MMG LIMITED

五礦資源有限公司

(Incorporated in Hong Kong with limited liability)

(STOCK CODE: 1208)

MINERAL RESOURCES AND ORE RESERVES STATEMENT AS AT 30 JUNE 2021

This announcement is made by MMG Limited (Company or MMG and, together with its subsidiaries, the Group) pursuant to rule 13.09(2) of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (Listing Rules) and the Inside Information Provisions (as defined in the Listing Rules) under Part XIVA of the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong).

The Board of Directors of the Company (Board) is pleased to report the Group's updated Mineral Resources and Ore Reserves Statement as at 30 June 2021 (Mineral Resources and Ore Reserves Statement).

The key changes to Mineral Resources and Ore Reserves Statement as at 30 June 2021 are:

- The Group's Mineral Resources (contained metal) have decreased for copper (6%), zinc (1%), molybdenum (8%), silver (0.1%) and gold (3%). Lead (0.4%) and cobalt (0.4%) have increased slightly from 2020.

- The Group's Ore Reserves (contained metal) have decreased for copper (5%), zinc (8%), lead (2%), silver (3%), gold (9%) and molybdenum (8%).

For copper metal, the main reasons for changes are depletion at all sites which is partly offset by a small increase in metal price assumption. Reductions at Las Bambas are mostly due to negative impacts of costs and cut off grade adjustments which are only partially offset by positive movements in metal prices. At Dugald River, the change to the geological model of the Inferred copper lens, due to improvements in orebody knowledge, has resulted in a negative variance. Mining and milling depletion accounts for approximately 64% of the total decrease from 2020 Mineral Resources and 68% for Ore Reserves.

For zinc metal, the main reasons for the changes are depletion at all sites which is partially offset by additional tonnes from known lenses at Rosebery and Dugald River. Continuing exploration at both Australian sites has partially replaced depletion over the last 12 months.

Open Pit Oxide Ore Reserves at Kinsevere have been exhausted, with oxide and mixed ore stockpiles remaining in Ore Reserves.

All data reported here are on a 100% asset basis, with MMG's attributable interest shown against each asset within the Mineral Resources and Ore Reserves tables (pages 4 to 8).

MINERAL RESOURCES AND ORE RESERVES STATEMENT

A copy of the executive summary of the Mineral Resources and Ore Reserves Statement is annexed to this announcement.

The information referred to in this announcement has been extracted from the report titled Mineral Resources and Ore Reserves Statement as at 30 June 2021 published on 28 October 2021 and is available to view on www.mmg.com. The Company confirms that it is not aware of any new information or data that materially affects the information included in the Mineral Resources and Ore Reserves Statement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the Mineral Resources and Ore Reserves Statement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the Mineral Resources and Ore Reserves Statement.

By order of the Board
MMG Limited
Gao Xiaoyu
CEO and Executive Director

Hong Kong, 28 October 2021

As at the date of this announcement, the Board comprises eight directors, of which one is an executive director, namely Mr Gao Xiaoyu; four are non-executive directors, namely Mr Guo Wenqing (Chairman), Mr Jiao Jian, Mr Xu Jiqing and Mr Zhang Shuqiang; and three are independent non-executive directors, namely Dr Peter William Cassidy, Mr Leung Cheuk Yan and Mr Chan Ka Keung, Peter.

MMG Limited

MINERAL RESOURCES AND ORE RESERVES STATEMENT

30 June 2021

EXECUTIVE SUMMARY

Mineral Resources and Ore Reserves for MMG have been estimated as at 30 June 2021 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 4 to 8, which include the 30 June 2021 and 30 June 2020 estimates for comparison. The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources that have been converted 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 have 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 9.

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 2020 estimate relate to depletion[1] at all sites together with increased costs, changes in metal price assumptions, increases to cut-off grades and updates to the models at all sites. Improvements to the geological model at all sites have resulted in both increases and decreases of which none are material. Relatively small decreases at Chalcobamba and Sulfobamba have offset a similar magnitude increase at Ferrobamba. A decrease in the Inferred copper lens at Dugald River has resulted from continuing improvements in orebody knowledge. There are no material changes at Kinsevere or the regional DRC copper deposits. Zinc metal increased slightly after depletion at Rosebery while at Dugald River the net reduction is mostly due to depletion.

Key changes to the Ore Reserves (contained metal) since the 30 June 2020 estimate are mostly related to depletion[1]. Chalcobamba South West zone has been added to the Chalcobamba Ore Reserves at Las Bambas for the first time. Increased costs have driven cut off grades higher at Las Bambas which have had a small negative impact on the results. Illegal artisanal mining at Sulfobamba has been estimated with 19kt of metal removed from the Ore Reserves. All insitu open pit material has been excluded from the Kinsevere Ore Reserve due to the prohibitive cost of low volume mining at the site. At Dugald River, a minor increase (net of depletion) to Ore Reserves has resulted from prior year focus on Reserve Definition drilling uplifting both tonnes and Zn grades.

Pages 10 and 11 provide 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 and processing.

MINERAL RESOURCES[1]

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

	2021								2020							
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	0.4	1.4							0.8	1.9						
Inferred	0.01	1.1							0.1	1.8						
Total	**0.4**	**1.4**							**0.9**	**1.9**						
Ferrobamba Primary Copper																
Measured	410	0.59			2.6	0.05	220		462	0.61			2.6	0.05	229	
Indicated	280	0.70			3.2	0.06	200		264	0.72			3.2	0.07	201	
Inferred	72	0.92			3.9	0.08	140		115	0.61			2.1	0.04	97	
Total	**770**	**0.66**			**3.0**	**0.06**	**210**		**840**	**0.64**			**2.7**	**0.05**	**202**	
Ferrobamba Total	**770**								**841**							
Chalcobamba Oxide Copper																
Indicated	6.5	1.5							5.6	1.4						
Inferred	0.5	1.7							0.5	1.6						
Total	**7.0**	**1.5**							**6.1**	**1.4**						
Chalcobamba Primary Copper																
Measured	120	0.52			1.6	0.02	150		128	0.45			1.3	0.02	161	
Indicated	170	0.70			2.7	0.03	120		206	0.65			2.4	0.03	128	
Inferred	27	0.60			2.5	0.03	140		39	0.61			2.2	0.03	115	
Total	**320**	**0.63**			**2.3**	**0.03**	**130**		**373**	**0.58**			**2.0**	**0.03**	**138**	
Chalcobamba Total	**327**								**379**							
Sulfobamba Primary Copper																
Indicated	80	0.68			4.8	0.02	170		87	0.58			6.4	0.02	119	
Inferred	96	0.58			6.5	0.02	120		102	0.62			5.6	0.02	142	
Total	**180**	**0.63**			**5.7**	**0.02**	**140**		**189**	**0.62**			**5.6**	**0.02**	**142**	
Sulfobamba Total	**180**								**189**							
Oxide Copper Stockpile																
Indicated	13	1.1							12.1	1.2						
Total	**13**	**1.1**							**12.1**	**1.2**						
Sulphide Stockpile																
Measured	26	0.39			1.8		140		8.1	0.40			1.8		135	
Total	**26**	**0.39**			**1.8**		**140**		**8.1**	**0.40**			**1.8**		**135**	
Las Bambas Total	**1,300**								**1,429**							

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

MINERAL RESOURCES[1]

Deposit	2021 Tonnes (Mt)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)	Mo (ppm)	Co (%)	2020 Tonnes (Mt)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)	Mo (ppm)	Co (%)
Kinsevere (100%)																
Oxide Copper																
Measured	1.2	3.2						0.11	1.5	3.2						0.10
Indicated	5.5	2.7						0.09	6.1	2.8						0.09
Inferred	2.2	2.1						0.07	2.2	2.2						0.07
Total	**8.9**	**2.7**						**0.09**	**9.8**	**2.7**						**0.09**
Transition Mixed Copper Ore																
Measured	0.8	2.0						0.15	0.9	2.1						0.12
Indicated	2.2	2.1						0.12	2.3	2.1						0.08
Inferred	1.1	1.6						0.08	1.1	1.6						0.12
Total	**4.1**	**1.9**						**0.12**	**4.3**	**2.0**						**0.25**
Primary Copper																
Measured	1.5	2.6						0.25	1.5	2.6						0.25
Indicated	19	2.3						0.10	18.7	2.3						0.11
Inferred	9.2	1.7						0.08	9.0	1.8						0.08
Total	**29**	**2.1**						**0.10**	**29.3**	**2.1**						**0.10**
Oxide-TMO Cobalt																
Measured	0.02	0.46						0.31	0.03	0.49						0.29
Indicated	0.16	0.35						0.33	0.18	0.33						0.32
Inferred	1.0	0.23						0.32	0.98	0.23						0.32
Total	**1.2**	**0.25**						**0.32**	**1.2**	**0.3**						**0.32**
Primary Cobalt																
Measured	0.01	0.54						0.24	0.02	0.55						0.20
Indicated	0.15	0.57						0.20	0.15	0.57						0.20
Inferred	0.17	0.33						0.25	0.16	0.34						0.25
Total	**0.34**	**0.44**						**0.22**	**0.34**	**0.45**						**0.22**
Stockpiles																
Measured																
Indicated	16	1.6							15.5	1.6						
Total	**16**	**1.6**							**15.5**	**1.6**						
Kinsevere Total	**59**	**2.0**							**60.4**	**2.0**						

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

MINERAL RESOURCES[1]

Deposit	2021 Tonnes (Mt)	2021 Cu (%)	2021 Zn (%)	2021 Pb (%)	2021 Ag (g/t)	2021 Au (g/t)	2021 Mo (ppm)	2021 Co (%)	2020 Tonnes (Mt)	2020 Cu (%)	2020 Zn (%)	2020 Pb (%)	2020 Ag (g/t)	2020 Au (g/t)	2020 Mo (ppm)	2020 Co (%)
Sokoroshe 2 (100%)																
Oxide																
Copper																
Measured																
Indicated	1.7	2.4						0.35	1.9	2.3						0.33
Inferred	0.02	3.4						0.07								
Total	**1.7**	**2.4**						**0.34**	**1.9**	**2.3**						**0.33**
Transition Mixed Copper Ore																
Measured																
Indicated	0.1	0.9						1.50								
Inferred	0.2	2.5						0.24								
Total	**0.3**	**1.8**						**0.75**								
Primary Copper																
Measured																
Indicated																
Inferred	0.67	1.7						0.58	0.83	1.8						0.51
Total	**0.67**	**1.7**						**0.58**	**0.83**	**1.8**						**0.51**
Oxide Cobalt																
Measured																
Indicated	0.47	0.41						0.56	0.37	0.6						1.03
Inferred	0.10	0.25						0.34								
Total	**0.57**	**0.38**						**0.52**	**0.37**	**0.6**						**1.03**
Primary																
Cobalt																
Measured																
Indicated	0.012	0.14						0.34								
Inferred	0.004	0.36						0.65	0.10	0.3						0.36
Total	**0.016**	**0.20**						**0.42**								
Total	**3.3**	**1.9**						**0.46**	**3.2**	**1.9**						**0.46**
Nambulwa (100%)																
Oxide Copper																
Measured																
Indicated	1.0	2.2						0.11	1.0	2.3						0.12
Inferred	0.09	1.9						0.07	0.1	1.9						0.07
Total	**1.1**	**2.2**						**0.11**	**1.1**	**2.3**						**0.11**
Oxide Cobalt																
Measured																
Indicated	0.17	0.15						0.27	0.04	0.08						0.40
Inferred																
Total	**0.17**	**0.15**						**0.27**	**0.04**	**0.08**						**0.40**
Total	**1.3**	**2.0**						**0.13**	**1.1**	**2.2**						**0.12**
DZ (100%)																
Oxide Copper																
Measured																
Indicated	0.79	2.0						0.13	0.78	2.0						0.12
Inferred	0.04	2.0						0.13	0.04	2.0						0.13
Total	**0.82**	**2.0**						**0.13**	**0.82**	**2.0**						**0.12**
Oxide Cobalt																
Measured																
Indicated	0.35	0.26						0.27	0.07	0.34						0.39
Inferred	0.01	0.14						0.25	0.00	0.63						0.51
Total	**0.35**	**0.26**						**0.27**	0.07	0.34						0.39
DZ Total	**1.2**	**1.5**						**0.17**	**0.89**	**1.9**						**0.15**

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

MINERAL RESOURCES[1]

Deposit	2021 Tonnes (Mt)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)	Mo (ppm)	Co (%)	2020 Tonnes (Mt)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)	Mo (ppm)	Co (%)
Mwepu (100%)																
Oxide Copper																
Measured																
Indicated	0.86	2.4						0.18	0.95	2.3						0.17
Inferred	0.57	2.4						0.28	0.63	2.3						0.27
Total	**1.4**	**2.4**						**0.22**	**1.58**	**2.3**						**0.21**
Oxide Cobalt																
Measured																
Indicated	0.10	0.26						0.27	0.08	0.61						0.45
Inferred	0.12	1.5						0.17	0.22	0.44						0.47
Total	**0.22**	**2.4**						**0.18**	**0.30**	**0.49**						**0.46**
Mwepu Total	**1.9**	**1.9**						**0.25**	**1.9**	**2.0**						**0.25**
Dugald River (100%)																
Primary Zinc																
Measured	13		13.1	2.4	80				13.5		13.2	2.3	74			
Indicated	17		11.6	1.4	21				19.8		11.5	1.2	21			
Inferred	36		11.2	0.8	8.7				34.3		11.0	0.8	9			
Total	**66**		**11.7**	**1.3**	**26**				**67.6**		**11.6**	**1.2**	**26**			
Primary Copper																
Inferred	4.5	1.5				0.1			19.2	1.4				0.1		
Total	**4.5**	**1.5**				**0.1**			**19.2**	**1.4**				**0.1**		
Dugald River Total	**70**								**86.8**							
Rosebery (100%)																
Rosebery																
Measured	6.5	0.22	7.7	3.0	135	1.4			6.7	0.19	8.0	3.0	131	1.5		
Indicated	3.1	0.17	6.5	2.3	117	1.2			2.1	0.15	6.6	2.0	98	1.1		
Inferred	7.1	0.21	8.6	2.5	91	1.2			6.7	0.26	9.2	3.0	109	1.5		
Total	**17**	**0.21**	**7.9**	**2.6**	**113**	**1.3**			**15.5**	**0.21**	**8.3**	**2.9**	**117**	**1.4**		
Rosebery Total	**17**								**15.5**							
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	**14**	**2.5**	**3.8**	**0.4**	**84**	**1.3**			**14.0**	**2.5**	**3.8**	**0.4**	**84**	**1.3**		
Izok Lake (100%)																
Measured																
Indicated	13	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	**15**	**2.3**	**13**	**1.4**	**73**	**0.18**			**14.6**	**2.3**	**13.1**	**1.4**	**73**	**0.18**		

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

ORE RESERVES[1]

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

Ore Reserves

Deposit	2021 Tonnes (Mt)	2021 Cu (%)	2021 Zn (%)	2021 Pb (%)	2021 Ag (g/t)	2021 Au (g/t)	2021 Mo (ppm)	2020 Tonnes (Mt)	2020 Cu (%)	2020 Zn (%)	2020 Pb (%)	2020 Ag (g/t)	2020 Au (g/t)	2020 Mo (ppm)
Las Bambas (62.5%)														
Ferrobamba Primary Copper														
Proved	360	0.61			2.7	0.05	220	422	0.61			2.6	0.05	223
Probable	160	0.77			3.5	0.07	190	166	0.74			3.4	0.07	189
Total	**520**	**0.66**			**2.9**	**0.06**	**210**	**587**	**0.64**			**2.8**	**0.06**	**214**
Chalcobamba Primary Copper														
Proved	83	0.60			1.9	0.02	140	81	0.51			1.6	0.02	156
Probable	140	0.74			2.7	0.03	120	126	0.72			2.8	0.04	123
Total	**220**	**0.69**			**2.4**	**0.03**	**130**	**207**	**0.64**			**2.3**	**0.03**	**136**
Sulfobamba Primary Copper														
Proved														
Probable	56	0.79			5.8	0.03	160	64	0.76			5.5	0.03	163
Total	**56**	**0.79**			**5.8**	**0.03**	**160**	**64**	**0.76**			**5.5**	**0.03**	**163**
Primary Copper Stockpiles														
Proved	26	0.39			1.8		140	8.14	0.40			1.8		135
Total	**26**	**0.39**			**1.8**		**140**	**8.14**	**0.40**			**1.8**		**135**
Las Bambas Total	**820**	**0.67**			**3.0**		**180**	**867**	**0.65**			**2.9**		**191**
Kinsevere (100%)														
Oxide Copper														
Proved	0.0	0.0						0.8	3.5					
Probable	0.0	0.0						1.7	3.2					
Total	**0.0**	**0.0**						**2.4**	**3.3**					
Stockpiles														
Proved														
Probable	7.0	1.6						9.3	2.1					
Total	**7.0**	**1.6**						**9.3**	**2.1**					
Kinsevere Total	**7.0**	**1.6**						**11.8**	**2.3**					
Dugald River (100%)														
Primary Zinc														
Proved	12		11.0	2.1	70			10.9		10.8	2.0	64		
Probable	12		10.1	1.3	18			14.5		10.1	1.2	20		
Total	24		10.6	1.7	44			25.4		10.4	1.5	39		
Dugald River Total	**24**		**10.6**	**1.7**	**44**			**25.4**		**10.4**	**1.5**	**39**		
Rosebery (100%)														
Proved	5.3	0.19	6.4	2.6	120	1.3		6.1	0.18	7.0	2.7	121	1.4	
Probable	0.84	0.18	5.5	2.0	110	1.1		1.1	0.18	6.1	2.0	100	1.1	
Total	**6.1**	**0.19**	**6.3**	**2.5**	**120**	**1.2**		**7.2**	**0.18**	**6.9**	**2.6**	**118**	**1.3**	
Rosebery Total	**6.1**	**0.19**	**6.3**	**2.5**	**120**	**1.2**		**7.2**	**0.18**	**6.9**	**2.6**	**118**	**1.3**	

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

COMPETENT PERSONS

Table 1: Competent Persons for Mineral Resources, Ore Reserves and Corporate

Deposit	Accountability	Competent Person	Professional Membership	Employer
MMG Mineral Resources and Ore Reserves Committee	Mineral Resources	Rex Berthelsen[1]	HonFAusIMM(CP)	MMG
MMG Mineral Resources and Ore Reserves Committee	Ore Reserves	Neil Colbourne[1]	MAusIMM	MMG
MMG Mineral Resources and Ore Reserves Committee	Metallurgy: Mineral Resources / Ore Reserves	Amy Lamb[1]	MAusIMM	MMG
Las Bambas	Mineral Resources	Hugo Rios[1]	MAusIMM(CP)	MMG
Las Bambas	Ore Reserves	Yao Wu[1]	MAusIMM(CP)	MMG
Kinsevere	Mineral Resources	Samson Malenga[2]	Pr.Sci.Nat.	MMG
Kinsevere	Ore Reserves	Dean Basile	MAusIMM(CP)	Mining One Pty Ltd
Rosebery	Mineral Resources	Anna Lewin	MAusIMM(CP)	MMG
Rosebery	Ore Reserves	Philip Uebergang	MAusIMM	Ground Control Engineering Pty Ltd
Dugald River	Mineral Resources	Richard Bueger	MAIG	Mining Plus Pty Ltd
Dugald River	Ore Reserves	Philip Bremner	FAusIMM	Oreteck Pty Ltd
High Lake, Izok Lake	Mineral Resources	Allan Armitage[3]	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.

[1] Participants in the MMG Long-Term Incentive Plans which may include Mineral Resources and Ore Reserves growth as a performance condition

[2] South African Council for Natural Scientific Professions, Professional Natural Scientist

[3] Member of the Association of Professional Engineers and Geoscientists of British Columbia

SUMMARY OF SIGNIFICANT CHANGES

MINERAL RESOURCES

Mineral Resources as at 30 June 2021 have changed, since the 30 June 2020 estimate, for several reasons with the most significant changes outlined in this section.

Mineral Resources (contained metal) have decreased for copper (-6%), zinc (-1%), molybdenum (-8%), silver (-0.1%) and gold (-3%). Lead (0.4%) and cobalt (0.4%) have increased slightly from 2020. Variations to Mineral Resources (contained metal) on an individual site basis are discussed below:

Increases:

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

- continued drilling and improvements in orebody knowledge specifically at Dugald River and Rosebery. At Rosebery, continued drilling success in the middle and upper mine has further delineated 1.2Mt of additional resource as extensions to previously mined lenses; and
- metal prices, specifically cobalt, has increased the overall contained cobalt metal in the DRC deposits.

Decreases:

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

- depletion at all producing operations;
- removal of 40kt Cu from Sulfobamba deposit at Las Bambas due to illegal mining over the last 5 years;
- negative impacts of costs and cut off grade adjustments have been partially offset by positive movements in metal prices and account for 60% of the variance with the remainder due to improved orebody knowledge and geological modelling has resulted in 156kt metal reduction at Chalcobamba;
- remodelling of the hangingwall copper lens at Dugald River resulted in a decrease to the Inferred Mineral Resource reported in 2020; and
- an increase in costs and cut off grades at Las Bambas.

ORE RESERVES

Ore Reserves as at 30 June (contained metal) have decreased for copper (-5%), zinc (-8%), lead (-2%), silver (-3%), gold (-9%) and molybdenum (-8%).

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

Increases:

- Ore Reserves have increases at Dugald River for lead (4%) and silver (5%) have been realised due to continued drilling for Reserve Definition, which has increased the lead and silver grades, respectively; and
- Chalcobamba South West has been included in the Ore Reserve at Las Bambas for the first time, having contributed 230kt to the 2021 Ore Reserves. This, however, has not offset depletion and other negative impacts.

Decreases:

Decreases in Ore Reserves (metal) for copper (-5%), zinc (-8%), lead (-3%), silver (-3%) and gold (-9%) are due to:

- depletion at all producing operations;
- impact of increased costs on cut-off grade and an estimated 19kt of ore attributed to illegal mining at Sulfobamba;
- a further reduction of copper (-58%) at Kinsevere, due to changes in exclusion of all remaining in-pit material due to high contract mining costs required to recommence mining and exclusion of the black shale material from the stockpiles due to having no suitable blending material available; and
- a further reduction of zinc (-5%) at Dugald River, due to lower modelled grades.

KEY ASSUMPTIONS

PRICES AND EXCHANGE RATES

The following price and foreign exchange assumptions, set according to the relevant MMG Standard as at February 2021, have been applied to all Mineral Resources and Ore Reserves estimates. Price assumptions for all metals have changed from the 2020 Mineral Resources and Ore Reserves statement.

Table 2: 2021 Price (real) and foreign exchange assumptions

	Ore Reserves	Mineral Resources
Cu (US$/lb)	3.28	3.68
Zn (US$/lb)	1.16	1.41
Pb (US$/lb)	0.93	1.13
Au US$/oz	1,512	1,773
Ag US$/oz	18.90	22.17
Mo (US$/lb)	10.08	12.12
Co (US$/lb)	20.16	30.24
USD:CAD	1.30	As per Ore Reserves
AUD:USD	0.75	
USD:PEN	3.23	

CUT-OFF GRADES

Mineral Resources and Ore Reserves cut-off values are shown in Table 3 and Table 4, respectively.

Table 3: Mineral Resources cut-off grades

Site	Mineralisation	Likely Mining Method[1]	Cut-Off Value	Comments
Las Bambas	Oxide copper	OP	1% Cu[2]	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$3.68/lb Cu and US$12.12/lb Mo pit shell.
	Primary copper Ferrobamba		0.18% Cu[2] (average)	
	Primary copper Chalcobamba		0.20% Cu[2] (average)	
	Primary copper Sulfobamba		0.21% Cu[2] (average)	
Kinsevere	Oxide copper & stockpiles	OP	0.6% CuAS[3]	*In-situ* copper Mineral Resources constrained within a US$3.68/lb Cu and US$25.79/lb Co pit shell.
	Transition mixed ore copper (TMO)	OP	0.7% Cu[2]	
	Primary copper	OP	0.7% Cu[2]	
	Oxide TMO Cobalt	OP	0.2% Co[4]	*In-situ* cobalt Mineral Resources constrained within a US$3.68/lb Cu and US$30.24/lb Co pit shell, but exclusive of copper mineralisation.
	Primary cobalt	OP	0.1% Co[4]	
Sokoroshe II	Oxide	OP	0.73% Cu[2]	*In-situ* copper Mineral Resources constrained within a US$3.68/lb Cu and US$30.24/lb Co pit shell.
	TMO Copper	OP	0.8% Cu[2]	
	Primary copper	OP	0.8% Cu[2]	
	Oxide TMO cobalt	OP	0.2% Co[4]	*In-situ* cobalt Mineral Resources constrained within a US$3.68/lb Cu and US$30.24/lb Co pit shell, but exclusive of copper mineralisation above cut off.
	TMO Cobalt	OP	0.2% Co[4]	
	Primary cobalt	OP	0.2% Co[4]	
Nambulwa / DZ	Oxide copper	OP	0.76% Cu[2]	*In-situ* copper Mineral Resources constrained within a US$3.68/lb Cu and US$30.24/lb Co pit shell.
	Oxide cobalt	OP	0.2% Co[4]	*In-situ* cobalt Mineral Resources constrained within a US$3.68/lb Cu and US$30.24/lb Co pit shell, but exclusive of copper mineralisation.
Mwepu	Oxide and TMO copper	OP	0.89% Cu[2]	*In-situ* copper Mineral Resources constrained within a US$3.68/lb Cu and US$30.24/lb Co pit shell.
	Oxide cobalt	OP	0.2% Co[4]	*In-situ* cobalt Mineral Resources constrained within a US$3.68/lb Cu and US$30.24/lb Co pit shell, but exclusive of copper mineralisation.
Rosebery	Rosebery (Zn, Cu, Pb, Au, Ag)	UG	A$174/t NSR[5]	All areas of the mine are reported using the same NSR cut-off value.
Dugald River	Primary zinc (Zn, Pb, Ag)	UG	A$142/t NSR[5]	All areas of the mine are reported using the same NSR cut-off value.
	Primary copper	UG	1% Cu[2]	All areas of the mine are reported at the same cut-off grade
High Lake	Cu, Zn, Pb, Ag, Au	OP	2.0% CuEq[6]	CuEq[6] = 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%.
	Cu, Zn, Pb, Ag, Au	UG	4.0% CuEq[6]	CuEq[6] = 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[7]	ZnEq[7] = Zn + (Cu×3.31) + (Pb×1.09) + (Au×1.87) + (Ag×0.033); prices and metal recoveries as per High Lake.

[1] OP = Open Pit, UG = Underground
[2] Cu = Total copper
[3] CuAS = Acid soluble copper
[4] Co = Total cobalt
[5] NSR = Net Smelter Return
[6] CuEq = Copper equivalent
[7] ZnEq = Zinc equivalent

Table 4 : Ore Reserves cut-off grades

Site	Mineralisation	Mining Method	Cut-Off Value	Comments
Las Bambas	Primary copper Ferrobamba	OP	0.20% Cu[1] (average)[2]	Range based on rock type recovery.
	Primary copper Chalcobamba		0.23% Cu[1] (average)[3]	
	Primary copper Sulfobamba		0.24% Cu[1] (average)[4]	
Kinsevere	Copper oxide	OP	0.6% CuAS[5]	Approximate cut-off grades shown in this table for ex-pit material. Variable cut-off grade based on net value script.
		OP	0.6% CuAS[4]	For existing stockpiles reclaim.
Rosebery	(Zn, Cu, Pb, Au, Ag)	UG	A$174/t NSR[6]	
Dugald River	Primary zinc	UG	A$142/t NSR (average)[6]	

[1] Cu = Total copper
[2] Range from 0.20 to 0.24% Cu
[3] Range from 0.22 to 0.29% Cu
[4] Range from 0.24 to 0.29% Cu
[5] CuAS = Acid Soluble Copper
[6] NSR = Net Smelter Return

PROCESSING RECOVERIES

Average processing recoveries are shown in Table 5. More detailed processing recovery relationships are provided in the Technical Appendix.

Table 5: Processing Recoveries

Site	Product	Recovery						Concentrate Moisture Assumptions
		Cu	Zn	Pb	Ag	Au	Mo	
Las Bambas	Copper Concentrate	86%	-	-	75%	71%		10%
	Molybdenum Concentrate						55.5%	5%
Rosebery	Zinc Concentrate		84%					8%
	Lead Concentrate		1.8%	77%	36%	16%		7%
	Copper Concentrate	58%			41%	36%		8%
	Doré[1] (gold and silver)				0.13%	24%		
Dugald River	Zinc Concentrate	–	88%		39%	–		10.5%
	Lead Concentrate	–		66%	47%	–		10.0%
Kinsevere	Copper Cathode	76% (96% CuAS[2])						

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

[1] 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

[2] CuAS = Acid Soluble Copper