

Notice to ASX/LSE

Mineral Resources and Ore Reserves updates

21 February 2024

Rio Tinto has today announced to the Australian Securities Exchange (ASX) changes in Mineral Resources and Ore Reserves to support its 2023 annual reporting¹, including:

- Decreased Mineral Resources at the Rio Tinto Kennecott (RTK) Bingham Canyon open pit deposit in Utah, United States of America.
- Increased Ore Reserves and associated decreased Mineral Resources at the Rio Tinto Aluminium (RTA) Pacific Operations Amrun deposit in Queensland, Australia.
- Revised classification for the Ore Reserves at the Iron Ore Company of Canada (IOC) operations in Newfoundland and Labrador, Canada.

Supporting information relating to the changes of Mineral Resources and Ore Reserves is set out in the Table 1 Release and its appendices. This release provides a summary of those changes. Mineral Resources and Ore Reserves are quoted in this release on a 100 percent basis. Mineral Resources are reported in addition to Ore Reserves. The figures used to calculate Mineral Resources and Ore Reserves are often more precise than the rounded numbers shown in the tables, hence small differences may result if the calculations are repeated using the tabulated figures.

These changes will be included in Rio Tinto's 2023 Annual Report, to be released to the market on 21 February 2024, which will set out in full Rio Tinto's Mineral Resources and Ore Reserves position as at 31 December 2023, and Rio Tinto's interests.

Rio Tinto Kennecott

Mineral Resources and Ore Reserves for the RTK Bingham Canyon open pit are presented in Table A and Table B². Mineral Resources tonnes have decreased by 21 Mt (22%) as a result of the conversion of the East Wall Extension to Ore Reserves and removal of an opportunity to steepen the South Wall due to geotechnical concerns and changes to economic assumptions. There is an associated increase in Ore Reserves as a result of the East Wall conversion, which has been offset by depletion.

¹ These Mineral Resources and Ore Reserves were reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 (JORC Code) and the ASX Listing Rules in a release to the ASX dated 21 February 2024 titled "Ore Reserve and Mineral Resource updates: supporting information and Table 1 checklists" (Table 1 Release). Rio Tinto confirms that it is not aware of any new information or data that materially affects the information included in the Table 1 Release, that all material assumptions and technical parameters underpinning the estimates in the Table 1 Release continue to apply and have not materially changed, and that the form and context in which the Competent Persons' findings are presented have not been materially modified.

² The Competent Persons responsible for the information in the Table 1 Release that relates to Rio Tinto Kennecott Mineral Resources were Pancho Rodriguez and Ana Chiquini, who are Members of the Australasian Institute of Mining and Metallurgy (MAusIMM). The Competent Person responsible for the information in the Table 1 Release that relates to Rio Tinto Kennecott Ore Reserves is Brady Pett (MAusIMM).

Rio Tinto Aluminium Pacific Operations – Amrun

Mineral Resources and Ore Reserves for the RTA Amrun deposit are presented in Table C and Table D³. Mineral Resources exclusive of Ore Reserves have decreased by 55 Mt (7%) at Amrun due to conversion of Mineral Resources to Ore Reserves resulting from a routine review of price assumptions over the life of the mine, and updated orebody knowledge.

Ore Reserves have increased by 149 Mt (19%) at Amrun. The increase in Ore Reserves is associated with a routine review of price assumptions over the life of the mine, and updated orebody knowledge. There has been no material change to other modifying factors, including governmental, tenure, environmental, cultural heritage, community or operational.

Iron Ore Company of Canada

Mineral Resources and Ore Reserves for IOC are presented in Table E and Table F⁴. The classification of the Ore Reserves has changed as a result of reclassification of a significant proportion of the Proved Ore Reserves to Probable Ore Reserves. The change reflects a lower level of confidence in the modifying factors in areas supported by older data which does not have recovery and grind energy geometallurgical data.

³ The Competent Person responsible for the information in the Table 1 Release that relates to Rio Tinto Aluminium Pacific Operations Mineral Resources is Angus Mc Intyre (MAusIMM). The Competent Person responsible for the information in the Table 1 Release that relates to Rio Tinto Aluminium Pacific Operations Ore Reserves is William Saba (MAusIMM).

⁴ The Competent Persons responsible for the information in the Table 1 Release that relates to Iron Ore Company of Canada Mineral Resources were Ramsey Way, Mervin McDonald and Beverly Power, who are Members of Professional Engineers and Geoscientists of Newfoundland and Labrador. The Competent Persons responsible for the information in the Table 1 Release that relates to Iron Ore Company of Canada Ore Reserves were Rodney Williams and Stéphane Roche, who are Members of Professional Engineers and Geoscientists of Newfoundland and Labrador.

Table A Rio Tinto Kennecott Copper Bingham Canyon open pit Mineral Resources as at 31 December 2023

	Likely mining method ⁽¹⁾	Measured Mineral Resources as at 31 December 2023					Indicated Mineral Resources as at 31 December 2023					Total Measured and Indicated Mineral Resources as at 31 December 2023					
		Tonnage	Grade				Tonnage	Grade				Tonnage	Grade				
Copper⁽²⁾		Mt	% Cu	g/t Au	g/t Ag	% Mo	Mt	% Cu	g/t Au	g/t Ag	% Mo	Mt	% Cu	g/t Au	g/t Ag	% Mo	
Bingham Canyon (US)																	
- Bingham Open Pit ⁽³⁾	O/P	38	0.47	0.15	2.47	0.020	22	0.39	0.16	2.66	0.016	59	0.44	0.15	2.54	0.018	
		Inferred Mineral Resources as at 31 December 2023					Total Mineral Resources as at 31 December 2023					Rio Tinto interest	Total Mineral Resources as at 31 December 2022				
		Tonnage	Grade				Tonnage	Grade					Grade				
Copper⁽²⁾		Mt	% Cu	g/t Au	g/t Ag	% Mo	Mt	% Cu	g/t Au	g/t Ag	% Mo	%	Mt	% Cu	g/t Au	g/t Ag	% Mo
Bingham Canyon (US)																	
- Bingham Open Pit ⁽³⁾	12	0.26	0.20	2.56	0.005		72	0.41	0.16	2.55	0.016	100.0	93	0.43	0.15	2.24	0.016

1. Likely mining method: O/P = open pit/surface.
2. Copper Mineral Resources are reported on a dry in situ weight basis.
3. Bingham Canyon Open Pit Mineral Resources molybdenum grades interpolated from exploration drilling assays have been factored based on a long reconciliation history to blast hole and mill samples.

Table B Rio Tinto Kennecott Copper Bingham Canyon open pit Ore Reserves as at 31 December 2023

	Type of mine ⁽¹⁾	Proved Ore Reserves as at 31 December 2023					Probable Ore Reserves as at 31 December 2023					Total Ore Reserves as at 31 December 2023				
		Tonnage	Grade				Tonnage	Grade				Tonnage	Grade			
Copper⁽²⁾		Mt	% Cu	g/t Au	g/t Ag	% Mo	Mt	% Cu	g/t Au	g/t Ag	% Mo	Mt	% Cu	g/t Au	g/t Ag	% Mo
Bingham Canyon (US)																
- Bingham Open Pit ⁽³⁾	O/P	470	0.37	0.18	1.98	0.038	360	0.36	0.18	1.98	0.028	829	0.37	0.18	1.98	0.033
		Average mill recovery %				Rio Tinto interest	Rio Tinto share recoverable metal					Total Ore Reserves as at 31 December 2022				
		Cu	Au	Ag	Mo		Mt Cu	Moz Au	Moz Ag	Mt Mo		Tonnage	Grade			
Copper⁽²⁾												Mt	% Cu	g/t Au	g/t Ag	% Mo
Bingham Canyon (US)																
- Bingham Open Pit ⁽³⁾		89	69	71	63	100.0	2.681	3.257	37.686	0.176		880	0.38	0.18	1.97	0.033

1. Type of Mine: O/P = open pit/surface.
2. Copper Ore Reserves are reported as dry mill feed tonnes.
3. Bingham Canyon Open Pit Ore Reserves molybdenum grades interpolated from exploration drilling assays have been factored based on a long reconciliation history to blast hole and mill samples.

Table C Rio Tinto Aluminium Pacific Operations Mineral Resources as at 31 December 2023

	Likely mining method ⁽¹⁾	Measured Mineral Resources as at 31 December 2023			Indicated Mineral Resources as at 31 December 2023			Total Measured and Indicated Mineral Resources as at 31 December 2023		
		Tonnage	Grade	% SiO ₂	Tonnage	Grade	% SiO ₂	Tonnage	Grade	% SiO ₂
Bauxite		Mt	% Al ₂ O ₃	% SiO ₂	Mt	% Al ₂ O ₃	% SiO ₂	Mt	% Al ₂ O ₃	% SiO ₂
Rio Tinto Aluminium (Australia) ⁽²⁾										
- Amrun	O/P	115	49.2	11.7	388	49.7	11.7	504	49.6	11.7
- East Weipa and Andoom	O/P	43	49.9	8.8	-	-	-	43	49.9	8.8
- Gove	O/P	9	48.1	8.9	0.4	47.8	8.9	9	48.1	8.9
- North of Weipa	O/P	-	-	-	202	52.0	11.1	202	52.0	11.1
Total (Australia)		167	49.3	10.8	591	50.5	11.5	759	50.2	11.4

	Inferred Mineral Resources as at 31 December 2023			Total Mineral Resources as at 31 December 2023			Rio Tinto interest	Total Mineral Resources as at 31 December 2022		
	Tonnage	Grade	% SiO ₂	Tonnage	Grade	% SiO ₂		Tonnage	Grade	% SiO ₂
Bauxite	Mt	% Al ₂ O ₃	% SiO ₂	Mt	% Al ₂ O ₃	% SiO ₂	%	Mt	% Al ₂ O ₃	% SiO ₂
Rio Tinto Aluminium (Australia) ⁽²⁾										
- Amrun	285	51.7	12.1	788	50.4	11.9	100.0	843	50.6	11.8
- East Weipa and Andoom	-	-	-	43	49.9	8.8	100.0	53	49.3	8.5
- Gove	0.01	46.9	8.1	9	48.1	8.9	100.0	13	48.3	9.0
- North of Weipa	1,248	51.8	11.4	1,451	51.9	11.4	100.0	1,330	52.0	11.6
Total (Australia)	1,533	51.8	11.5	2,291	51.3	11.5		2,240	51.4	11.6

1. Likely mining method: O/P = open pit/surface.

2. Rio Tinto Aluminium bauxite Mineral Resources are stated as dry product tonnes and total alumina and silica grades.

Table D Rio Tinto Aluminium Pacific Operations Ore Reserves as at 31 December 2023

	Type of mine ⁽¹⁾	Proved Ore Reserves as at 31 December 2023			Probable Ore Reserves as at 31 December 2023			Total Ore Reserves as at 31 December 2023		
		Tonnage	Grade	% SiO ₂	Tonnage	Grade	% SiO ₂	Tonnage	Grade	% SiO ₂
Bauxite⁽²⁾		Mt	% Al ₂ O ₃	% SiO ₂	Mt	% Al ₂ O ₃	% SiO ₂	Mt	% Al ₂ O ₃	% SiO ₂
Rio Tinto Aluminium (Australia) ⁽³⁾										
- Amrun	O/P	263	53.9	9.2	688	54.5	9.0	950	54.3	9.1
- East Weipa and Andoom	O/P	69	50.5	7.9	3	49.5	8.7	72	50.5	8.0
- Gove	O/P	57	50.2	6.4	0.7	50.5	5.0	58	50.2	6.4
Total (Australia)		388	52.8	8.6	692	54.4	9.0	1,080	53.8	8.8

	Rio Tinto interest	Rio Tinto share recoverable mineral	Total Ore Reserves as at 31 December 2022		
			Tonnage	Grade	% SiO ₂
Bauxite⁽²⁾	%	Mt	Mt	% Al ₂ O ₃	% SiO ₂
Rio Tinto Aluminium (Australia) ⁽³⁾					
- Amrun	100.0	950	801	54.6	8.9
- East Weipa and Andoom	100.0	72	59	51.7	7.1
- Gove	100.0	58	56	50.5	5.8
Total (Australia)	100.0	1,080	916	54.2	8.6

1. Type of Mine: O/P = open pit/surface.

2. Bauxite Ore Reserves are stated as recoverable Ore Reserves of marketable product after accounting for all mining and processing losses. Mill recoveries are therefore not shown.

3. Australian bauxite Ore Reserves are stated as dry tonnes and total alumina and silica grade.

Table E Iron Ore Company of Canada Mineral Resources as at 31 December 2023

	Likely mining method ⁽¹⁾	Measured Mineral Resources as at 31 December 2023					Indicated Mineral Resources as at 31 December 2023					Total Measured and Indicated Mineral Resources as at 31 December 2023					
		Tonnage	Grade				Tonnage	Grade				Tonnage	Grade				
Iron ore ⁽²⁾		Mt	% Fe	% SiO ₂	% Al ₂ O ₃	% P	Mt	% Fe	% SiO ₂	% Al ₂ O ₃	% P	Mt	% Fe	% SiO ₂	% Al ₂ O ₃	% P	
Iron Ore Company of Canada (Canada) ⁽³⁾	O/P	171	40.8	35.8	0.2	0.02	720	38.5	37.1	0.2	0.03	891	38.9	36.9	0.2	0.03	
		Inferred Mineral Resources as at 31 December 2023					Total Mineral Resources as at 31 December 2023					Rio Tinto interest	Total Mineral Resources as at 31 December 2022				
		Tonnage	Grade				Tonnage	Grade					Tonnage	Grade			
Iron ore ⁽²⁾		Mt	% Fe	% SiO ₂	% Al ₂ O ₃	% P	Mt	% Fe	% SiO ₂	% Al ₂ O ₃	% P	%	Mt	% Fe	% SiO ₂	% Al ₂ O ₃	% P
Iron Ore Company of Canada (Canada) ⁽³⁾		751	38.2	35.7	0.2	0.03	1,641	38.6	36.3	0.2	0.03	58.7	1,666	38.7	37.4	0.2	0.03

1. Likely mining method: O/P = open pit/surface.
2. Iron ore Mineral Resources are stated on a dry in situ weight basis.
3. The reported Mineral Resources have the potential to produce marketable product (57% pellets and 43% concentrate for sale at a natural moisture content of 2%) comprising 73 million tonnes at 65% iron 2.7% silica (Measured), 301 million tonnes at 65% iron 2.7% silica (Indicated) and 308 million tonnes at 65% iron 2.7% silica (Inferred) using process recovery factors derived from current IOC concentrating and pellet operations. LOI is not determined for resource drilling samples, so no estimate of % LOI is available for Mineral Resources.

Table F Iron Ore Company of Canada Ore Reserves as at 31 December 2023

	Type of mine ⁽¹⁾	Proved Ore reserves as at 31 December 2023			Probable Ore Reserves as at 31 December 2023			Total Ore Reserves as at 31 December 2023		
		Tonnage	Grade		Tonnage	Grade		Tonnage	Grade	
Iron ore⁽²⁾		Mt	% Fe	% SiO ₂	Mt	% Fe	% SiO ₂	Mt	% Fe	% SiO ₂
Iron Ore Company of Canada (Canada) ⁽³⁾	O/P	149	65.0	2.8	275	65.0	2.8	423	65.0	2.8
	Rio Tinto interest	Rio Tinto share marketable product			Total Ore Reserves as at 31 December 2022					
					Tonnage	Grade				
Iron ore⁽²⁾		Mt			Mt	% Fe	% SiO ₂			
Iron Ore Company of Canada (Canada) ⁽³⁾	58.7	249			453	65.0	3.0			

1. Type of Mine: O/P = open pit/surface.
2. Ore Reserves of iron ore are shown as recoverable Ore Reserves of marketable product after accounting for all mining and processing losses. Mill recoveries are therefore not shown.
3. Iron Ore Company of Canada Ore Reserves are reported as marketable product (57% pellets and 43% concentrate for sale) at a natural moisture content of 2%. The marketable product is derived from mined material comprising 357 million dry tonnes at 38% iron, 36% silica, 0.23% alumina, 0.022% phosphorus (Proved) and 651 million dry tonnes at 38% iron, 35% silica, 0.19% alumina, 0.023% phosphorus (Probable) using process recovery factors derived from current IOC concentrating and pellet operations. No meaningful relationship has been established between the product and feed grades of alumina and phosphorus, so these grades cannot be reported for Ore Reserves. Saleable product is produced to meet silica grade specifications, so the Ore Reserves silica grade is the targeted silica grade for the currently anticipated long-term product mix. Loss on Ignition (LOI) is not determined for resource drilling samples, so no estimate of % LOI is available for Ore Reserves.

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This announcement is authorised for release to the market by Andy Hodges, Rio Tinto's Group Company Secretary