (US$893,191 - US$956,990)	1	-
HK$7,500,001 - HK$8,000,000 (US$956,991 - US$1,020,790)	1	-
HK$9,000,001 - HK$9,500,000 (US$1,148,381 - US$1,212,180)	-	1
HK$10,500,001 - HK$11,000,000 (US$1,339,781 - US$1,403,580)	-	1
HK$11,000,001 - HK$11,500,000 (US$1,403,581 - US$1,467,380)	1	1
HK$12,000,001 - HK$12,500,000 (US$1,531,181 - US$1,594,980)	1	-
HK$12,500,001 - HK$13,000,000 (US$1,594,981 - US$1,658,780)	-	1
HK$13,500,001 - HK$14,000,000 (US$1,722,581 - US$1,786,380)	-	1
HK$15,000,001 - HK$15,500,000 (US$1,913,971 - US$1,977,770)	-	1
HK$17,500,001 - HK$18,000,000 (US$2,232,971 - US$2,296,770)	-	1
HK$23,000,001 - HK$23,500,000 (US$2,934,761 - US$2,998,560)	1	-
	8	**8**

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

35. LONG-TERM INCENTIVE EQUITY PLANS

SHARE OPTION SCHEME

Pursuant to share option scheme adopted at the extraordinary general meeting of the Company held on 26 March 2013 (2013 Share Option Scheme), options were granted to eligible participants under 2013 Options and 2016 Options. At 31 December 2019, there were a total of 51,453,166 options outstanding granted under 2013 Options and 2016 Options (2018: 160,333,869), of which 51,453,166 (2018: 27,859,828) were exercisable. The outstanding options represented approximately 0.93% (2018: 1.99%) of the total number of issued shares of the Company at that date.

During the year ended 31 December 2019, the movements in the number of options granted under the 2013 Options and 2016 Options were as follows:

(i) 2013 Options

On 9 April 2013, 13 December 2016 and 15 December 2016, the Company granted options to the eligible participants pursuant to the 2013 Share Option Scheme (2013 Options). There were 49,386,564 options outstanding at 31 December 2019, which represented approximately 0.61% of the total number of issued shares of the Company at 31 December 2019. During the year ended 31 December 2019, the movements of the 2013 Options were as follows:

				NUMBER OF OPTIONS				
CATEGORY AND NAME OF PARTICIPANT	DATE OF GRANT[1,2,3]	EXERCISE PRICE PER[2,4] SHARE (HK$)	EXERCISE PERIOD[2,5]	BALANCE AT 1 JANUARY 2019	GRANTED DURING THE YEAR	EXERCISED DURING THE YEAR	LAPSED DURING THE YEAR[6]	BALANCE AT 31 DECEMBER 2019
Directors								
XU Jiqing	15 December 2016	2.51	End of vesting period to 8 April 2020	2,626,701	-	-	-	2,626,701
Employees of the Group	9 April 2013, 13 December 2016, and 15 December 2016	2.51	End of vesting period to 8 April 2020	25,233,127	-	(2,157,638)	(2,108,852)	20,966,637
Total Group				**27,859,828**	**-**	**(2,157,638)**	**(2,108,852)**	**23,593,338**

1. The closing price of the shares of the Company immediately before the date on which the options were granted on 9 April 2013 was HK$2.45 per share.
2. Pursuant to the terms of the long-term incentive equity plan of the Company (Long-Term Incentive Equity Plan), which governs (among others) the share option scheme, the exercise price and the number of shares issuable upon exercise of the 2013 Options were adjusted as a result of the Rights Issue with effect from 13 December 2016. As a result, adjustment of options took place on 13 December 2016, and conversion from cash-based entitlements to equity-based entitlements took place on 15 December 2016.
3. As originally contemplated in the 2013 Long-Term Incentive Cash Plan, 5,923,307 Options were also granted to certain employees of the Company and its subsidiaries, as a result of the conversion of their entitlements under the 2013 Long-Term Incentive Cash Plan pursuant to the 2013 Share Option Scheme, to the equity equivalent of the entitlements they would have received historically under the 2013 Share Option Scheme, had they received such equity-based entitlements, rather than cash-based entitlements, at that time. The options are fully vested upon grant. The closing price of the shares of the Company immediately before the date on which the options were granted on 15 December 2016 was HK$2.25 per share.
4. As a result of Rights Issue, the exercise price per share was adjusted from HK$2.62 to HK$2.51.
5. The vesting period of the options was three years from the date of grant. The vesting of options was conditional upon the achievement of certain performance conditions as set out in the respective letters of grant, including among others, achievement of financial, resources growth and market-related performance targets during the vesting period. Achievement of Company and individual performance conditions has resulted in 66.67% of the 2013 Options granted to participants vesting on 9 April 2016.
6. Options lapsed due to cessation of employment.

During the year ended 31 December 2018, the movements of the 2013 Options were as follows:

CATEGORY AND NAME OF PARTICIPANT	DATE OF GRANT[1,2,3]	EXERCISE PRICE PER[2,4] SHARE (HK$)	EXERCISE PERIOD[2,5]	NUMBER OF OPTIONS BALANCE AT 1 JANUARY 2018	GRANTED DURING THE YEAR	EXERCISED DURING THE YEAR	TRANS-FERRED DURING THE YEAR	LAPSED DURING THE YEAR[6]	BALANCE AT 31 DECEMBER 2018
Directors									
XU Jiqing	15 December 2016	2.51	End of vesting period to 8 April 2020	2,626,701	-	-	-	-	2,626,701
Employees of the Group	9 April 2013, 13 December 2016, and 15 December 2016	2.51	End of vesting period to 8 April 2020	52,821,563	-	(27,588,359)	-	(77)	25,233,127
Total Group				**55,448,264**	**-**	**(27,588,359)**	**-**	**(77)**	**27,859,828**

1. The closing price of the shares of the Company immediately before the date on which the options were granted on 9 April 2013 was HK$2.45 per share.
2. Pursuant to the terms of the long-term incentive equity plan of the Company (Long-Term Incentive Equity Plan), which governs (among others) the share option scheme, the exercise price and the number of shares issuable upon exercise of the 2013 Options were adjusted as a result of the Rights Issue with effect from 13 December 2016. As a result, adjustment of options took place on 13 December 2016, and conversion from cash-based entitlements to equity-based entitlements took place on 15 December 2016.
3. As originally contemplated in the 2013 Long-Term Incentive Cash Plan, 5,923,307 Options were also granted to certain employees of the Company and its subsidiaries, as a result of the conversion of their entitlements under the 2013 Long-Term Incentive Cash Plan pursuant to the 2013 Share Option Scheme, to the equity equivalent of the entitlements they would have received historically under the 2013 Share Option Scheme, had they received such equity-based entitlements, rather than cash-based entitlements, at that time. The options are fully vested upon grant. The closing price of the shares of the Company immediately before the date on which the options were granted on 15 December 2016 was HK$2.25 per share.
4. As a result of Rights Issue, the exercise price per share was adjusted from HK$2.62 to HK$2.51.
5. The vesting period of the options was three years from the date of grant. The vesting of options was conditional upon the achievement of certain performance conditions as set out in the respective letters of grant, including among others, achievement of financial, resources growth and market-related performance targets during the vesting period. Achievement of Company and individual performance conditions has resulted in 66.67% of the 2013 Options granted to participants vesting on 9 April 2016.
6. Options lapsed due to cessation of employment.
7. No options were cancelled during the period.

The estimated fair value of the options granted on 9 April 2013 was approximately US$0.1356 each, estimated at the date of grant by using the Black-Scholes option-pricing model.

The value of the share options was subject to a number of assumptions and limitations of the option-pricing model, including a risk-free interest rate, option price volatility, expected life of the option, market price of the Company's shares and expected dividend. The risk-free interest rate was 0.68%; the expected volatility used in calculating the value of options was 46% and the expected dividend was assumed to be nil.

The 2013 Options vested on 9 April 2016 with an overall outcome of 66.67% of the target values. The validity period of the options is seven years from the date of grant to 8 April 2020.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

(ii) 2016 Options

On 15 December 2016, the Company granted options to the eligible participants pursuant to the 2013 Share Option Scheme (2016 Options). There were 25,793,226 options outstanding at 31 December 2019, which represented approximately 0.32% of the total number of issued shares of the Company at 31 December 2019.

During the year ended 31 December 2019, the movements of the 2016 Options were as follows:

				NUMBER OF OPTIONS				
CATEGORY AND NAME OF PARTICIPANT	DATE OF GRANT[1]	EXERCISE PRICE PER SHARE (HK$)	EXERCISE PERIOD[2]	BALANCE AT 1 JANUARY 2019	GRANTED DURING THE YEAR	EXERCISED DURING THE YEAR	LAPSED DURING THE YEAR[3]	BALANCE AT 31 DECEMBER 2019
Directors								
XU Jiqing	15 December 2016	2.29	4 years after date of vesting	3,493,261	-	-	(2,328,841)	1,164,420
Employees of the Group	15 December 2016	2.29	4 years after date of vesting	128,980,780	-	(630,785)	(103,721,189)	24,628,806
Total Group				**132,474,041**	**-**	**(630,785)**	**(106,050,030)**	**25,793,226**

1. The closing price of the shares of the Company immediately before the date on which the options were granted on 15 December 2016 was HK$2.25 per share.
2. The vesting and performance period of the options is three years from 1 January 2016 to 31 December 2018, with 60% of vested options exercisable from 1 January 2019 and 40% of the vested options subject to a 12-month exercise deferral period, such options being exercisable after 1 January 2020. The vesting of options is conditional upon the achievement of certain performance conditions as set out in the respective letters of grant including, among others, achievement of resources growth and market-related performance targets during the vesting period. Options vest on a percentage basis based on the target performance level achieved. Achievement of the Company and individual performance conditions have resulted in 33.33% of the 2016 Options granted to participants vesting on 22 May 2019.
3. Options lapsed due to a combination of cessation of employment and non-achievement of performance conditions during the vesting period.
4. No options were cancelled during the year.

During the year ended 31 December 2018, the movements of the 2016 Options were as follows:

CATEGORY AND NAME OF PARTICIPANT	DATE OF GRANT[1]	EXERCISE PRICE PER SHARE (HK$)	EXERCISE PERIOD[2]	NUMBER OF OPTIONS: BALANCE AT 1 JANUARY 2018	GRANTED DURING THE YEAR	EXERCISED DURING THE YEAR	TRANS-FERRED DURING THE YEAR	LAPSED DURING THE YEAR[3]	BALANCE AT 31 DECEMBER 2018
Directors									
XU Jiqing	15 December 2016	2.29	4 years after date of vesting	3,493,261	-	-	-	-	3,493,261
Employees of the Group	15 December 2016	2.29	4 years after date of vesting	134,329,280	-	-	-	(5,348,500)	128,980,780
				137,822,541	-	-	-	(5,348,500)	132,474,041

1. The closing price of the shares of the Company immediately before the date on which the options were granted on 15 December 2016 was HK$2.25 per share.
2. The vesting and performance period of the options is three years from 1 January 2016 to 31 December 2018, with 60% of vested options exercisable from 1 January 2019 and 40% of vested options subject to a 12-month exercise deferral period, such options being exercisable after 1 January 2020. The vesting of options is conditional upon the achievement of certain performance conditions as set out in the respective letters of grant, including among others, achievement of resources growth and market related performance targets during the vesting period. Options vest on a percentage basis based on the target performance level achieved.
3. Options lapsed due to cessation of employment.
4. The total number of vested options is subject to Board approval at the end of the vesting period. No options were cancelled during the year.

The estimated fair value of the options granted on 15 December 2016 was approximately US$0.1371 each, estimated at the date of grant by using the Black-Scholes option-pricing model.

The value of the share options was subject to a number of assumptions and limitations of the option-pricing model, including a risk-free interest rate, option price volatility, expected life of the option, market price of the Company's shares and expected dividend. The risk-free interest rate was 1.89%; the expected volatility used in calculating the value of options was 40% and the expected dividend was assumed to be nil.

The validity period of the options is from the date of grant until seven years from 1 January 2016 to 31 December 2022. The vesting and performance period of the options is three years from 1 January 2016 to 31 December 2018. If a participant leaves employment before the expiry of the vesting period, the option will lapse unless the participant leaves due to certain specific reasons including ill-health, injury or disability, retirement with the agreement of the employer, redundancy, death, the participating employing company ceasing to be part of the Group and any other reason, if the Board so decides.

During the year, the Group recognised a reversal of the share option expense of approximately US$1.5 million (2018: US$nil) in relation to the 2016 Options.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

PERFORMANCE AWARDS (SHARES)

Pursuant to the performance awards granted under the Long-Term Incentive Equity Plan, performance awards were granted to eligible participants under 2017 Performance Awards, 2018 Performance Awards and 2019 Performance Awards. At 31 December 2019, there were a total of 68,872,662 performance awards outstanding granted under the 2017 Performance Awards, 2018 Performance Awards and 2019 performance awards, which represented approximately 0.85% of the total number of issued shares of the Company at that date.

2017 Performance Awards

On 31 August 2017, the Company granted performance awards to the eligible participants pursuant to the Long-Term Incentive Equity Plan (2017 Performance Awards). There were 39,348,866 performance awards outstanding at 31 December 2019, representing approximately 0.49% of the total number of issued shares of the Company at that date.

During the year ended 31 December 2019, the movements of the 2017 Performance Awards were as follows:

		NUMBER OF PERFORMANCE AWARDS					
CATEGORY AND NAME OF PARTICIPANT	DATE OF GRANT[2]	BALANCES AT 1 JANUARY 2019	GRANTED DURING THE YEAR	VESTED DURING THE YEAR	CANCELLED DURING THE YEAR	LAPSED DURING THE YEAR[3]	BALANCE AT 31 DECEMBER 2019
Directors							
XU Jiqing[1]	31 August 2017	1,476,000	-	-	-	-	1,476,000
Employees of the Group	31 August 2017	42,429,449	-	-	-	(4,556,583)	37,872,866
Total		**43,905,449**	**-**	**-**	**-**	**(4,556,583)**	**39,348,866**

1. On 1 January 2020, Mr Xu Jiqing resigned as the Executive General Manager – Commercial and was redesignated from an Executive Director to a Non-executive Director of the Company. His interests in the 1,476,000 performance awards lapsed on the same day.
2. The vesting and performance period of the performance awards is three years from 1 January 2017 to 31 December 2019. The time of vesting will be on or around April 2020. The vesting of performance awards is conditional upon the achievement of certain performance conditions as set out in the respective letters of grant, including among others, achievement of resources growth and market-related performance targets during the vesting period. Performance awards vest on a percentage basis based on the threshold and target performance levels achieved. Portions of the vested performance awards will be subject to holding locks for various periods of up to three years after vesting. The performance awards are granted for nil cash consideration.
3. Performance awards lapsed due to cessation of employment.

During the year ended 31 December 2018, the movements of the 2017 Performance Awards were as follows:

		NUMBER OF PERFORMANCE AWARDS					
CATEGORY AND NAME OF PARTICIPANT	DATE OF GRANT[1]	BALANCES AT 1 JANUARY 2018	GRANTED DURING THE YEAR	VESTED DURING THE YEAR	CANCELLED DURING THE YEAR	LAPSED DURING THE YEAR	BALANCE AT 31 DECEMBER 2018
Directors							
JIAO Jian	31 August 2017	7,333,333	-	-	-	(7,333,333)[2]	-
XU Jiqing	31 August 2017	1,476,000	-	-	-	-	1,476,000
Employees of the Group	31 August 2017	45,137,559	-	-	-	(2,708,110)[3]	42,429,449
Total		**53,946,892**	**-**	**-**	**-**	**(10,041,443)**	**43,905,449**

1. The vesting and performance period of the performance awards is three years from 1 January 2017 to 31 December 2019. The time of vesting will be on or around April 2020. The vesting of performance awards is conditional upon the achievement of certain performance conditions as set out in the respective letters of grant, including among others, achievement of resources growth and market-related performance targets during the vesting period. Performance awards vest on a percentage basis based on the threshold and target performance levels achieved. Portions of the vested performance awards will be subject to holding locks for various periods of up to three years after vesting. The performance awards are granted for nil cash consideration.
2. On 1 August 2018, Mr Jiao Jian resigned as the CEO and was re-designated from an Executive Director to a Non-executive Director of the Company. His interests in the 7,333,333 performance awards ceased on the same day.
3. Performance awards lapsed due to cessation of employment.

The performance awards are granted for nil cash consideration. The vesting of the performance awards will be subject to the achievement by each participant of certain performance conditions, among other things, independently assessed measures of achievement of non-market based conditions such as resources growth and financial and market based conditions such as total shareholder return. Portions of the vested performance awards will be subject to holding locks for various periods of up to three years after vesting.

The estimated fair value of the performance awards granted on 31 August 2017 was approximately US$0.4434 each, estimated at the date of grant by using Monte Carlo Simulations (for market based conditions) and reference to market price of the Company's shares at the date of grant.

The value of the performance awards was subject to a number of assumptions and limitations of the performance awards-pricing model, including a risk-free interest rate, price volatility, expected life of the performance awards, market price of the Company's shares and expected dividend. The risk-free interest rate was 1.34%; the expected volatility used in calculating the value of performance awards was 46.78% and the expected dividend was assumed to be nil.

During the year, the Group recognised a reversal of the share award expense of approximately US$3.5 million (2018: US$2.0 million expense) in relation to the 2017 Performance Awards.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

2018 Performance Awards

On 29 June 2018, the Company granted performance awards to the eligible participants pursuant to the Long-Term Incentive Equity Plan (2018 Performance Awards). There were 8,324,117 performance awards outstanding at 31 December 2019, representing approximately 0.10% of the total number of issued shares of the Company at that date.

During the year ended 31 December 2019, the movements of the 2018 Performance Awards were as follows:

		NUMBER OF PERFORMANCE AWARDS					
CATEGORY AND NAME OF PARTICIPANT	DATE OF GRANT[2]	BALANCES AT 1 JANUARY 2019	GRANTED DURING THE YEAR	VESTED DURING THE YEAR	CANCELLED DURING THE YEAR	LAPSED DURING THE YEAR[3]	BALANCE AT 31 DECEMBER 2019
Directors							
XU Jiqing[1]	29 June 2018	705,833	-	-	-	-	705,833
Employees of the Group	29 June 2018	8,566,723	-	-	-	(948,439)	7,618,284
Total		**9,272,556**	**-**	**-**	**-**	**(948,439)**	**8,324,117**

1. On 1 January 2020, Mr Xu Jiqing resigned as the Executive General Manager – Commercial and was redesignated from an Executive Director to a Non-executive Director of the Company. His interests in the 705,833 performance awards lapsed on the same day.
2. The vesting and performance period of the performance awards is three years from 1 January 2018 to 31 December 2020. The time of vesting will be on or around June 2021. The vesting of performance awards is conditional upon the achievement of certain performance conditions as set out in the respective letters of grant, including among others, achievement of resources growth and market-related performance targets during the vesting period. Performance awards vest on a percentage basis based on the threshold and target performance levels achieved. Portions of the vested performance awards will be subject to holding locks for various periods of up to two years after vesting. The performance awards are granted for nil cash consideration.
3. Performance awards lapsed due to cessation of employment.

During the year ended 31 December 2018, the movements of the 2018 Performance Awards were as follows:

		NUMBER OF PERFORMANCE AWARDS					
CATEGORY AND NAME OF PARTICIPANT	DATE OF GRANT[1]	BALANCES AT 1 JANUARY 2018	GRANTED DURING THE YEAR	VESTED DURING THE YEAR	CANCELLED DURING THE YEAR	LAPSED DURING THE YEAR[2]	BALANCE AT 31 DECEMBER 2018
Directors							
XU Jiqing	29 June 2018	-	705,833	-	-	-	705,833
Employees of the Group	29 June 2018	-	8,811,776	-	-	(245,053)	8,566,723
Total		**-**	**9,517,609**	**-**	**-**	**(245,053)**	**9,272,556**

1. The vesting and performance period of the performance awards is three years from 1 January 2018 to 31 December 2020. The time of vesting will be on or around June 2021. The vesting of performance awards is conditional upon the achievement of certain performance conditions as set out in the respective letters of grant, including among others, achievement of resources growth and market-related performance targets during the vesting period. Performance awards vest on a percentage basis based on the threshold and target performance levels achieved. Portions of the vested performance awards will be subject to holding locks for various periods of up to two years after vesting. The performance awards are granted for nil cash consideration.
2. Performance awards lapsed due to cessation of employment.

The performance awards are granted for nil cash consideration. The vesting of the performance awards will be subject to the achievement by each participant of certain performance conditions, among other things, independently assessed measures of achievement of non-market based conditions such as resources growth and financial and market based conditions such as total shareholder return. Portions of the vested performance awards will be subject to holding locks for various periods of up to three years after vesting.

The estimated fair value of the performance awards granted on 29 June 2018 was approximately US$0.6572 each, estimated at the date of grant by using Monte Carlo Simulations (for market based conditions) and reference to market price of the Company's shares at the date of grant.

The value of the performance awards was subject to a number of assumptions and limitations of the performance awards-pricing model, including a risk-free interest rate, price volatility, expected life of the performance awards, market price of the Company's shares and expected dividend. The risk-free interest rate was 1.34%; the expected volatility used in calculating the value of performance awards was 46.78% and the expected dividend was assumed to be nil.

During the year, the Group recognised a share award expense of approximately US$0.5 million (2018: US$1.9 million) in relation to the 2018 Performance Awards.

2019 Performance Awards

On 3 May 2019, the Company granted performance awards to the eligible participants pursuant to the Long-Term Incentive Equity Plan (2019 Performance Awards). There were 21,199,679 performance awards outstanding at 31 December 2019, representing approximately 0.26% of the total number of issued shares of the Company at that date.

During the year ended 31 December 2019, the movements of the 2019 Performance Awards were as follows:

		NUMBER OF PERFORMANCE AWARDS					
CATEGORY AND NAME OF PARTICIPANT	**DATE OF GRANT[2]**	**BALANCES AT 1 JANUARY 2019**	**GRANTED DURING THE YEAR**	**VESTED DURING THE YEAR**	**CANCELLED DURING THE YEAR**	**LAPSED DURING THE YEAR[3]**	**BALANCE AT 31 DECEMBER 2019**
Directors							
Gao Xiaoyu	3 May 2019	-	5,604,754	-	-	-	5,604,754
XU Jiqing[1]	3 May 2019	-	1,145,229	-	-	-	1,145,229
Employees of the Group	3 May 2019	-	15,444,192	-	-	(994,496)	14,449,696
Total		**-**	**22,194,175**	**-**	**-**	**(994,496)**	**21,199,679**

1. On 1 January 2020, Mr Xu Jiqing resigned as the Executive General Manager – Commercial and was redesignated from an Executive Director to a Non-executive Director of the Company. His interests in the 1,145,229 performance awards lapsed on the same day.
2. The vesting and performance period of the performance awards is three years from 1 January 2019 to 31 December 2021. The time of vesting will be on or around June 2022. The vesting of performance awards is conditional upon the achievement of certain performance conditions as set out in the respective letters of grant, including among others, achievement of resources growth and market-related performance targets during the vesting period. Performance awards vest on a percentage basis based on the threshold and target performance levels achieved. Portions of the vested performance awards will be subject to holding locks for various periods of up to two years after vesting. The performance awards are granted for nil cash consideration.
3. Performance awards lapsed due to cessation of employment.

The performance awards are granted for nil cash consideration. The vesting of the performance awards will be subject to the achievement by each participant of certain performance conditions, among other things, independently assessed measures of achievement of non-market based conditions such as resources growth and financial and market based conditions such as total shareholder return. Portions of the vested performance awards will be subject to holding locks for various periods of up to three years after vesting.

The estimated fair value of the performance awards granted on 3 May 2019 was approximately US$0.3766 each, estimated at the date of grant by using Monte Carlo Simulations (for market based conditions) and reference to market price of the Company's shares at the date of grant.

The value of the performance awards was subject to a number of assumptions and limitations of the performance awards-pricing model, including a risk-free interest rate, price volatility, expected life of the performance awards, market price of the Company's shares and expected dividend. The risk-free interest rate was 2.11%; the expected volatility used in calculating the value of performance awards was 63.75% and the expected dividend was assumed to be nil.

During the year, the Group recognised a share award expense of approximately US$2.3 million in relation to the 2019 Performance Awards.

36. COMMITMENTS

CAPITAL COMMITMENTS

Commitments for capital expenditure contracted for at the reporting date but not recognised as liabilities, are set out in the table below:

	2019 US$ MILLION	2018 US$ MILLION
Property, plant and equipment		
Within one year	168.5	84.6
Over one year but not more than five years	48.8	24.3
	217.3	**108.9**
Intangible assets		
Within one year	-	0.1
	-	**0.1**

	2019 US$ MILLION	2018 US$ MILLION
Aggregate		
Property, plant and equipment and intangible assets		
Contracted but not provided for	217.3	109.0
	217.3	**109.0**

37. 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 2019, these guarantees amounted to US$373.4 million (2018: US$351.1 million). The Group has an Australian dollar 200.0 million (approximately US$140.1 million), reduced during the year from Australian dollar 300.0 million (approximately US$210.2 million), revolving bank guarantee facility with Bank of China Limited, Sydney ("BG Facility"), which is guaranteed by CMN. MMG has entered into a counter-indemnity agreement in favour of CMN capped at 27.39% of the maximum principal amount outstanding under the BG Facility.

Following the sale of Century mine in 2017, the Group has procured certain bank guarantees amounting to US$135.7 million (2018: US$136.6 million) for the benefit of New Century until 31 December 2026. New Century is legally required to punctually meet all obligations and must use best endeavours to ensure that no demand is made under the bank guarantees. New Century must ensure that, within 90 days of the end of each financial year, the bank guarantee is reduced by not less than 40% of the Century mine's EBITDA in respect of a financial year. At 31 December 2019, the Group has recognised financial liabilities of US$135.7 million (2018: US$136.6 million) in relation to the New Century bank guarantees (Note 29).

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 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, Laos and the DRC. For some of the tax matters under audit in Peru, if unfavourable assessment resolutions were ultimately issued, MLB intends to appeal and not to pay any assessed amount. No disclosure of an estimate of financial effect of the subject matter has been made in the financial statements as in the opinion of the management, 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 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.

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 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, a payment is either not probable or cannot be measured reliably. As such, no provision has been reflected in the consolidated financial statements for such tax matters.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

38. EVENTS AFTER THE END OF THE REPORTING PERIOD

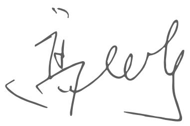
The outbreak of COVID-19, has adversely impacted global economic activity and commodity prices in the period subsequent to the reporting date. This outbreak has not directly impacted on the operations of the Company. Nonetheless, reduced demand for base metals and the resulting decline in commodity prices can reasonably be expected to have an impact on the Group's future financial performance. The extent of this impact cannot be reliably quantified or estimated as at the reporting date. The Company continues to closely monitor the situation.

Other than this and matters outlined in these financial statements, 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.

39. COMPANY STATEMENT OF FINANCIAL POSITION AND RESERVES

(a) Company Statement of Financial Position

	NOTE	AT 31 DECEMBER 2019 US$ MILLION	AT 31 DECEMBER 2018 US$ MILLION
ASSETS			
Non-current assets			
Right-of-use assets		0.4	-
Other receivables		0.2	-
Interests in subsidiaries		2,485.9	2,735.3
		2,486.5	**2,735.3**
Current assets			
Other receivables		0.2	0.2
Loan to a subsidiary		-	7.0
Cash and cash equivalents		0.3	0.4
		0.5	**7.6**
Total assets		**2,487.0**	**2,742.9**
EQUITY			
Share capital		2,912.2	2,910.8
Reserves and accumulated losses	(b)	(1,346.1)	(1,063.4)
Total equity		**1,566.1**	**1,847.4**
LIABILITIES			
Non-current liabilities			
Loans from subsidiaries		**920.1**	**895.3**
Current liabilities			
Lease liabilities		0.4	-
Other payables		0.4	0.2
		0.8	**0.2**
Total liabilities		**920.9**	**895.5**
Net current (liabilities)/assets		**(0.3)**	**7.4**
Total equity and liabilities		**2,487.0**	**2,742.9**



GAO XIAOYU
CEO AND EXECUTIVE DIRECTOR

XU JIQING
NON-EXECUTIVE DIRECTOR

(b) Company reserves and accumulated losses

US$ MILLION	SPECIAL CAPITAL RESERVE	SHARE-BASED PAYMENT RESERVE	ACCUMU-LATED LOSSES	TOTAL
At 1 January 2018	9.4	42.4	(1,040.1)	**(988.3)**
Loss and total comprehensive loss for the year	-	-	(51.5)	**(51.5)**
Employee long-term incentives	-	3.9	-	**3.9**
Employee share options exercised and vested	-	(27.5)	-	**(27.5)**
Employee share options lapsed	-	(1.3)	1.3	**-**
At 31 December 2018	**9.4**	**17.5**	**(1,090.3)**	**(1,063.4)**
Loss and total comprehensive loss for the year	-	-	(282.5)	**(282.5)**
Employee share options exercised and vested	-	(0.2)	-	**(0.2)**
Employee share options lapsed	-	(0.9)	0.9	**-**
At 31 December 2019	**9.4**	**16.4**	**(1,371.9)**	**(1,346.1)**

FIVE-YEAR FINANCIAL SUMMARY

US$ MILLION	2019[1]	2018	2017	2016	2015
Results – the Group					
Revenue	3,032.3	3,670.2	3,751.3	2,488.8	1,950.9
EBITDA	**1,461.5**	**1,751.2**	**2,090.8**	**949.2**	**420.9**
EBIT	**341.9**	**833.1**	**1,272.2**	**264.7**	**(1,125.5)**
Finance income	11.2	6.8	6.0	3.3	3.8
Finance costs	(523.1)	(533.7)	(537.6)	(316.3)	(88.8)
(Loss)/profit before income tax	(170.0)	306.2	740.6	(48.3)	(1,210.5)
Income tax (expense)/credit	(25.3)	(169.6)	(394.5)	(50.4)	161.8
(Loss)/profit for the year	**(195.3)**	**136.6**	**346.1**	**(98.7)**	**(1,048.7)**
Attributable to:					
Equity holders of the Company	(230.4)	68.3	147.1	(152.7)	(1,026.5)
Non-controlling interests	35.1	69.1	201.3	54.0	(22.2)
	(195.3)	**137.4**	**348.4**	**(98.7)**	**(1,048.7)**

1. The Group adopted the new HKFRS 16 Leases on 1 January 2019, as such the prior period information presented is not comparable.

A summary of the Group results that relate to current operations involving the exploration for, and development of mining projects, is presented below.

US$ MILLION	2019[2]	2018	2017	2016	2015
Results – current operations					
EBIT	341.9	833.1	1,272.2	264.7	(1,125.5)
Significant non-recurring items	150.0	-	(178.6)	-	897.0
Underlying EBIT[1]	**491.9**	**833.1**	**1,093.6**	**264.7**	**(228.5)**

1. Underlying EBIT represents EBIT adjusted for significant non-recurring items (before tax).
2. The Group adopted the new HKFRS 16 Leases on 1 January 2019, as such the prior period information presented is not comparable.

FIVE-YEAR FINANCIAL SUMMARY CONTINUED

US$ MILLION	2019[1]	2018	2017	2016	2015
Assets and liabilities – the Group					
Property, plant and equipment	10,394.2	10,897.7	11,982.1	12,084.3	11,873.0
Right-of-use assets[1]	140.6	-	-	-	-
Intangible assets	567.5	596.0	622.3	620.6	628.6
Inventories	488.6	279.7	348.0	375.5	342.9
Trade and other receivables	571.9	644.4	506.6	915.7	801.2
Loan to a related party	-	-	120.0	95.0	-
Cash and cash equivalents	217.5	601.9	936.1	552.7	598.3
Other financial assets	3.1	3.3	17.8	12.7	27.3
Derivative financial assets	-	-	0.5	16.7	-
Current income tax assets	101.3	54.3	55.7	5.5	1.4
Deferred income tax assets	180.4	178.1	200.5	291.1	368.5
Assets of disposal group classified as held for sale	-	-	-	260.2	18.8
Total assets	**12,665.1**	**13,255.4**	**14,789.6**	**15,230.0**	**14,660.0**
Capital and reserves attributable to equity holders of the Company	1,012.2	1,257.1	1,211.4	1,030.5	666.6
Non-controlling interests	1,665.7	1,639.2	1,760.4	1,559.1	1,508.6
Total equity	**2,677.9**	**2,896.3**	**2,971.8**	**2,589.6**	**2,175.2**
Borrowings	7,628.3	8,131.4	9,192.5	10,253.2	10,263.1
Lease liabilities[1]	160.8	-	-	-	-
Trade and other payables	591.3	508.1	730.1	652.6	527.6
Other liabilities	135.7	136.6	160.3	5.8	0.3
Current income tax liabilities	2.4	18.8	15.2	3.1	31.8
Provisions	588.7	630.8	856.7	972.9	913.5
Deferred income tax liabilities	880.0	933.4	863.0	683.0	744.0
Liabilities of disposal group classified as held for sale	-	-	-	69.8	4.5
Total liabilities	**9,987.2**	**10,359.1**	**11,817.8**	**12,640.4**	**12,484.8**
Total equity and liabilities	**12,665.1**	**13,255.4**	**14,789.6**	**15,230.0**	**14,660.0**

1. The Group adopted the new HKFRS 16 Leases on 1 January 2019, as such the prior period information presented is not comparable.

GLOSSARY

AGM	annual general meeting of the Company
Album Enterprises	Album Enterprises Limited, a wholly owned subsidiary of CMN
associate(s)	has the meaning ascribed to it under the Listing Rules
Australia	The Commonwealth of Australia
Board	the board of directors of the Company
Board Charter	the board charter of the Company
BOC Sydney	Bank of China Limited, Sydney Branch
CDB	China Development Bank
CEO	Chief Executive Officer
CFO	Chief Financial Officer
China	has the same meaning as PRC
CITIC	CITIC Metal Peru Investment Limited
CMC	China Minmetals Corporation, a state-owned enterprise incorporated under the laws of the PRC
CMC Group	CMC and its subsidiaries
CMCL	China Minmetals Corporation Limited, a subsidiary of CMC
CMN	China Minmetals Non-ferrous Metals Company Limited, a subsidiary of CMC
CMNH	China Minmetals Non-ferrous Metals Holding Company Limited, a subsidiary of CMC
Companies Ordinance	the Companies Ordinance (Chapter 622 of the Laws of Hong Kong)
Company	MMG Limited, a company incorporated in Hong Kong, the securities of which are listed and traded on the main board of the Hong Kong Stock Exchange
Copper Partners Investment	Copper Partners Investment Co, Ltd, a subsidiary of CMC
Director(s)	the director(s) of the Company
DRC	Democratic Republic of the Congo
EBIT	earnings before interest (net finance costs) and income tax
EBITDA	earnings before interest (net finance costs), income tax, depreciation, amortisation and impairment expenses
EBITDA margin	EBITDA divided by revenue
Executive Committee	the executive committee of the Group, which consists of all Executive Directors of the Company, Chief Executive Officer, Chief Financial Officer, Executive General Manager – Corporate Relations, Executive General Manager – Americas and Executive General Manager – Commercial
Gearing ratio	net debt (total borrowings excluding finance charge prepayments, less cash and bank deposits) divided by the aggregate of net debt plus total equity
Group	the Company and its subsidiaries
HK$	Hong Kong dollar, the lawful currency of Hong Kong
HKFRS	Hong Kong Financial Reporting Standards, which include all applicable individual Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards (HKAS) and interpretations issued by the Hong Kong Institute of Certified Public Accountants (HKICPA)
HNG	Hunan Nonferrous Metals Holding Group Co., Ltd., a subsidiary of CMC
Hong Kong	the Hong Kong Special Administrative Region of the People's Republic of China
Hong Kong Stock Exchange	(please refer to the definition of 'Stock Exchange')
ICBC	Industrial and Commercial Bank of China Limited
ICMM	International Council on Mining and Metals
JORC Code	Joint Ore Reserves Committee 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'

GLOSSARY CONTINUED

Laos	the Lao People's Democratic Republic
Las Bambas Joint Venture Group	MMG South America Management Company Limited (also referred to as MMG SAM), and its subsidiaries
Las Bambas Project	the development, construction and operation of the copper mines, processing facilities and associated infrastructure at the Las Bambas copper project located in the Apurimac region in Peru, together with all activities and infrastructure associated with the transportation and export of products from such mines
Listing Rules	the Rules Governing the Listing of Securities on the Stock Exchange
LME	London Metal Exchange
Mineral and Metal Group	the collective brand name of the portfolio of international mining assets held by Album Resources
Mineral Resources	as defined under the JORC Code, a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction
Minmetals HK	China Minmetals H.K. (Holidings) Limited, an indirectly owned subsidiary of CMC
MLB	Minera Las Bambas S.A., a non-wholly owned subsidiary of MMG and the owner of the Las Bambas mine
MMG or MMG Limited	has the same meaning as the Company
MMG Dugald River	MMG Dugald River Pty Ltd, a wholly owned subsidiary of the Company
MMG Management	MMG Management Pty Ltd, a wholly owned subsidiary of the Company
MMG SA	MMG South America Company Limited, a wholly owned subsidiary of the Company
MMG SAM	MMG South America Management Company Limited, a non-wholly owned subsidiary of the Company
Model Code	Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 of the Listing Rules
Ore Reserves	as defined under the JORC Code, the economically mineable part of a Measured and/or Indicated Mineral Resource
PRC	the People's Republic of China excluding, for the purpose of this document only, Hong Kong, the Macao Special Administrative Region of the People's Republic of China and Taiwan, unless the context requires otherwise
SFO	the Securities and Futures Ordinance (Chapter 571 of the laws of Hong Kong)
Shareholder(s)	the shareholder(s) of the Company
SHEC	Safety, Health, Environment and Community
Stock Exchange	The Stock Exchange of Hong Kong Limited
Top Create	Top Create Resources Limited, a wholly owned subsidiary of CMN
TRIF	total recordable injury frequency per million hours worked
US$	United States dollar, the lawful currency of the United States of America
VAT	value added tax

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CORPORATE INFORMATION

BOARD OF DIRECTORS

Chairman
GUO Wenqing
(Non-executive Director)

Executive Director
GAO Xiaoyu
(Chief Executive Officer)

Non-executive Directors
JIAO Jian
ZHANG Shuqiang
XU Jiqing

Independent Non-executive Directors
Peter CASSIDY
LEUNG Cheuk Yan
CHAN Ka Keung, Peter

AUDIT AND RISK MANAGEMENT COMMITTEE

Chairman
CHAN Ka Keung, Peter

Members
ZHANG Shuqiang
XU Jiqing
Peter CASSIDY
LEUNG Cheuk Yan

GOVERNANCE, REMUNERATION AND NOMINATION COMMITTEE

Chairman
Peter CASSIDY

Members
JIAO Jian
XU Jiqing
LEUNG Cheuk Yan
CHAN Ka Keung, Peter

DISCLOSURE COMMITTEE

Members
GAO Xiaoyu
Ross CARROLL
Troy HEY
Nick MYERS
LEUNG Suet Kam, Lucia

GENERAL COUNSEL

Nick MYERS

COMPANY SECRETARY

LEUNG Suet Kam, Lucia

LEGAL ADVISER

Linklaters, Hong Kong

AUDITOR

Deloitte Touche Tohmatsu
Certified Public Accountants

SHARE REGISTRAR

Computershare Hong Kong
Investor Services Limited
17th Floor
Hopewell Centre
183 Queen's Road East
Wanchai
Hong Kong

PRINCIPAL BANKERS

China Development Bank
Industrial and Commercial Bank
of China Limited
Bank of China Limited
The Export-Import Bank of China
Bank of America Merrill Lynch Limited
Australia and New Zealand Banking
Group Limited
Banco Bilbao Vizcaya Argentaria, S.A.

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Hong Kong Limited
Stock Code: 1208

ADDITIONAL SHAREHOLDER INFORMATION

The Chinese version of the Annual Report is prepared based on the English version. If there is any inconsistency between the English and Chinese versions of this Annual Report, the English text shall prevail to the extent of the inconsistency.

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