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 2022

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 2022 (Mineral Resources and Ore Reserves Statement).

The key changes to Mineral Resources and Ore Reserves Statement as at 30 June 2022 are:

- The Group's Mineral Resources (contained metal) have increased for copper (5%), cobalt (11%), molybdenum (2%) and gold (2%). Estimated Mineral Resource decreases (contained metal) have occurred in zinc (3%), lead (10%) and silver (1%).

- The Group's Ore Reserves (contained metal) have decreased for copper (1%), zinc (8%), lead (19%), silver (5%), gold (5%) and molybdenum (13%). Cobalt metal has decreased slightly by 0.2%.

For copper metal, an increase in metal price assumptions have resulted in a net positive variance in Resources. At Las Bambas continuous improvement to the geological model through drilling and orebody knowledge study have also contributed to increased Resources. Otherwise, the main reasons for changes are depletion at all sites. Other drivers have not resulted in material changes to either Mineral Resources or Ore Reserves. Continued depletion at Sulfobamba by illegal mining is the only negative variance. Copper metal Mineral Resources additions have replaced depletion by approximately 150% in 2022, driven primarily by Las Bambas.

For zinc metal, the main reasons for the changes are depletion at the two Australian sites and narrower than expected zones from some Dugald River drilling results combined with changes to modelling practices at the site.

MMG Limited

MINERAL RESOURCES AND ORE RESERVES STATEMENT

30 June 2022

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 9).

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 2022 published on 25 October 2022 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
Li Liangang
Interim CEO and Executive Director

Hong Kong, 25 October 2022

As at the date of this announcement, the Board comprises seven directors, of which one is an executive director, namely Mr Li Liangang; three are non-executive directors, namely Mr Jiao Jian (Chairman), Mr Zhang Shuqiang and Mr Xu Jiqing; 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 2022

EXECUTIVE SUMMARY

Mineral Resources and Ore Reserves for MMG have been estimated as at 30 June 2022 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 9, which include the 30 June 2022 and 30 June 2021 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 10.

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 2021 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. Geological models are continually improved and updated with new drilling information and result in both increases and decreases. Relatively small increases have occurred at Ferrobamba (Las Bambas) while all other copper deposits have increased by less than 1% compared to the global change. There are no material changes at the Kinsevere mine whereas copper and cobalt have increased in the regional DRC satellite copper deposits resulting from new drilling at Sokoroshe 2 and an increase of the copper price assumption. Zinc metal increases are more than twice the depleted metal at Rosebery while at Dugald River, depletion (43%) and model changes (57%), partially driven by narrower intersections in some areas, explains the negative zinc variance at the site. The lead and silver negative variances are partially explained by depletion of those metals, 18% and 27% respectively, with the majority of the negative variance due to adverse model changes.

Key changes to the Ore Reserves (contained metal) since the 30 June 2021 estimate are mostly related to depletion[1]. An increase in contained copper metal at Las Bambas in the Ferrobamba deposit are due to improved grades and changes resulting from the pit design. Other pits show no material change. Milled depletion explains 90% of the negative zinc metal variance at Dugald River, but only 30% and 50% of the lead and silver negative variances respectively.

Pages 11 and 12 provide further discussion of the Mineral Resources and Ore Reserves changes.

On 13 October 2022, MMG made a voluntary announcement regarding an invasion of both Sokoroshe 2 and Nambulwa project sites. Kinsevere Operation intends to mine both of these deposits as part of its Expansion Project and its future operations. MMG maintains that it holds current and valid mining lease agreements with Gécamines over these deposits and has announced it has commenced international arbitration before the International Chamber of Commerce on 21 October 2022.

[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.

	2022								2021							
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	0.03	1.7							0.4	1.4						
Inferred									0.01	1.1						
Total	**0.03**	**1.7**							**0.4**	**1.4**						
Ferrobamba Primary Copper																
Measured	470	0.56			2.3	0.04	210		410	0.59			2.6	0.05	220	
Indicated	270	0.70			3.3	0.06	180		280	0.70			3.2	0.06	200	
Inferred	110	0.84			4.2	0.08	170		72	0.92			3.9	0.08	140	
Total	**850**	**0.64**			**2.9**	**0.05**	**190**		**770**	**0.66**			**3.0**	**0.06**	**210**	
Ferrobamba Total	**850**								**770**							
Chalcobamba Oxide Copper																
Indicated	6.8	1.4							6.5	1.5						
Inferred	0.06	1.5							0.5	1.7						
Total	**6.9**	**1.4**							**7.0**	**1.5**						
Chalcobamba Primary Copper																
Measured	140	0.54			1.7	0.02	140		120	0.52			1.6	0.02	150	
Indicated	180	0.64			2.5	0.03	110		170	0.70			2.7	0.03	120	
Inferred	29	0.56			2.4	0.03	130		27	0.60			2.5	0.03	140	
Total	**340**	**0.60**			**2.1**	**0.03**	**120**		**320**	**0.63**			**2.3**	**0.03**	**130**	
Chalcobamba Total	**347**								**327**							
Sulfobamba Primary Copper																
Indicated	84	0.67			4.7	0.02	170		80	0.68			4.8	0.02	170	
Inferred	98	0.58			6.5	0.02	120		96	0.58			6.5	0.02	120	
Total	**180**	**0.62**			**5.7**	**0.02**	**140**		**180**	**0.63**			**5.7**	**0.02**	**140**	
Sulfobamba Total	**180**	**0.62**			**5.7**	**0.02**	**140**		**180**	**0.63**			**5.7**	**0.02**	**140**	
Oxide Copper Stockpile																
Indicated	14	1.1							13	1.1						
Total	**14**	**1.1**							**13**	**1.1**						
Sulphide Stockpile																
Measured	30	0.38			2.2		130		26	0.39			1.8		140	
Total	**30**	**0.38**			**2.2**		**130**		**26**	**0.39**			**1.8**		**140**	
Las Bambas Total	**1,400**								**1,300**							

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

MMG Limited

MINERAL RESOURCES AND ORE RESERVES STATEMENT

30 June 2022

MINERAL RESOURCES[1]

Deposit	2022 Tonnes (Mt)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)	Mo (ppm)	Co (%)	2021 Tonnes (Mt)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)	Mo (ppm)	Co (%)
Kinsevere (100%)																
Oxide Copper																
Measured	2.6	2.9						0.08	1.2	3.2						0.11
Indicated	4.4	2.6						0.12	5.5	2.7						0.09
Inferred	2.0	2.0						0.09	2.2	2.1						0.07
Total	**9.0**	**2.6**						**0.10**	**8.9**	**2.7**						**0.09**
Transition Mixed Copper Ore																
Measured	1.0	2.2						0.16	0.8	2.0						0.12
Indicated	2.5	2.0						0.12	2.2	2.1						0.08
Inferred	1.3	1.7						0.08	1.1	1.6						0.12
Total	**4.8**	**1.9**						**0.12**	**4.1**	**1.9**						**0.25**
Primary Copper																
Measured	2.2	2.5						0.23	1.5	2.6						0.25
Indicated	18	2.2						0.10	19	2.3						0.10
Inferred	10	1.6						0.07	9.2	1.7						0.08
Total	**31**	**2.1**						**0.10**	**29**	**2.1**						**0.10**
Oxide-TMO Cobalt																
Measured									0.02	0.46						0.31
Indicated	0.70	0.21						0.32	0.16	0.35						0.33
Inferred	0.73	0.16						0.33	0.99	0.23						0.32
Total	**1.4**	**0.18**						**0.32**	**1.2**	**0.3**						**0.32**
Primary Cobalt																
Measured									0.01	0.54						0.24
Indicated	0.17	0.31						0.20	0.15	0.57						0.20
Inferred	0.24	0.26						0.22	0.17	0.33						0.25
Total	**0.41**	**0.28**						**0.21**	**0.34**	**0.44**						**0.22**
Stockpiles																
Measured																
Indicated	14	1.5							16	1.6						
Total	**14**	**1.5**							**16**	**1.6**						
Kinsevere Total	**61**	**1.9**							**59**	**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	2022 Tonnes (Mt)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)	Mo (ppm)	Co (%)	2021 Tonnes (Mt)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)	Mo (ppm)	Co (%)
Sokoroshe 2 (100%)																
Oxide Copper																
Measured																
Indicated	2.8	2.1						0.39	1.7	2.4						0.35
Inferred	0.16	1.1						0.10	0.02	3.4						0.07
Total	**2.9**	**2.1**						**0.37**	**1.7**	**2.4**						**0.34**
Transition Mixed Copper Ore																
Measured																
Indicated	0.07	1.6						0.23	0.1	0.9						1.50
Inferred									0.2	2.5						0.24
Total	**0.07**	**1.6**						**0.23**	**0.3**	**1.8**						**0.75**
Primary Copper																
Measured																
Indicated	0.62	1.50						0.47								
Inferred									0.67	1.7						0.58
Total	**0.62**	**1.5**						**0.47**	**0.67**	**1.7**						**0.58**
Oxide Cobalt																
Measured																
Indicated	0.63	0.24						0.51	0.47	0.41						0.56
Inferred	0.31	0.35						0.31	0.10	0.25						0.34
Total	**0.93**	**0.27**						**0.45**	**0.57**	**0.4**						**0.52**
Primary Cobalt																
Measured																
Indicated	0.047	0.53						0.64	0.012	0.14						0.34
Inferred									0.004	0.36						0.65
Total	**0.047**	**0.53**						**0.64**	**0.016**	**0.20**						**0.42**
Sokoroshe 2 Total	**4.6**	**1.6**						**0.40**	**3.3**	**1.9**						**0.46**
Nambulwa (100%)																
Oxide Copper																
Measured																
Indicated	1.1	2.2						0.11	1.0	2.2						0.11
Inferred	0.10	1.9						0.07	0.09	1.9						0.07
Total	**1.2**	**2.1**						**0.11**	**1.1**	**2.2**						**0.11**
Transition Mixed Copper Ore																
Measured																
Indicated	0.02	3.3						0.18								
Inferred																
Total	**0.02**	**3.3**						**0.18**								
Oxide Cobalt																
Measured																
Indicated	0.17	0.14						0.27	0.17	0.15						0.27
Inferred																
Total	**0.17**	**0.14**						**0.27**	**0.2**	**0.1**						**0.27**
Nambulwa Total	**1.4**	**1.9**						**0.13**	**1.3**	**2.0**						**0.13**

[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	2022 Tonnes (Mt)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)	Mo (ppm)	Co (%)	2021 Tonnes (Mt)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)	Mo (ppm)	Co (%)
DZ (100%)																
Oxide Copper																
Measured																
Indicated	0.94	1.8						0.13	0.79	2.0						0.13
Inferred	0.04	2.0						0.12	0.04	2.0						0.13
Total	**0.98**	**1.8**						**0.13**	**0.82**	**2.0**						**0.13**
Oxide Cobalt																
Measured																
Indicated	0.33	0.22						0.27	0.35	0.26						0.27
Inferred	0.01	0.14						0.25	0.01	0.14						0.25
Total	**0.33**	**0.22**						**0.27**	**0.35**	**0.26**						**0.27**
DZ Total	**1.3**	**1.4**						**0.16**	**1.2**	**1.5**						**0.17**
Mwepu (100%)																
Oxide Copper																
Measured																
Indicated	0.75	2.5						0.17	0.86	2.4						0.18
Inferred	0.45	2.7						0.29	0.57	2.4						0.28
Total	**1.2**	**2.6**						**0.22**	**1.4**	**2.4**						**0.22**
TMO Copper																
Measured																
Indicated	0.20	1.3						0.18								
Inferred	0.18	1.4						0.22								
Total	**0.38**	**1.3**						**0.20**								
Oxide Cobalt																
Measured																
Indicated	0.04	0.7						0.45	0.10	0.56						0.32
Inferred	0.05	0.7						0.44	0.12	0.61						0.33
Total	**0.09**	**0.7**						**0.45**	**0.22**	**0.59**						**0.33**
Primary Cobalt																
Measured																
Indicated	0.07	0.25						0.31	0.07	0.25						0.31
Inferred	0.20	0.27						0.42	0.20	0.27						0.41
Total	**0.27**	**0.26**						**0.39**	**0.27**	**0.26**						**0.39**
Mwepu Total	**1.9**	**1.9**						**0.29**	**1.9**	**1.9**						**0.25**

[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	2022 Tonnes (Mt)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)	Mo (ppm)	Co (%)	2021 Tonnes (Mt)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)	Mo (ppm)	Co (%)
Dugald River (100%)																
Primary Zinc																
Measured	12		13.5	2.2	71				13		13.1	2.4	80			
Indicated	15		12.0	0.9	16				17		11.6	1.4	21			
Inferred	33		11.3	0.8	8.1				36		11.2	0.8	9			
Total	**61**		**11.9**	**1.1**	**23**				**66**		**11.7**	**1.3**	**26**			
Primary Copper																
Inferred	4.5	1.5				0.1			4.5	1.5				0.1		
Total	**4.5**	**1.5**				**0.1**			**4.5**	**1.5**				**0.1**		
Dugald River Total	**65**								**70**							
Rosebery (100%)																
Rosebery																
Measured	7.3	0.20	7.4	2.7	118	1.2			6.5	0.22	7.7	3.0	135	1.4		
Indicated	4.6	0.18	6.9	1.9	75	1.1			3.1	0.17	6.5	2.3	117	1.2		
Inferred	7.9	0.19	7.0	2.1	77	1.1			7.1	0.21	8.6	2.5	91	1.2		
Total	**20**	**0.19**	**7.1**	**2.3**	**92**	**1.1**			**17**	**0.21**	**7.9**	**2.6**	**113**	**1.3**		
Rosebery Total	**20**								**17**							
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**	**2.5**	**3.8**	**0.4**	**84**	**1.3**		
Izok Lake (100%)																
Measured																
Indicated	13	2.4	13.3	1.4	73	0.18			13	2.4	13.3	1.4	73	0.18		
Inferred	1.2	1.5	10.5	1.3	73	0.21			1.2	1.5	10.5	1.3	73	0.21		
Total	**15**	**2.3**	**13.1**	**1.4**	**73**	**0.18**			**15**	**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	2022 Tonnes (Mt)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)	Mo (ppm)	Co (%)	2021 Tonnes (Mt)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)	Mo (ppm)	Co (%)
Las Bambas (62.5%)																
Ferrobamba Primary Copper																
Proved	340	0.65			2.9	0.05	200		360	0.61			2.7	0.05	220	
Probable	130	0.91			4.6	0.08	180		160	0.77			3.5	0.07	190	
Total	**470**	**0.72**			**3.4**	**0.06**	**200**		**520**	**0.66**			**2.9**	**0.06**	**210**	
Chalcobamba Primary Copper																
Proved	100	0.65			2.1	0.03	130		83	0.60			1.9	0.02	140	
Probable	130	0.71			2.7	0.03	110		140	0.74			2.7	0.03	120	
Total	**230**	**0.68**			**2.4**	**0.03**	**120**		**220**	**0.69**			**2.4**	**0.03**	**130**	
Sulfobamba Primary Copper																
Proved																
Probable	54	0.80			5.9	0.03	160		56	0.79			5.8	0.03	160	
Total	**54**	**0.80**			**5.9**	**0.03**	**160**		**56**	**0.79**			**5.8**	**0.03**	**160**	
Primary Copper Stockpiles																
Proved	30	0.38			2.2		130		26	0.39			1.8		140	
Total	**30**	**0.38**			**2.2**		**130**		**26**	**0.39**			**1.8**		**180**	
Las Bambas Total	**780**	**0.70**			**3.2**		**170**		**820**	**0.67**			**3.0**		**180**	
Kinsevere (100%)																
Oxide/TMO Copper and Cobalt																
Proved	3.0	2.5						0.12	1.0	3.4						0.15
Probable	5.7	2.2						0.12	3.8	2.9						0.11
Total	**8.6**	**2.3**						**0.12**	**4.8**	**3.0**						**0.12**
Primary Copper and Cobalt																
Proved	1.9	2.3						0.21	1.8	2.5						0.24
Probable	16	2.2						0.10	18	2.4						0.11
Total	**18**	**2.2**						**0.11**	**19**	**2.4**						**0.12**
Stockpiles																
Proved																
Probable	14	1.5							16	1.6						
Total	**14**	**1.5**							**16**	**1.6**						
Kinsevere Total	**40**	**2.0**							**40**	**2.1**						
Dugald River (100%)																
Primary Zinc																
Proved	12		10.9	1.9	62				12		11.0	2.1	70			
Probable	10		10.1	0.9	14				12		10.1	1.3	18			
Total	22		10.5	1.4	39				24		10.6	1.7	44			
Dugald River Total	**22**		**10.5**	**1.4**	**39**				**24**		**10.6**	**1.7**	**44**			
Rosebery (100%)																
Proved	4.8	0.19	6.7	2.7	120	1.2			5.3	0.19	6.4	2.6	120	1.3		
Probable	0.77	0.20	6.1	2.1	79	1.3			0.84	0.18	5.5	2.0	110	1.1		
Total	**5.5**	**0.19**	**6.6**	**2.6**	**110**	**1.2**			**6.1**	**0.19**	**6.3**	**2.5**	**120**	**1.2**		
Rosebery Total	**5.5**	**0.19**	**6.6**	**2.6**	**110**	**1.2**			**6.1**	**0.19**	**6.3**	**2.5**	**120**	**1.2**		

[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	Cornel Parshotam[1]	MAusIMM	MMG
MMG Mineral Resources and Ore Reserves Committee	Metallurgy: Mineral Resources / Ore Reserves	Amy Lamb[1]	MAusIMM(CP)	MMG
Las Bambas	Mineral Resources	Hugo Rios[1]	MAusIMM(CP)	MMG
Las Bambas	Ore Reserves	Jorge Valverde[1]	MAusIMM(CP)	MMG
Kinsevere	Mineral Resources	Jeremy Witley[2]	Pr.Sci.Nat.	The MSA Group (Pty) Ltd
Kinsevere	Ore Reserves	Dean Basile	MAusIMM(CP)	Mining One Pty Ltd
Rosebery	Mineral Resources	Maree Angus	MAusIMM(CP)	AMC Consultants Pty Ltd
Rosebery	Ore Reserves	Andrew Robertson	FAusIMM	Mining Plus Pty Ltd
Dugald River	Mineral Resources	Andrew Fowler	MAusIMM(CP)	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 2022 have changed, since the 30 June 2021 estimate, for several reasons with the most significant changes outlined in this section.

Mineral Resources (contained metal) have increased for copper (5%), cobalt (11%), molybdenum (2%) and gold (2%). Zinc (-3%), lead (-10%) and silver (-1%) have decreased from 2021. 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:

- metal prices, specifically copper, has increased the overall contained copper metal and contributed by association to an increase in cobalt in the Kinsevere and satellite DRC deposits; and
- improvements in orebody knowledge specifically at Las Bambas and Rosebery. At Rosebery, continued drilling success in the middle and lower mine areas, specifically Z lens, combined with a reduction in cut-off grade, has further delineated a combined 3.1Mt of additional resource as extensions to the deposit. An increase in metal of 10% copper, 7% zinc, 3% lead and 6% gold have resulted. At Las Bambas, copper metal has increased by 6%, silver by 7% and molybdenum by 2%.

Decreases:

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

- depletion at all producing operations;
- drilling at Dugald River has intersected some narrower zones than expected and has partially contributing to the -6% zinc metal reduction. Changes to the modelling procedures aimed at addressing a negative reconciliation in by-products have contributed to the majority of the lead (-20%) and silver (-19%) variances. This largely impacts the Indicated category; and
- removal of a further 10kt Cu from Sulfobamba deposit at Las Bambas due to illegal mining over the last 12 months taking the total estimated depletion due to illegal mining to 50kt Cu.

ORE RESERVES

Ore Reserves as at 30 June (contained metal) have decreased for copper (-1%), zinc (-8%), lead (-19%), silver (-5%), gold (-5%), molybdenum (-13%) and cobalt (-0.2%).

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

Increases:

There are no increases of metal in the 2022 Ore Reserves.

Decreases:

Decreases in Ore Reserves (metal) as stated above are due to:

- depletion at all producing operations;
- changes in modelling practices at Dugald River have had an adverse impact on lead (-23%) and silver (-18%), specifically in the Probable Ore Reserve category. This impact is not material from a value perspective as lead and silver combined represent less than 10% of the total Metal Zn Equivalent (4.5%);
- the reduction of copper metal (-6%) at Kinsevere, and at Rosebery (-6%) are both due depletion; and
- the reduction of zinc metal (-8%) at Dugald River and (-4%) at Rosebery are due to depletion net of minor model updates.

KEY ASSUMPTIONS

PRICES AND EXCHANGE RATES

The following price and foreign exchange assumptions, set according to the relevant MMG Standard as at February 2022, have been applied to all Mineral Resources and Ore Reserves estimates. Price assumptions for all metals have changed from the 2021 Mineral Resources and Ore Reserves statement.

Table 2: 2022 Price (real) and foreign exchange assumptions

	Ore Reserves	Mineral Resources
Cu (US$/lb)	3.38	4.04
Zn (US$/lb)	1.17	1.39
Pb (US$/lb)	0.89	1.06
Au US$/oz	1,566	1,878
Ag US$/oz	19.60	23.48
Mo (US$/lb)	10.48	12.12
Co (US$/lb)	20.60	30.30
USD:CAD	1.25	As per Ore Reserves
AUD:USD	0.75	
USD:PEN	3.71	

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$4.04/lb Cu and US$12.12/lb Mo pit shell.
	Primary copper Ferrobamba		0.16% Cu[2] (average)	
	Primary copper Chalcobamba		0.18% Cu[2] (average)	
	Primary copper Sulfobamba		0.20% Cu[2] (average)	
Kinsevere	Oxide copper & stockpiles	OP	0.55% CuAS[3]	*In-situ* copper Mineral Resources constrained within a US$4.04/lb Cu and US$30.30/lb Co pit shell.
	Transition mixed ore copper (TMO)	OP	0.6% Cu[2]	
	Primary copper	OP	0.6% Cu[2]	
	Oxide TMO Cobalt	OP	0.2% Co[4]	*In-situ* cobalt Mineral Resources constrained within a US$4.04/lb Cu and US$30.30/lb Co pit shell, but exclusive of copper mineralisation.
	Primary cobalt	OP	0.1% Co[4]	
Sokoroshe 2	Oxide	OP	0.6% CuAS[3]	*In-situ* copper Mineral Resources constrained within a US$4.04/lb Cu and US$30.30/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$4.04/lb Cu and US$30.30/lb Co pit shell, but exclusive of copper mineralisation above cut off.
	Primary cobalt	OP	0.2% Co[4]	
Nambulwa / DZ	Oxide copper	OP	0.6% CuAS[3]	*In-situ* copper Mineral Resources constrained within a US$4.04/lb Cu and US$30.30/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$4.04/lb Cu and US$30.30/lb Co pit shell, but exclusive of copper mineralisation.
	Primary cobalt	OP	0.2 Cu[4]	
Mwepu	Oxide copper	OP	0.75% CuAS[3]	*In-situ* copper Mineral Resources constrained within a US$4.04/lb Cu and US$30.30/lb Co pit shell.
	TMO copper	OP	1.0% Cu[2]	
	Primary copper	OP	1.0% Cu[2]	
	Oxide TMO cobalt	OP	0.3% Co[4]	*In-situ* cobalt Mineral Resources constrained within a US$4.04/lb Cu and US$30.30/lb Co pit shell, but exclusive of copper mineralisation.
	Primary cobalt	OP	0.2% Co[4]	
Rosebery	Rosebery (Zn, Cu, Pb, Au, Ag)	UG	A$155/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$145/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

[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

Site	Mineralisation	Likely Mining Method[1]	Cut-Off Value	Comments
				recoveries at Au:75%, Ag:83%, Cu:89%, Pb:81% and Zn:93%.
Izok Lake	Cu, Zn, Pb, Ag, Au	OP	4.0% ZnEq[1]	ZnEq[1] = Zn + (Cu×3.31) + (Pb×1.09) + (Au×1.87) + (Ag×0.033); prices and metal recoveries as per High Lake.

Table 4 : Ore Reserves cut-off grades

Site	Mineralisation	Mining Method	Cut-Off Value	Comments
Las Bambas	Primary copper Ferrobamba	OP	0.20% Cu[2] (average)[3]	Range based on rock type recovery.
	Primary copper Chalcobamba		0.23% Cu[2] (average)[4]	
	Primary copper Sulfobamba		0.25% Cu[2] (average)[5]	
Kinsevere	Copper oxide	OP	0.5% CuAS[6]	Approximate cut-off grades shown in this table for ex-pit material. Variable cut-off grade based on net value script.
		OP	0.5% CuAS[6]	For existing stockpiles reclaim.
Rosebery	(Zn, Cu, Pb, Au, Ag)	UG	A$155/t NSR[7]	
Dugald River	Primary zinc	UG	A$145/t NSR (average)[7]	

[1] ZnEq = Zinc Equivalent
[2] Cu = Total copper
[3] Range from 0.20 to 0.24% Cu
[4] Range from 0.22 to 0.29% Cu
[5] Range from 0.24 to 0.29% Cu
[6] CuAS = Acid Soluble Copper
[7] 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%					7.8%
	Lead Concentrate		8%	77%	37%	16%		6%
	Copper Concentrate	58%			40%	35%		8.7%
	Doré[1] (gold and silver)				0.14%	24%		
Dugald River	Zinc Concentrate	–	91%		35%	–		9.7%
	Lead Concentrate	–		66%	36%	–		9.2%
Kinsevere and satellites	Copper Cathode	80% (96% CuAS[2])						
	Cobalt Precipitate	64% Co Recovery						

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