

Rio Tinto declares interim ordinary dividend of \$2.5 billion

29 July 2020

Rio Tinto Chief Executive J-S Jacques said “We have been agile and adapted our way of working, to deliver another resilient performance while navigating the new and ongoing challenges of dealing with COVID-19. Despite the challenging backdrop, we generated underlying EBITDA of \$9.6 billion, with a margin of 47%, driven by our strong and stable operations, with all of our assets continuing to operate throughout the first half. As a result, we have declared an interim dividend of \$2.5 billion, equivalent to 155 US cents per share, and have reconfirmed our 2020 production guidance across all commodities.

“Our world-class portfolio of high-quality assets and our strong balance sheet consistently serve us well in all market conditions and particularly in turbulent times. This, together with our disciplined capital allocation, underpins our ability to sustain production, increase our investment in the business, pay taxes and royalties to governments and continue delivering superior returns to shareholders.”

Six months ended 30 June	2020	2019	Change
Net cash generated from operating activities (US\$ millions)	5,628	6,389	(12)%
Capital expenditure ¹ (US\$ millions)	2,693	2,391	13 %
Free cash flow ² (US\$ millions)	2,809	3,879	(28)%
Underlying EBITDA ² (US\$ millions)	9,640	10,250	(6)%
Underlying earnings ² (US\$ millions)	4,750	4,932	(4)%
Net earnings (US\$ millions)	3,316	4,130	(20)%
Underlying earnings ² per share (US cents)	293.7	301.5	(3)%
Ordinary dividend per share (US cents)	155.0	151.0	3 %
Return on capital employed (ROCE) ²	21 %	23 %	
	At 30 June 2020	At 31 Dec 2019	
Net debt ² (US\$ millions)	(4,826)	(3,651)	

- Sustained improvement in safety performance, with the all injury frequency rate declining to 0.37 (0.42 in 2019), a reduction in the severity rate and fewer process safety incidents.
- We remain committed to our relationship with communities, following the Juukan Gorge events in the Pilbara. We are engaging extensively with Traditional Owners, including the Puutu Kunti Kurrama and Pinikura people, and indigenous leaders in the Pilbara and across Australia. A board-led review of our heritage management processes is underway. We will make our submission to the Inquiry by the Joint Standing Committee on Northern Australia by 31 July.
- \$5.6 billion operating cash flow was 12% lower than 2019 first half, mainly due to lower prices and the effect of timing differences. In June 2020 we made a final payment of \$1.0 billion in Australian income tax with respect to 2019 profits.
- \$2.8 billion free cash flow² was 28% lower than 2019 first half, reflecting the lower operating cash flow and a 13% rise in capital expenditure to \$2.7 billion due to an increase in development capital.
- \$9.6 billion underlying EBITDA² was 6% lower than 2019 first half, primarily due to lower prices for aluminium and copper. Iron ore prices were stable, reflected in our underlying EBITDA margin² of 47%.
- \$4.8 billion underlying earnings² was 4% lower than 2019 first half. Taking exclusions into account, net earnings of \$3.3 billion mainly reflected \$1.0 billion³ of impairments, of four aluminium smelters and the Diavik diamond mine, and exchange rate movements.
- Maintained strength in our balance sheet with \$4.8 billion of net debt², an increase of \$1.2 billion, which mainly reflects \$3.8 billion of cash returns paid to shareholders in 2020 first half, partly offset by the free cash flow of \$2.8 billion.
- \$2.5 billion interim ordinary dividend declared today, with interim pay-out ratio at 53% of first half underlying earnings, equivalent to 155 US cents per share, 3% higher than 2019 first half.

The financial results are prepared in accordance with IFRS and are unaudited. Footnotes are set out on page 4.

Resilient revenues and EBITDA

- \$19.4 billion consolidated sales revenue (\$20.3 billion including our share of equity accounted units) was 7% lower than 2019 first half, mainly due to lower prices and volumes for copper and lower aluminium prices.
- \$9.6 billion underlying EBITDA² was 6% lower than 2019 first half. At constant prices and exchange rates, it was just 3% lower, reflective of the stability in operational performance across the Group.
- 30% effective tax rate on underlying earnings², marginally lower than in 2019 first half.
- \$3.3 billion net earnings, 20% lower than 2019 first half, mainly reflected a \$0.2 billion higher impairment charge, \$0.3 billion increase in exchange rate losses and \$0.1 billion net additional closure costs for non-operating and fully impaired assets. See table on page 7.

Cash flow from operations

	Six months ended 30 June 2020 US\$m	Six months ended 30 June 2019 US\$m
Net cash generated from operating activities	5,628	6,389
Capital expenditure ¹	(2,693)	(2,391)
Sales of property, plant and equipment	28	17
Lease principal payments	(154)	(136)
Free cash flow²	2,809	3,879
Cash inflows from prior years' disposals	10	46
Dividends paid to equity shareholders	(3,607)	(6,843)
Share buy-back	(208)	(988)
Non-cash impact from implementation of IFRS 16 Leases at 1 January 2019	—	(1,248)
Other	(179)	44
Increase in net debt²	(1,175)	(5,110)

Footnotes are set out on page 4.

- \$5.6 billion of cash generated from operating activities was 12% lower, primarily driven by lower pricing for aluminium and copper and lower dividends from equity accounted units.
- \$2.7 billion of capital expenditure¹ was 13% higher, despite the impact of COVID-19, comprised of \$1.2 billion of sustaining capital and \$1.5 billion of development capital, of which \$0.6 billion was growth and \$0.9 billion was replacement.
- These were the two drivers of free cash flow² of \$2.8 billion, down 28%.
- \$3.6 billion of dividends reflected the 2019 final dividend paid in April 2020.
- \$0.2 billion of share buy-backs with 3.6 million Rio Tinto plc shares repurchased.
- As a result of the above, net debt² increased by \$1.2 billion from 2019 year end to \$4.8 billion.

Increased investment in growth projects and development

- Maintained our spend on exploration and evaluation with \$280 million in 2020 first half, as we progressed the Resolution copper project in Arizona and increased activity at Winu and Jadar. This was offset by lower greenfield expenditure due to COVID constraints.
- On 28 July 2020, we declared the maiden Inferred Mineral Resource at the Winu copper-gold project in Western Australia of 503 Mt at 0.45% copper equivalent and announced the discovery of a new zone of gold dominant mineralisation approximately 2 kilometres east of Winu.⁴ We are targeting first production from Winu in 2023, subject to regulatory approvals, Traditional Owner and other consents.
- The Simandou iron ore project (Blocks 3 and 4) in Guinea is progressing, as we collaborate with our partners to optimise the programme.
- Funding approved by the Board for feasibility study for Jadar lithium project in Serbia.
- \$2.6 billion Koodaideri replacement iron ore mine in Western Australia is progressing, with production ramp-up still expected to occur in early 2022. Koodaideri will have a 43 Mt annual capacity, underpinning production of our Pilbara Blend™.
- First ore from the \$0.8 billion Robe River Joint Venture sustaining production projects (West Angelas C&D and Mesa B, C and H at Robe Valley) is still expected in 2021. All primary approvals for Mesa H have now been received.

- Announced a mine redesign on 3 July 2020 for Panel 0 of the Hugo Dummett North copper/gold underground mine at Oyu Tolgoi in Mongolia, confirming that the caving method of mining remains valid and that the schedule and costs currently remain within the ranges previously disclosed. We are targeting first sustainable production between October 2022 and June 2023 and development capital of \$6.6 to \$7.1 billion based on the updated mine design of Panel 0.⁵ These estimates are also subject to any additional scheduling delays or increases in capital costs arising from the impacts of the ongoing COVID-19 pandemic. Material contained in pillars retained on either side of Panel 0 has been reclassified from Ore Reserves to Mineral Resources⁶. Part of the material contained in these pillars is expected to be recoverable at a later stage following additional studies which are currently underway. The definitive estimate of cost and schedule for Panel 0 is still expected in the second half of 2020.
- The \$0.9 billion first phase of the south wall pushback at the Kennecott copper mine in the US remains on track, despite disruptions from the 5.7 magnitude earthquake in March, with access to higher grades expected from 2021. The \$1.5 billion second phase is expected to extend copper operations to 2032.
- The Zulti South project at Richards Bay Minerals (RBM) in South Africa, which will sustain current capacity and extend mine life, remains on full suspension.

Total cash returns declared to shareholders in first half

Six months ended 30 June	2020 US\$ billion	2020 per share	2019 US\$ billion	2019 per share
Ordinary dividend				
Interim	2.5	155.0	2.5	151.0
Pay-out ratio on ordinary interim dividend		53 %		50 %
Additional return				
Special dividend announced in August 2019, paid in September 2019	n/a	n/a	1.0	61.0
Total cash returns declared in first half	2.5	155.0	3.5	212.0

Total cash returns paid to shareholders in first half

Six months ended 30 June	2020 US\$ billion	2019 US\$ billion
Previous year's final ordinary dividend paid in April of each year	3.6	2.9
2018 special dividend announced in February 2019, paid in April 2019	n/a	3.9
Share buy-back programme, completed in February 2020	0.2	1.0
Total cash returns paid to shareholders in first half	3.8	7.8

Guidance

- Capital expenditure¹ expected to be around \$6 billion in 2020 and around \$7 billion in both 2021 and 2022. The three year cumulative spend of \$20 billion is unchanged from the original guidance issued in October 2019.
- Effective tax rate on underlying earnings of approximately 30% in 2020.

2020 production guidance (Rio Tinto share, unless otherwise stated)

Pilbara iron ore (shipments, 100% basis)	324 to 334 Mt
Bauxite	55 to 58 Mt
Alumina	7.8 to 8.2 Mt
Aluminium	3.1 to 3.3 Mt
Mined copper	475 to 520 kt
Refined copper	165 to 205 kt
Diamonds	12 to 14 M carats
Titanium dioxide slag	lower end of 1.2 to 1.4 Mt
Iron Ore Company of Canada pellets and concentrate	10.5 to 12.0 Mt
Boric oxide equivalent	~0.5 Mt

2020 unit cost guidance

Pilbara iron ore unit cash costs per wet metric tonne, free on board (FOB) basis	\$14-15/t*
Copper C1 unit costs (average for Kennecott, Oyu Tolgoi and Escondida)	120-135 US cents/lb

*Assumes a 0.67 Australian dollar exchange rate

- Production and unit cost guidance is unchanged from our First Quarter Operations Review released on 17 April 2020.
- Mined and refined copper guidance is subject to the effective ongoing restart of the Kennecott smelter.
- We will continue to monitor and adjust production levels and product mix to meet customer requirements in 2020, in line with our value over volume strategy, government imposed restrictions related to COVID-19, and any other potential COVID-19 related disruptions.

1. Capital expenditure is presented gross, before taking into account any cash received from disposals of property, plant and equipment (PP&E).
2. This financial performance indicator is a non-GAAP alternative performance measure ("APM"). It is used internally by management to assess the performance of the business and is therefore considered relevant to readers of this document. It is presented here to give more clarity around the underlying business performance of the Group's operations. APMs are reconciled to directly comparable IFRS financial measures on pages 61 to 66.
3. Refer to page 40 for pre-tax analysis of impairment charge.
4. Refer to the release to the ASX on 28 July 2020 "Rio Tinto reveals maiden Resource at Winu and new discovery". The Competent Person responsible for the information in that release that relates to Mineral Resources and Exploration Results is Dr Julian Verbeek. Rio Tinto confirms that it is not aware of any new information or data that materially affects the information included in the market announcement, that all material assumptions and technical parameters underpinning the estimates in the market announcement continue to apply and have not materially changed, and that the form and context in which the Competent Person's findings are presented have not been materially modified.
5. The level of accuracy of these estimates is preliminary in nature and subject to a range of variables, in line with previous guidance. The confidence level of these estimates is at a level associated with a Pre-Feasibility Study, and further work is required between now and the second half of 2020 to refine the mine design options and study them to a level of confidence and accuracy associated with Feasibility Study quality estimates.
6. Refer to market release on 3 July 2020 "Oyu Tolgoi mine design confirms project schedule and cost ranges and update to Ore Reserves and Mineral Resource."

Underlying EBITDA, underlying earnings by product group

	Underlying EBITDA			Underlying Earnings		
	2020	2019	Change	2020	2019	Change
Six months ended 30 June	US\$m	US\$m	%	US\$m	US\$m	%
Iron Ore	7,698	7,552	2 %	4,563	4,506	1 %
Aluminium	925	1,127	(18)%	193	315	(39)%
Copper & Diamonds	670	1,213	(45)%	68	348	(80)%
Energy & Minerals	739	954	(23)%	232	341	(32)%
Other operations	(10)	(88)	(89)%	(28)	(80)	(65)%
Reportable segment total	10,022	10,758	(7)%	5,028	5,430	(7)%
Inter-segment transactions	(18)	—		(6)	—	
Product group total	10,004	10,758	(7)%	5,022	5,430	(8)%
Central pension costs, share-based payments and insurance	102	77	32 %	97	77	26 %
Restructuring, project and one-off costs	(72)	(175)	(59)%	(53)	(119)	(55)%
Other central costs	(273)	(272)	— %	(233)	(258)	(10)%
Central exploration and evaluation	(121)	(138)	(12)%	(97)	(109)	(11)%
Net interest				14	(89)	(116)%
Total	9,640	10,250	(6)%	4,750	4,932	(4)%

Underlying EBITDA and underlying earnings are non-GAAP alternative performance measures ("APMs") used by management to assess the performance of the business, and provide additional information which investors may find useful. APMs are reconciled to directly comparable IFRS financial measures on pages 61 to 66.

Central and other costs

Pre-tax central pension costs, share-based payments and insurance were a \$102 million credit compared with a \$77 million credit in 2019 first half mainly due to higher insurance premiums in 2020 first half with a lower offset from claims than 2019 first half.

On a pre-tax basis, restructuring, project and one-off central costs were 59% lower than 2019 first half mainly due to lower provisions recognised in 2020 in respect of legacy operations and the absence of operating model project costs in 2020.

Other central costs of \$273 million (pre-tax) were in line with 2019 first half.

Central exploration and evaluation costs

We have a strong portfolio of projects with activity in 15 countries across six commodities. Due to COVID-19, there have been significant impacts on exploration activities in some jurisdictions. All projects have followed government requirements and guidelines while focusing on protecting well-being and health of local and indigenous communities.

Commentary on financial results

To provide additional insight into the performance of our business, we report underlying EBITDA and underlying earnings. The principal factors explaining the movements in underlying EBITDA are set out in this table.

	US\$m
2019 first half underlying EBITDA	10,250
Prices	(604)
Exchange rates	255
Volumes and mix	(106)
General inflation	(157)
Energy	125
Operating cash cost movements	(194)
Lower exploration and evaluation spend	7
One-off items	(245)
Non-cash costs/other	309
2020 first half underlying EBITDA	9,640

Lower prices overall, in particular for aluminium sector

Commodity price movements in 2020 first half lowered underlying EBITDA by \$604 million compared with 2019 first half. We have included a table of prices and exchange rates on page 72.

The freight-adjusted Platts CFR index for 62% iron fines was very stable, on average, just 0.5% higher compared with 2019 first half. This was driven by strong demand from China and continued supply disruptions in the seaborne market.

Average LME prices for copper and aluminium were down 11% and 13%, respectively, compared with 2019 first half. The mid-west premium duty paid for aluminium in the US averaged \$249 per tonne - 41% lower than in 2019 first half. This contrasted with the gold price which increased 26% period on period.

Tailwind from weaker Australian and Canadian dollars

Compared with 2019 first half, on average the US dollar strengthened by 7% against the Australian dollar, by 2% against the Canadian dollar and by 14% against the South African rand. Currency movements increased underlying EBITDA by \$255 million relative to 2019 first half.

Marginally lower EBITDA from volumes and mix

Operational stability across the Group was reflected in the movement in volumes and mix, which marginally decreased underlying EBITDA by \$106 million compared with 2019 first half. Although iron ore shipments from the Pilbara rose by 3%, the gains are mostly included in Other, reflecting the recovery from the fire at Cape Lambert A in 2019 first half. Other key variances included reduced gold volumes following lower grades at Oyu Tolgoi, lower titanium dioxide feedstock volumes and a drop in diamond sales in line with weaker markets.

Benefit from lower energy prices

Lower energy prices, on average, compared to 2019 first half benefited underlying EBITDA by \$125 million, mainly due to lower diesel prices. This was outweighed by the \$157 million impact of general price inflation.

Higher costs

Our cash operating costs rose by \$194 million (on a unit cost basis) compared with 2019 first half. There was some respite on cost inflation for certain raw materials for our Aluminium business, in particular for caustic soda, pitch and petroleum coke as well as lower alloy costs. However, this was offset by other cost pressures, notably fixed cost inefficiencies at Kennecott following planned smelter maintenance, and higher unit cash costs at Oyu Tolgoi in line with lower output.

Maintained our exploration and evaluation spend

We largely maintained our exploration and evaluation activity, spending just \$7 million less than 2019 first half. This was focused on our highest value projects, particularly our copper projects, Winu in Western Australia and Resolution in Arizona, and our lithium project in Serbia. This largely offset a slight reduction in grassroots spend, mainly attributable to COVID-19 restrictions at many remote locations.

One-off items

One-off items reduced EBITDA by \$245 million compared with 2019 first half. This primarily reflected earlier than planned pot-lining replacement at the Kitimat aluminium smelter (\$50 million), the impact from curtailment of operations at RBM (\$40 million) and the financial impact in the period of the 5.7 magnitude earthquake at Kennecott (\$138 million). The impact of the earthquake is expected to partially unwind in future periods as stockpiled intermediate products are processed and sold.

Non-cash costs/other

The movements in our non-cash costs and other items, which increased EBITDA by \$309 million compared with 2019 first half, mainly reflected recovery from the fire at our Cape Lambert A port in the Pilbara in the first quarter of 2019 (\$228 million), lower provisions in respect of legacy operations (\$83 million) and lower restructuring and project costs (\$103 million). This was partly offset by additional costs (\$157 million) incurred due to COVID-19 across the Group such as screening, equipment hire, roster changes, temporary relocation and hygiene.

Net earnings

The principal factors explaining the movements in underlying earnings and net earnings are set out here.

	US\$m
2019 first half net earnings	4,130
Total changes in underlying EBITDA	(610)
Decrease in depreciation and amortisation (pre-tax) in underlying earnings	70
Decrease in interest and finance items (pre-tax) in underlying earnings	12
Decrease in tax on underlying earnings	209
Decrease in underlying earnings attributable to outside interests	137
Total changes in underlying earnings	(182)
Changes in exclusions from underlying earnings:	
Movement in net impairment charges	(174)
Movement in closure estimates (non-operating and fully impaired sites)	(118)
Movement in exchange differences and gains/losses on debt	(321)
Movements in other exclusions	(19)
2020 first half net earnings	3,316

Depreciation and amortisation, net interest and tax

Our depreciation and amortisation charge was \$70 million lower than 2019 first half, mainly due to the impact of the weaker Australian and Canadian dollars against the US dollar.

Interest and finance items (pre-tax) were \$12 million lower than 2019 first half, reflective of more of our debt being at floating interest rates and the repayment of \$526 million of Euro Bonds, which matured in May 2020.

The 2020 first half effective corporate income tax rate on underlying earnings, excluding equity accounted units, was 30%, compared with 31% in 2019 first half. The effective tax rate on underlying earnings in Australia in both years was just over 30%. We anticipate an effective tax rate on underlying earnings of approximately 30% in 2020.

Two amended tax assessments have been received from the Australian Taxation Office (ATO) related to marketing profits made by our Singapore commercial centre: A\$447 million in April 2017 relating to the marketing of iron ore, and A\$86 million in March 2020 relating to the marketing of aluminium. The profits relating to these assessments have been taxed in Singapore. The ATO has confirmed that these assessments do not relate to tax avoidance and no penalties have been levied. The Australian and Singaporean tax authorities have accepted our request for them to resolve these matters through negotiation under the Australia-Singapore double tax treaty. If the tax authorities are unable to reach agreement within two years, any disagreement between them will be resolved via binding arbitration. We will accept the outcome of this bilateral dispute resolution process.

Items excluded from underlying earnings

Net impairment charges excluded from underlying earnings increased by \$174 million compared with 2019 first half. In 2020 first half, we recognised \$1,033 million of impairment charges, comprised of \$472 million related to three of our Pacific Aluminium smelters (NZAS, Bell Bay and Boyne), \$269 million related to the ISAL smelter in Iceland and \$292 million related to our interest in the Diavik diamond mine. In 2019 first half we recognised a \$773 million impairment charge of the Oyu Tolgoi underground project, after tax and non-controlling interests. On pages 40 and 41 there is a detailed explanation of the impairment process.

In 2020 first half, we recognised net additional closure costs of \$118 million, after tax and non-controlling interests, principally relating to a non-operating site (Gove) and a fully impaired site (Argyle). Further analysis can be found on page 64.

In 2020 first half, we recognised non-cash exchange and derivative losses of \$283 million. This was mainly on US dollar debt in non-US dollar functional currency Group companies, intragroup balances, and on the revaluation of certain derivatives which do not qualify for hedge accounting. These losses compared with 2019 first half gains of \$38 million, giving rise to a negative period-on-period movement of \$321 million. The exchange losses are largely offset by currency translation gains recognised in equity. The quantum of US dollar debt is largely unaffected and we will repay it from US dollar sales receipts.

Profit

Net earnings and underlying earnings refer to amounts attributable to the owners of Rio Tinto. The profit after tax attributable to the owners of Rio Tinto in 2020 first half totalled \$3.3 billion (2019 first half: \$4.1 billion). We recorded a profit in 2020 first half of \$3.5 billion (2019 first half: \$2.9 billion) of which a profit of \$0.1 billion (2019 first half loss: \$1.2 billion) was attributable to non-controlling interests.

Net earnings and underlying earnings

The differences between underlying earnings and net earnings are set out in this table (all numbers are after tax and exclude non-controlling interests).

	Six months ended 30 June 2020 US\$m	Six months ended 30 June 2019 US\$m
Underlying earnings	4,750	4,932
Items excluded from underlying earnings		
Impairment charges	(1,033)	(859)
Foreign exchange and derivative (losses)/gains on US dollar net debt and intragroup balances and derivatives not qualifying for hedge accounting	(283)	38
Net increases in closure estimates (non-operating and fully impaired sites)	(118)	—
Other exclusions	—	19
Net earnings	3,316	4,130

On pages 63 to 64 there is a detailed reconciliation from underlying earnings to net earnings, including pre-tax amounts and additional explanatory notes. The differences between underlying EBITDA, EBITDA and net earnings are set out on the table on page 62.

Balance sheet

Net debt increased by \$1.2 billion in 2020 first half to \$4.8 billion at 30 June 2020. The rise reflected payment of the final dividend of \$3.6 billion and \$0.2 billion of share buy-backs, partly offset by our free cash flow.

Our net gearing ratio (net debt to total capital) increased to 10% at 30 June 2020 (31 December 2019: 7%).

Our total financing liabilities at 30 June 2020 were \$13.6 billion (see page 44) and the weighted average maturity was around 10 years. At 30 June 2020, approximately 87% of Rio Tinto's total borrowings were at floating interest rates (95% excluding leases). During the six months to 30 June 2020 we entered into \$1.5 billion of interest rate swaps to convert the remaining fixed Alcan debt to floating interest rates. The maximum amount, within non-current borrowings, maturing in any one calendar year is \$1.9 billion, which matures in 2025.

Cash and cash equivalents plus other short-term cash investments at 30 June 2020 were \$8.8 billion (31 December 2019: \$10.6 billion) and we have a \$7.5 billion fully committed Revolving Credit Facility, which remained undrawn throughout the period and matures in November 2022.

Rio Tinto Financial Information by Business Unit

Our Financial Information by Business Unit tables, which comprise gross revenue, underlying EBITDA, underlying earnings, capital expenditure, depreciation & amortisation and operating assets by business unit can be found on pages 67 to 70.

Our shareholder returns policy

The Board is committed to maintaining an appropriate balance between cash returns to shareholders and investment in the business, with the intention of maximising shareholder value.

At the end of each financial period, the Board determines an appropriate total level of ordinary dividend per share, taking into account the results for the financial year, the outlook for our major commodities, the Board's view of the long-term growth prospects of the business and the company's objective of maintaining a strong balance sheet. The intention is that the balance between the interim and final dividend be weighted to the final dividend.

The Board expects total cash returns to shareholders over the longer term to be in a range of 40-60% of underlying earnings in aggregate through the cycle. Acknowledging the cyclical nature of the industry, in periods of strong earnings and cash generation, it is the Board's intention to supplement the ordinary dividends with additional returns to shareholders. We determine dividends in US dollars. We declare and pay Rio Tinto plc dividends in pounds sterling and Rio Tinto Limited dividends in Australian dollars. The 2020 interim dividend has been converted at exchange rates applicable on 28 July 2020 (the latest practicable date prior to the declaration of the dividend). American Depositary Receipt (ADR) holders receive dividends at the declared rate in US dollars.

Ordinary dividend per share	2020 interim	2019 interim
Rio Tinto Group		
US cents per share	155.00	151.00
Rio Tinto plc		
UK pence per share	119.74	123.32
Rio Tinto Limited		
Australian cents per share	216.47	219.08
Special dividend per share		
Rio Tinto Group		
US cents per share	—	61.00
Rio Tinto plc		
UK pence per share	—	49.82
Rio Tinto Limited		
Australian cents per share	—	88.50

The 2020 interim dividend to be paid to our Rio Tinto Limited shareholders will be fully franked. The Board expects Rio Tinto Limited to be in a position to pay fully franked dividends for the foreseeable future.

On 17 September 2020, we will pay the 2020 interim dividend to holders of ordinary shares and holders of ADRs on the register at the close of business on 7 August 2020 (record date). The ex-dividend date is 6 August 2020.

Rio Tinto plc shareholders may choose to receive their dividend in Australian dollars, and Rio Tinto Limited shareholders may choose to receive theirs in pounds sterling. Currency conversions will be based on the pound sterling and Australian dollar exchange rates five business days before the dividend payment date. Rio Tinto plc and Rio Tinto Limited shareholders must register their currency elections by 26 August 2020.

We will operate our Dividend Reinvestment Plans for the 2020 interim dividend - see our website (riotinto.com) for details. Rio Tinto plc and Rio Tinto Limited shareholders' election notice for the Dividend Reinvestment Plans must be received by 26 August 2020. Purchases under the Dividend Reinvestment Plan are made on or as soon as practicable after the dividend payment date and at prevailing market prices. There is no discount available.

Review of operations

Iron Ore

Six months ended 30 June	2020	2019	Change
Pilbara production (million tonnes - 100%)	161.1	155.7	3 %
Pilbara shipments (million tonnes - 100%)	159.6	154.6	3 %
Salt production (000 tonnes - Rio Tinto share) ¹	2,469	2,579	(4)%
Gross sales revenue (US\$ millions)	11,465	11,208	2 %
Underlying EBITDA (US\$ millions)	7,698	7,552	2 %
Pilbara underlying FOB EBITDA margin ²	72 %	72 %	
Underlying earnings (US\$ millions)	4,563	4,506	1 %
Net cash generated from operating activities (US\$ millions)	5,460	5,258	4 %
Capital expenditure (US\$ millions) ³	(1,185)	(669)	77 %
Free cash flow (US\$ millions)	4,255	4,565	(7)%
Return on capital employed ⁴	64 %	62 %	

1. Dampier Salt is reported in Iron Ore, reflecting management responsibility. Iron Ore Company of Canada and the Simandou iron ore project in Guinea continue to be reported within Energy & Minerals.
2. The Pilbara underlying free on board (FOB) EBITDA margin is defined as Pilbara underlying EBITDA divided by Pilbara revenues, excluding freight revenue.
3. Capital expenditure is the net cash outflow on purchases less sales of property, plant and equipment, capitalised evaluation costs and purchases less sales of other intangible assets.
4. Return on capital employed (ROCE) is defined as underlying earnings excluding net interest divided by average capital employed (operating assets before net debt).

Financial performance

We increased our iron ore shipments by 3% compared with 2019 first half, in line with our solid operational performance. This occurred during a period of robust pricing for our high-quality products, which was driven by strong demand from China and constraints in seaborne supply.

Underlying EBITDA of \$7.7 billion was 2% higher than 2019 first half, reflecting increased sales volumes and lower operating costs. Iron ore prices, on average, were stable year on year.

2020 first half Pilbara unit cash costs were \$14.5 per tonne (2019 first half: \$14.6 per tonne). Cost guidance for full year of \$14-\$15 per tonne includes \$0.5 per tonne of unplanned one-off COVID-19 related costs (based on a A\$:US\$ exchange rate of 0.67), which relate to the controls we have put in place to keep our people safe such as cleaning, additional flights, screening and roster changes. However, these were largely mitigated by productivity gains, lower diesel costs and a weaker Australian dollar.

Our Pilbara operations delivered an underlying FOB EBITDA margin of 72%, consistent with 2019 first half.

We price the majority of our iron ore sales (79%) by reference to the average index price for the month of shipment. In 2020 first half, we priced approximately 14% of sales by reference to the prior quarter's average index lagged by one month, with the remainder sold either on current quarter average or on the spot market. We made approximately 69% of our sales including freight and 31% on an FOB basis.

We achieved an average iron ore price in 2020 first half of \$78.5 per wet metric tonne on an FOB basis (unchanged from 2019 first half). This equates to \$85.4 per dry metric tonne, assuming 8% moisture, (unchanged from 2019 first half) and compares to the average price for the freight-adjusted Platts 62% CFR index for fines of \$85.1 per dry metric tonne.

We shipped 4.7 million tonnes of SP10 product during the half, compared with 10.9 million tonnes in the second half of 2019. We have also continued to the blend SP10 product with Iron Ore Company of Canada material at our portside trading facilities.

The gross sales revenue for Pilbara operations included freight revenue of \$0.6 billion (2019 first half: \$0.6 billion).

Net cash generated from operating activities of \$5.5 billion was 4% higher than 2019 first half, driven by the same trends as underlying EBITDA and favourable movements in working capital, partly offset by higher tax payments.

Free cash flow of \$4.3 billion was 7% lower than 2019 first half, primarily reflecting higher capital spend. This included an increase in sustaining capital as well as the ramp-up of construction activity at the new Koodaideri hub.

Review of operations

Our Pilbara operations produced 161.1 million tonnes (our share 133.2 million tonnes), 3% higher than 2019 first half.

First half shipments of 159.6 million tonnes (our share 132.0 million tonnes) were 3% higher than 2019 first half, despite infrastructure damage and significant disruptions experienced at our ports as a result of Tropical Cyclone Damien in February. Our operations performed well, despite the strict measures implemented to manage COVID-19.

New projects and growth options

The \$2.6 billion Koodaideri mine is progressing, with production ramp-up still expected to occur in early 2022. The primary crusher surge bin was delivered to site in May 2020, representing the first significant structural component for the processing plant. Once complete, the initial mine development will have an annual capacity of 43 million tonnes.

First ore from the Robe River Joint Venture sustaining production projects (West Angelas C&D and Mesa B, C and H at Robe Valley) is still expected in 2021. All primary approvals for Mesa H were received in July 2020.

Construction at the Western Turner Syncline Phase 2 project is progressing, with first ore through the crusher expected in 2021.

Heritage

We remain committed to our relationship with communities, following the Juukan Gorge events in the Pilbara. We are engaging extensively with Traditional Owners, including the Puutu Kunti Kurrama and Pinikura people, and indigenous leaders in the Pilbara and across Australia. A board-led review of our heritage management processes in Iron Ore is underway. We will make our submission to the Inquiry by the Joint Standing Committee on Northern Australia by 31 July.

Aluminium

Six months ended 30 June	2020	2019	Change
Bauxite production (000 tonnes - Rio Tinto share)	28,373	26,171	8 %
Alumina production (000 tonnes - Rio Tinto share)	4,000	3,886	3 %
Aluminium production (000 tonnes - Rio Tinto share) ¹	1,568	1,599	(2)%
Gross sales revenue (US\$ millions)	4,487	5,100	(12)%
Underlying EBITDA (US\$ millions)	925	1,127	(18)%
Underlying EBITDA margin (integrated operations)	23 %	25 %	
Underlying earnings (US\$ millions)	193	315	(39)%
Net cash generated from operating activities (US\$ millions)	1,089	1,043	4 %
Capital expenditure - excluding EAUs ¹ (US\$ millions)	(443)	(635)	(30)%
Free cash flow (US\$ millions)	624	391	60 %
Return on capital employed ²	3 %	4 %	

1. Capital expenditure is the net cash outflow on purchases less sales of property, plant and equipment, capitalised evaluation costs and purchases less sales of other intangible assets. It excludes equity accounted units (EAUs).

2. Return on capital employed (ROCE) is defined as underlying earnings excluding net interest divided by average capital employed (operating assets before net debt).

Financial performance

Our aluminium business delivered strong underlying EBITDA and a substantial increase in cash flow, despite significantly lower sales prices and reduced demand for value-added product (VAP) due to the impact of COVID-19. Markets were particularly challenging for aluminium metal where global demand for primary aluminium declined by approximately 7% and global supply was largely unchanged. However, our robust operating performance and integrated operations centres supported us to optimise outcomes, delivering solid underlying EBITDA, significantly lower working capital and controlled capital expenditure reductions to drive the higher cash flows.

Underlying EBITDA of \$0.9 billion was 18% lower than 2019 first half. The weaker pricing environment, in particular for primary metal, weaker currencies, inflation and energy prices impacted EBITDA by \$0.4 billion. Underlying improvements from higher bauxite volumes, lower costs, productivity improvements and lower input prices, primarily for caustic soda and petroleum coke, contributed a \$0.2 billion uplift, reflecting the resilience we have embedded in the business. This supported us to sustain our industry-leading EBITDA margin at 23%, only slightly lower than the first half of 2019 (25%).

We achieved an average realised aluminium price of \$1,849 per tonne, 15% lower than 2019 first half (\$2,174 per tonne). This comprised the LME price, a market premium and a VAP premium. The cash LME price averaged \$1,595 per tonne, 13% lower than 2019 first half. In our key US market, the mid-West premium duty paid declined 41% to \$249 per tonne (2019 first half: \$420 per tonne). We aligned our product offering with market conditions, selling a higher percentage as standard ingot products (P1020) and a lower proportion as VAP: in 2020 first half, VAP represented 40% of the primary metal we sold (2019 first half: 54%) and generated product premiums averaging \$208 per tonne of VAP sold (2019 first half: \$242 per tonne). We note the potential reinstatement of the section 232 tariffs on particular aluminium products from Canada into the United States. We continue to work with our customers to manage any impacts, should the Section 232 tariffs be reinstated.

Although we are broadly balanced in alumina, approximately 2.2 million tonnes of our legacy alumina sales contracts are exposed to a fixed linkage to the LME price. These contracts date back to 2005 or earlier, and the majority expire between 2023 and 2030. The opportunity loss from these legacy contracts was around \$50 million in 2020 first half, compared with around \$150 million in 2019 first half.

Despite the challenging market conditions, we generated \$1.1 billion in net cash from operating activities, 4% higher than 2019 first half. We were able to offset the impact of the lower pricing environment with EBITDA gains from bauxite volumes and cash costs and significantly lower working capital. In addition, a 30% reduction in capital expenditure contributed to a free cash flow of \$0.6 billion, which was 60% higher than 2019 first half.

Review of operations

Bauxite production of 28.4 million tonnes was 8% higher than 2019 first half. In Australia, production at our managed mines was also up 8%, underpinned by the Amrun mine, while production at the non-managed CBG joint venture in Guinea increased by 14% reflecting good progress on the ramp-up of the expansion.

Our production performance enabled us to increase shipments of bauxite to third parties by 10% to 20.2 million tonnes, reinforcing our position as a leading global supplier in the seaborne bauxite trade.

Alumina production of 4.0 million tonnes was 3% higher than 2019 first half due to higher production levels in the Pacific refineries, with Yarwun delivering a half year production record.

Aluminium production of 1.6 million tonnes was 2% lower than 2019 first half, primarily due to pot relining at Kitimat, the decision to operate the ISAL smelter in Iceland at 85% of its capacity and the curtailment of the fourth pot line at the Tiwai Point Aluminium Smelter (NZAS) on 3 April 2020 due to COVID-19 impacts. This was partly offset by the non-managed Becancour smelter which has reached 93% capacity, following its ramp-up after a lock-out in 2019.

The aluminium industry continues to face challenging conditions in global markets and policy uncertainty, exacerbated by the impact of COVID-19. On 9 July 2020, we announced the wind-down of operations and eventual closure of NZAS following the conclusion of the strategic review which has shown the business is no longer viable given high energy costs and a challenging outlook for the aluminium industry. As a result, NZAS has given Meridian Energy notice to terminate the power contract, which will end in August 2021 when the smelter's wind-down of operations is expected to be complete.

We continue to actively work on enhancing the competitiveness of our smelters, including discussing energy pricing with stakeholders, to ensure the sustainability of our smelters in Australia and Iceland. We have completed the first phase of the strategic review of our ISAL smelter in Iceland announced on 12 February 2020. Despite numerous efforts to engage constructively with our energy supplier, Landsvirkjun (LV), we have concluded that LV is not ready to materially improve ISAL's current electricity purchase conditions and address LV's abusive and discriminatory conduct, to ensure a sustainable future for the smelter. Consequently, on 22 July 2020, we announced we had submitted a complaint to the Icelandic Competition Authority, alleging abuse of market dominance by LV. If this situation is not addressed, we will have no choice but to consider termination of the energy contract and commence planning for an orderly closure of the smelter.

New projects and growth options

At the Kemano project in Kitimat in British Columbia, Canada, we placed the project on care and maintenance during the first half following the departure of the main contractor from site. We are targeting a re-start of tunnel excavation works in the third quarter of 2020, following Board approval of \$155 million of additional capital, with completion now expected in 2022 (previously 2021). Total approved capital is now \$0.6 billion.

Construction of the ELYSIS research and development centre in the Saguenay has been restarted, having been stopped due to COVID-19 measures introduced by the Quebec government.

Copper & Diamonds

Six months ended 30 June	2020	2019	Change
Mined copper production (000 tonnes - Rio Tinto share)	265.7	280.8	(5)%
Refined copper production (000 tonnes - Rio Tinto share)	74.1	130.6	(43)%
Diamonds production (000 carats - Rio Tinto share)	7,669	8,277	(7)%
Gross sales revenue (US\$ millions)	2,124	2,959	(28)%
Underlying EBITDA (US\$ millions)	670	1,213	(45)%
Underlying EBITDA margin (product group operations)	39 %	46 %	
Underlying earnings (US\$ millions)	68	348	(80)%
Net cash generated from operating activities (US\$ millions) ¹	32	775	(96)%
Capital expenditure - excluding EAUs (US\$ millions) ²	(891)	(855)	4 %
Free cash flow (US\$ millions)	(867)	(90)	
Return on capital employed ³	1 %	6 %	

1. Net cash generated from operating activities excludes the operating cash flows of equity accounted units (Escondida) but includes dividends from the equity accounted units
2. Capital expenditure is the net cash outflow on purchases less sales of property, plant and equipment, capitalised evaluation costs and purchases less sales of other intangible assets. It excludes equity accounted units (EAUs).
3. Return on capital employed (ROCE) is defined as underlying earnings excluding net interest divided by average capital employed (operating assets before net debt).

Financial performance

We increased productivity and accelerated cost reductions despite a challenging first half. Besides weak market conditions and COVID-19 restrictions, we sustained a 5.7 magnitude earthquake affecting the Kennecott operation and a planned smelter shutdown at Kennecott, which, together with temporarily lower grades, contributed to reduced volumes.

At \$0.7 billion, our underlying EBITDA was 45% lower than 2019 first half. Price declines, due to weaker markets from the global COVID-19 pandemic, drove EBITDA \$0.1 billion lower, with an 11% decrease in realised copper prices to 250 US cents per pound and a 39% decrease in realised diamond prices. We also incurred a \$0.1 billion one-off hit at Kennecott, where the asset was impacted by a 5.7 magnitude earthquake in mid-March. This resulted in the flash converting furnace being offline and requiring a rebuild, in addition to the planned smelter shutdown. Lower grades across most of our assets accounted for the remaining decline in EBITDA, partly offset by productivity improvements achieved across all assets.

We continued our investment in future copper growth projects at Resolution (Arizona) and Winu (Western Australia), which continue to produce exciting prospects.

Cash from our operating activities was \$32 million, a \$0.7 billion decline on 2019 first half, largely driven by: lower gold volumes from Oyu Tolgoi, lower volumes from Kennecott following the earthquake, lower dividends from Escondida and lower prices and volumes for our diamond business. The lower prices were offset by productivity and cost improvements. Due to the rebuild of the flash converting furnace and planned smelter shutdown at Kennecott, there was also a build-up in matte inventories, which will be reduced in the second half as the smelter comes back online. Free cash flow was an outflow of \$0.9 billion, reflecting \$0.9 billion of capital expenditure, including ongoing activities at the Oyu Tolgoi underground project.

Review of operations

Copper

Mined copper production of 265.7 thousand tonnes was 5% lower than 2019 first half, attributable to lower copper grades at Kennecott and Oyu Tolgoi open pit, partly offset by higher production from Escondida.

Refined copper production was 43% lower than 2019 first half, reflecting lower production at Kennecott because of the earthquake and the 45-day smelter shutdown.

Kennecott

Mined copper production was 24% lower than 2019 first half primarily due to pit sequencing and copper grades, which were 23% lower, with the end of the east wall lower pit mining approaching. As planned, grades will continue to be low through 2020 before increasing from the first half of 2021, with the transition from east wall to south wall mining.

Refined copper was 64% lower than 2019 first half, driven by the planned shutdown of the smelter as well as the flash converting furnace (required due to the earthquake on 18 March 2020). We have aligned the rebuild of the flash converting furnace with the planned smelter shutdown and expect to see a production recovery in the second half of 2020.

Molybdenum production of 8.9 thousand tonnes was an increase of 101% compared with 2019 first half, due to a 60% increase in grades and productivity improvements.

Escondida

In first half 2020, Escondida operated with a reduced workforce as a preventative measure in response to COVID-19. Despite this, mined copper production was 7% higher than 2019 first half, due to record concentrator throughput in the second quarter and a 24% increase in material stacked at the leach pads, which fully compensated for lower copper grades.

Oyu Tolgoi

The Oyu Tolgoi open pit has continued to operate uninterrupted despite COVID-19 and proximity to China. Mined copper production from the open pit was 16% lower than 2019 first half, reflecting copper grades which were 13% lower, and a scheduled maintenance shutdown in the mill in the second quarter of 2020. First half 2020 sales were impacted by COVID-19 trucking restrictions within China, but recovered with drivers adopting stringent controls and easing border restrictions. Mine development and production phasing has been successfully accelerated and we now expect to access more gold in the second half of 2020 (previously, first half of 2021).

Diamonds

Diamond production was 7% lower than 2019 first half. At Argyle, production was 4% lower than 2019 first half, due to lower recovered grade, partly offset by higher tonnes processed and improved mining rates including record underground production rates in May and June 2020. Preparation continues for the safe cessation of Argyle operations before the end of 2020 and closure activities commencing in 2021.

At Diavik, production was 17% lower, due to lower processed tonnes and lower grade in the underground.

Dominion Diamond Mines, our 40% joint venture partner at the Diavik diamond mine, filed for creditor protection in April 2020 and has since defaulted on its cash calls.

Oyu Tolgoi underground project

Work continues to progress, despite international travel restrictions in place to manage the risk of COVID-19 transmission. Underground lateral development continues to achieve high productivity with average monthly rates above 1,800 equivalent metres (eqm) in 2020 first half (compared to 1,410 eqm in the second half of 2019).

Shaft 3, shaft 4 and non-critical surface construction work areas have been placed on care and maintenance. Following a period of day shift only, limited night shift work has recommenced on critical underground material handling infrastructure, which is progressing at significantly reduced rates.

Restrictions imposed on total personnel numbers at site may require redeployment of lateral development crews onto other critical activities from the third quarter of 2020 onwards in order to minimise any potential COVID-19 impacts.

On 3 July 2020, we announced a mine redesign for Panel 0, confirming that the caving method of mining remains valid and that the schedule and costs currently remain within the ranges previously disclosed. We are targeting first sustainable production between October 2022 and June 2023 and development capital of \$6.6 to \$7.1 billion based on the updated mine design of Panel 0.¹ To date, \$3.9 billion has been invested. These estimates are subject to any additional scheduling delays or increases in capital costs arising from the impacts of the ongoing COVID-19 pandemic. The definitive estimate of cost and schedule for Panel 0 is still expected in the second half of 2020. The mine redesign has a number of benefits including lower stability risk and ability to independently progress Panel 1 and Panel 2. Material contained in pillars retained on either side of Panel 0 has been reclassified from Ore Reserves to Mineral Resources.² Part of the material contained in these pillars is expected to be recoverable at a later stage following additional studies which are currently underway. The next phase of mine design studies will include design optimisation for Panel 0, and a review of mine design options for Panel 1 and Panel 2 to utilise the learnings from the Panel 0 work.

On 29 June 2020, we announced an agreement with the government of Mongolia on the preferred domestic power solution for Oyu Tolgoi that paves the way for the government to fund and construct a State Owned Power Plant at Tavan Tolgoi. Parties will work towards finalising a mutually agreeable Power Purchase Agreement and extension of existing power import arrangements beyond 2023 by March 2021. Oyu Tolgoi retains the right to implement its own coal-fired power plant or renewable energy solution in the event the State Owned Power Plant does not materialise.

Other new projects and growth options

The \$0.9 billion investment in phase one of the south wall pushback project at Kennecott remains on track, despite disruptions from the 5.7 magnitude earthquake in the first quarter of 2020. We expect to access higher grades made available from this project from 2021. The \$1.5 billion investment in phase two will further extend strip waste rock mining and support additional infrastructure development, allowing mining to continue into a new area of the ore body between 2026 and 2032 and continue to generate attractive returns for Kennecott.

At our Resolution Copper project in Arizona, we are continuing our study programme, despite COVID-19 disruptions. We commenced underground characterisation of the ore body following Board approval in April 2020. Sinking of Shaft 9 continues on schedule and on budget, reaching a depth of 1,906m out of 2,086m total by the end of June 2020.

On 28 July 2020, we disclosed the maiden Inferred Mineral Resource at the 100% owned Winu copper-gold project in the Paterson Province of Western Australia and revealed the discovery of a new zone of gold dominant mineralisation approximately 2 kilometres east of the Winu deposit.

The Inferred Mineral Resource, reported at a 0.2% copper equivalent cut-off, is 503 million tonnes at 0.45% copper equivalent (CuEq). This includes a higher grade component of 188 million tonnes at 0.68% CuEq at a cut-off grade of 0.45% CuEq.³

Study work to date suggests the copper mineralisation supports the development of a relatively shallow open-pit mine, combined with industry-standard processing technology that is used at other Rio Tinto sites. Drilling continues to refine the overall geometry of the system and controls. The deposit remains open at depth as well as to the north and southeast. The Winu project team continues to work with local Nyangumarta and Martu Traditional Owners and regulators to progress the agreements and approvals required for any future development. We are targeting first production for 2023.

1. *The level of accuracy of these estimates is preliminary in nature and subject to a range of variables, in line with previous guidance. The confidence level of these estimates is at a level associated with a Pre-Feasibility Study, and further work is required between now and the second half of 2020 to refine the mine design options and study them to a level of confidence and accuracy associated with Feasibility Study quality estimates.*
2. *Refer to market release on 3 July 2020 "Oyu Tolgoi mine design confirms project schedule and cost ranges and update to Ore Reserves and Mineral Resource."*
3. *Refer to the release to the ASX on 28 July 2020 "Rio Tinto reveals maiden Resource at Winu and new discovery". The Competent Person responsible for the information in that release that relates to Mineral Resources and Exploration Results is Dr Julian Verbeek. Rio Tinto confirms that it is not aware of any new information or data that materially affects the information included in the market announcement, that all material assumptions and technical parameters underpinning the estimates in the market announcement continue to apply and have not materially changed, and that the form and context in which the Competent Person's findings are presented have not been materially modified.*

Energy & Minerals

Six months ended 30 June	2020	2019	Change
Iron ore pellets and concentrates production ¹ (000 tonnes - Rio Tinto share)	5,322	5,012	6 %
Titanium dioxide slag production (000 tonnes - Rio Tinto share)	555	599	(7)%
Borates production (000 tonnes - Rio Tinto share)	258	253	2 %
Uranium production (000 lbs - Rio Tinto share) ²	1,393	1,413	(1)%
Gross sales revenue (US\$ millions)	2,331	2,539	(8)%
Underlying EBITDA (US\$ millions)	739	954	(23)%
Underlying EBITDA margin (product group operations)	34 %	40 %	
Underlying earnings (US\$ millions)	232	341	(32)%
Net cash generated from operating activities (US\$ millions)	417	680	(39)%
Capital expenditure (US\$ millions) ³	(125)	(188)	(34)%
Free cash flow (US\$ millions)	285	481	(41)%
Return on capital employed ⁴	10 %	17 %	

1. Iron Ore Company of Canada and the Simandou iron ore project in Guinea continue to be reported within Energy & Minerals.
2. To allow production numbers to be compared on a like-for-like basis, we have excluded production from asset divestments completed in 2019 from our share of prior year production data. The financial data above includes the results of divested assets up to the date of sale. On 25 February 2020, Rio Tinto's ownership interest in Energy Resources of Australia (ERA) increased from 68.39% to 86.33%, following completion of its offer to ensure ERA has the funds it needs to meet its current rehabilitation obligations. Production is reported including this change from 1 March 2020.
3. Capital expenditure is the net cash outflow on purchases less sales of property, plant and equipment, capitalised evaluation costs and purchases less sales of other intangible assets.
4. Return on capital employed (ROCE) is defined as underlying earnings excluding net interest divided by average capital employed (operating assets before net debt).

Financial performance

The business was stable and resilient from an operational perspective, despite some government-imposed COVID-19 restrictions, notably in Canada and South Africa. At Iron Ore Company of Canada (IOC), we took advantage of stronger market conditions in Asia and switched our product mix, prioritising concentrate over pellets.

Underlying EBITDA of \$0.7 billion was 23% lower than 2019 first half, primarily reflecting a \$0.2 billion impact from lower pricing across the portfolio, with iron ore pellets being the main contributor.

We generated net cash of \$0.4 billion from our operating activities and \$0.3 billion of free cash flow, reflecting the pricing environment and our stable operational performance. Tax payments were \$0.1 billion higher than in 2019 first half.

Review of operations

Energy

Uranium production was 1% lower than 2019 first half. At Energy Resources of Australia's Ranger operation we continued to process existing stockpiles during 2020 first half. We sold additional material from inventory to capitalise on improved market conditions.

Iron Ore Company of Canada (IOC)

IOC production of pellets and concentrate was 6% higher than 2019 first half, with more concentrate in the product mix to match market demand. Production in 2019 first half was also adversely affected by a flooding incident in June 2019.

Total shipments of pellets and concentrates were 9.4 million tonnes (our share 5.5 million tonnes), 14% higher than 2019 first half.

Minerals

Titanium dioxide feedstock production was 7% lower than 2019 first half. This was due to community disruptions that resulted in a site-wide shutdown at RBM in December 2019, as well as COVID-19 government restrictions, which resulted in a further curtailing of the site. Operations have since resumed following the COVID-19 restrictions. However, we are managing the situation carefully in the challenging South African environment, ensuring first and foremost the health and safety of our workforce and contractors.

All nine furnaces at Rio Tinto Fer et Titane (RTFT) are in operation, with three of four furnaces in operation at RBM. We will continue to operate to market demand, ensuring appropriate feedstock for our customers and will decide to idle furnaces, modulate or re-start the remaining idled furnace accordingly.

Borates refinery operating rates continued to be below name plate capacity during the first half of 2020, with production approximately in line with the first half of 2019. We adjust refinery operating rates to match market demand for borates products.

New projects and growth options

The Zulti South project at RBM in South Africa is on full suspension. We will assess a restart following normalisation of operations at RBM.

We have concluded the pre-feasibility study for our Jadar lithium project in Serbia and are now progressing the project to feasibility study stage, following the Board's approval in July. The Jadar deposit contains high-grade mineralisation of boron and lithium supporting a long life operation in the first quartile of operating costs for both products. Lithium carbonate is a high-growth market serving battery producers for the electric vehicle and stationary storage sectors. The development includes an underground mine, an industrial facility including a beneficiation plant and chemical processing plant and all associated infrastructure.

The Simandou iron ore project (Blocks 3 and 4) in Guinea is continuing, as we collaborate with our partners on a programme of optimisation to reduce capital intensity, lower operating costs and shorten the timetable for development. A scope of work has been prepared to enable selected China-based design institutes to update and re-engineer the infrastructure elements of the project including the design criteria of its designated trans-Guinean rail line, and, given recent advances in trans-shipping, a review of the optimal methods of shore to ship transfer of ore. It is anticipated that associated fieldwork involving geotechnical investigation and surveying will start in Guinea in the second half of 2020. We continue to provide employment and support to local communities through our presence in Guinea, including contributing funds to combat and mitigate the economic impact of COVID-19. We own 45.05% of the project, Chinalco owns 39.95% and the government of Guinea owns 15%.

Price and exchange rate sensitivities

The following sensitivities give the estimated effect on underlying EBITDA, assuming that each price or exchange rate moved in isolation. The relationship between currencies and commodity prices is a complex one; movements in exchange rates can affect movements in commodity prices and vice versa. The exchange rate sensitivities quoted here include the effect on operating costs of movements in exchange rates, but do not include the effect of the revaluation of foreign currency working capital. Please use them with care.

	Average published price/exchange rate for 2020 first half	US\$ million impact on full year 2020 underlying EBITDA of a 10% change in prices/exchange rates
Aluminium - US\$/t	\$1,595	447
Copper - US cents per pound	249c	276
Gold - US\$/ounce	\$1,645	38
Iron ore (62% Fe CFR freight-adjusted) - US\$ per dry metric tonne	\$85.1/dmt	1,892
Australian dollar against the US dollar	0.66	542
Canadian dollar against the US dollar	0.73	209
Oil (Brent) - US\$ per barrel	\$41/bbl	55

The impact of a \$100 per tonne change in each of the input costs below is expected to have the following impact on our Canadian¹ aluminium smelting unit cash cost² of \$1,196 per tonne in 2020 first half:

	US\$/t
Alumina (FOB)	191
Green petroleum coke (FOB)	36
Calcined petroleum coke (FOB)	33
Coal tar pitch (FOB)	8

1. Canadian smelters include all fully-owned smelters in Canada (Alma, AP60, Arvida, Grande-Baie, Kitimat and Laterrière), as well as Rio Tinto's share of the Becancour and Alouette smelters.
2. The smelting unit cash cost refers to all costs which have been incurred before casting, excluding depreciation but including corporate allocations and with alumina at market price, to produce one metric tonne of primary aluminium.

Capital projects

Projects (Rio Tinto 100% owned unless otherwise stated)	Total approved capital cost (100% unless otherwise stated)	Approved capital remaining to be spent from 1 July 2020	Status/Milestones
Ongoing and approved			
Iron ore			
Investment in West Angelas and the Robe Valley in the Pilbara region of Western Australia to sustain production capacity	\$0.8bn (RT share)	\$0.6bn (RT share)	Approved in October 2018, the investments will enable us to sustain production of our Pilbara Blend™ and Robe Valley products. Construction commenced in 2019 and first ore is expected in 2021. All primary approvals for Mesa H have now been received.
Investment in Koodaideri, a new production hub in the Pilbara region of Western Australia, to sustain existing production in our iron ore system	\$2.6bn	\$1.9bn	Approved in November 2018, the investment incorporates a processing plant and infrastructure including a 166-kilometre rail line connecting the mine to our existing network. The project is progressing with production ramp-up still expected in 2022. Once complete, the mine will have an annual capacity of 43 million tonnes.
Investment in the Greater Tom Price operations to help sustain production capacity	\$0.8bn	\$0.7bn	Approved in November 2019, the investment in the Western Turner Syncline phase 2 mine will facilitate mining of existing and new deposits. It includes construction of a new crusher and a 13-kilometre conveyor. Construction has commenced and first ore from the crusher is expected in 2021.
Aluminium			
Investment in a second tunnel at the 1000MW Kemano hydropower facility at Kitimat, British Columbia, Canada. The project will ensure the long-term reliability of the power supply to the modernised Kitimat smelter.	\$0.6bn	\$0.3bn	The project, which was approved in 2017, was impacted by the departure of the main contractor from site. We are targeting a restart of tunnel excavation works in the third quarter of 2020, following the approval of \$155 million of additional capital by the Board.
Copper & Diamonds			
Investment to extend mine life at Kennecott, US, beyond 2019	\$0.9bn	\$0.3bn	Funding for the continuation of open pit mining via the push back of the south wall: the project largely consists of simple mine stripping activities.
Further investment to extend mine life at Kennecott, US by a further six years to 2032	\$1.5bn	\$1.4bn	Approved in December 2019, the investment will further extend strip waste rock mining and support additional infrastructure development in the second phase of the south wall pushback project. This will allow mining to continue into a new area of the orebody between 2026 and 2032.

Projects (Rio Tinto 100% owned unless otherwise stated)	Total approved capital cost (100% unless otherwise stated)	Approved capital remaining to be spent from 1 July 2020	Status/Milestones
Development of the Oyu Tolgoi underground mine in Mongolia (Rio Tinto 34%)	\$5.3bn*	\$1.4bn* <i>*Subject to the outcomes of the definitive estimate of cost and schedule for Panel 0 expected in the second half of 2020.</i>	Approved in May 2016, work continues to progress, despite international travel restrictions issued by the government of Mongolia to manage the risk of COVID-19 transmission. On 3 July 2020 we announced a mine redesign for Panel 0 of the Hugo Dummett North copper/gold underground mine, confirming that the caving method of mining remains valid and that the schedule and costs remain within the ranges previously disclosed. We are targeting first sustainable production between October 2022 and June 2023 and development capital of \$6.6 to \$7.1 billion based on the updated mine design of Panel 0. ¹ These estimates are also subject to any additional scheduling delays or increases in capital costs arising from the impacts of the ongoing COVID-19 pandemic. Material contained in pillars retained on either side of Panel 0 has been reclassified from Ore Reserves to Mineral Resources ² . Part of the material contained in these pillars is expected to be recoverable at a later stage following additional studies which are currently underway. The definitive estimate of cost and schedule for Panel 0 is still expected in the second half of 2020.
Energy & Minerals			
Development of the Zulti South project at Richards Bay Minerals (RBM) in South Africa (Rio Tinto 74%), to sustain current capacity and extend mine life.	\$0.5bn	\$0.4bn	Approved in April 2019, the investment will underpin RBM's supply of zircon and ilmenite over the life of mine. The project is on full suspension. We will assess a restart following normalisation of operations at RBM.

1. The level of accuracy of these estimates is preliminary in nature and subject to a range of variables, in line with previous guidance. The confidence level of these estimates is at a level associated with a Pre-Feasibility Study, and further work is required between now and the second half of 2020 to refine the mine design options and study them to a level of confidence and accuracy associated with Feasibility Study quality estimates.
2. Refer to market release on 3 July 2020 "Oyu Tolgoi mine design confirms project schedule and cost ranges and update to Ore Reserves and Mineral Resource."

DIRECTORS' REPORT

for the half year ended 30 June 2020

Review of operations and important events

A detailed review of the Group's operations, the results of those operations during the half year ended 30 June 2020 and likely future developments are given on pages 1 to 22. Important events that have occurred during the period and up until the date of this report are set out below.

Financial

On 8 April 2020, we published our latest Taxes paid report detailing the \$7.6 billion of taxes and royalties paid globally in 2019, up from \$6.6 billion in 2018. The majority of taxes were paid in Australia (\$6.2 billion), home to the largest part of our business. We also made significant payments in Chile (\$311 million), Mongolia (\$305 million), Canada (\$291 million), United States (\$178 million), the United Kingdom (\$117 million) and South Africa (\$80 million).

On 16 June 2020 we announced that we had published a report on payments to governments made by us and our subsidiary undertakings for the year ended 31 December 2019 as required under the UK's Report on Payments to Governments Regulations 2014 (as amended in December 2015). We paid US\$7.6 billion of taxes and royalties and a further US\$1.3 billion on behalf of our employees during 2019.

Operations

On 12 February 2020 we announced that we would conduct a strategic review of the ISAL smelter in Iceland, to determine the operation's ongoing viability and explore options to improve its competitive position.

On 17 February 2020 we announced that iron ore operations in the Pilbara, Western Australia, were progressively resuming following the passing of Tropical Cyclone Damien.

On 17 February 2020 we announced that we continued to progress options to secure domestically sourced power for the Oyu Tolgoi copper mine in Mongolia, which we were obliged to do so by 30 June 2023 under the Investment Agreement between Turquoise Hill, the Government of Mongolia and Rio Tinto and subsequent Power Sector Framework Agreement, signed in 2018.

On 28 February 2020 we announced to the Australian Securities Exchange the first reporting of Ore Reserves at the Western Range iron ore deposit in the Pilbara, Western Australia and an increase in titanium dioxide feedstock Mineral Resources at Rio Tinto Fer et Titane's mine in Havre St Pierre, Quebec, Canada.

On 16 March 2020 we announced that we were working with the government of Mongolia to ensure Oyu Tolgoi was operating in accordance with the restrictions the Mongolian authorities put in place to contain the spread of COVID-19.

On 24 March 2020 we announced that as a result of separate actions by the Premier of Quebec and the President of South Africa we would slow down some of our operations to contain the spread of COVID-19.

On 19 June 2020 we announced that we had launched a board-led review into our heritage management processes within Iron Ore following the events at Juukan Gorge, with a focus on recommending improvements to the effectiveness of its internal processes and governance.

On 29 June 2020 we announced that we had reached an agreement with Turquoise Hill and government of Mongolia on the preferred domestic power solution for Oyu Tolgoi that paves the way for the government to fund and construct a State Owned Power Plant at Tavan Tolgoi.

On 3 July 2020 we announced that Oyu Tolgoi LLC had completed an updated feasibility study and was in the process of submitting this to the government of Mongolia. The updated study incorporated a new mine design for Panel 0 of the Hugo Dummett North underground mine at Oyu Tolgoi. The new design also confirmed that the caving method of mining remains valid and that the underground schedule and costs remained within the ranges previously disclosed.

On 9 July 2020 we announced that we will start planning for the wind-down of operations and the eventual closure of New Zealand Aluminium Smelters following the conclusion of its strategic review which has shown the business is no longer viable given high energy costs and a challenging outlook for the Aluminium industry.

On 22 July 2020 we announced that we submitted a formal complaint to the Icelandic Competition Authority (ICA) alleging abuse of market dominance by Landsvirkjun, the energy supplier to our ISAL aluminium smelter. We asked the ICA to address anti-competitive conduct by Landsvirkjun through discriminatory pricing and long-duration power contracts, so that the ISAL smelter is able to compete internationally.

People

On 21 February 2020 we announced the appointment of three new independent non-executive directors to the board. Hinda Gharbi, executive vice president of Reservoir & Infrastructure at Schlumberger Limited, and Jennifer Nason, a Global Chairman at JP Morgan Chase & Co, joined the board with effect from 1 March 2020. Ngaire Woods, Professor of Global Economic Governance at Oxford University, will join with effect from 1 September 2020.

On 1 July 2020 we announced that we had added a new role to our executive committee. Peter Toth will become Group executive, Strategy and Development. It was also announced that Stephen McIntosh, Group executive of Growth & Innovation and Health, Safety & Environment decided to retire after more than 30 years with us, leaving the company on 30 September. With Stephen's departure, Mark Davies will assume the role of Group executive, Safety, Technical and Projects.

Rio Tinto plc 2020 Annual General Meeting ("AGM")

At Rio Tinto plc's AGM on 8 April 2020, Resolution 24 ("Authority to purchase Rio Tinto plc shares") was passed with less than 80% of votes in favour and Shining Prospect (a subsidiary of the Aluminium Corporation of China ("Chinalco")) voted against. Chinalco has not sold any Rio Tinto plc shares and now has a holding of over 14% given its non-participation in Rio Tinto's significant share buy-back programmes over the last four years. This places Chinalco close to the 14.99% threshold agreed with the Australian Government at the time of Chinalco's original investment in 2008.

Directors

The directors serving on the boards of Rio Tinto plc and Rio Tinto Limited as at 30 June 2020 were:

	Notes	Date of appointment
Chairman		
Simon Thompson	(R and N)	1 April 2014
Executive directors		
Jean-Sébastien Jacques, Chief Executive		17 March 2016
Jakob Stausholm, Chief Financial Officer		3 September 2018
Non-executive directors		
Sam Laidlaw (senior independent director)	(R, N and S)	10 February 2017
Megan Clark	(R, N and S)	20 November 2014
David Constable	(A, N and S)	10 February 2017
Hinda Gharbi	(A, N and S)	1 March 2020
Simon Henry	(A, N and S)	1 April 2017
Michael L'Estrange	(N)	1 September 2014
Simon McKeon	(A, R and N)	1 January 2019
Jennifer Nason	(R, N and S)	1 March 2020

Notes

(A) Audit Committee
(R) Remuneration Committee
(N) Nominations Committee
(S) Sustainability Committee

Dividend

The 2019 final dividend was paid on 16 April 2020 to holders of Rio Tinto plc and Rio Tinto Limited ordinary shares and Rio Tinto plc ADR holders. The 2019 final dividend, equivalent to 231 US cents per share was determined by the board on 26 February 2020. Rio Tinto plc shareholders received 177.47 pence per share for the final dividend and Rio Tinto Limited shareholders received 349.74 Australian cents per share for the final dividend, based on the applicable exchange rates on 25 February 2020. Rio Tinto plc ADR holders received 231 US cents per ADR for the final dividend.

The 2020 interim dividend, equivalent to 155.00 US cents per share will be paid on 17 September 2020 to Rio Tinto Limited, Rio Tinto plc and Rio Tinto plc ADR shareholders on the register at the close of business on 7 August 2020. The ex-dividend date for the 2020 interim dividend for Rio Tinto Limited, Rio Tinto plc and Rio Tinto plc ADR shareholders is 6 August 2020. Rio Tinto plc shareholders will receive 119.74 pence per share for the interim dividend and Rio Tinto Limited shareholders will receive 216.47 Australian cents per share for the interim dividend based on the applicable exchange rates on 28 July 2020. ADR holders receive dividends at the declared rate in US dollars.

Principal risks and uncertainties

The principal risks and uncertainties that could materially affect our results and operations are set out on pages 71 to 80 of the 2019 Annual report and are listed under the risk factor headings below. Our principal risks and uncertainties for the remaining six months of the financial year remains broadly consistent with trends reported in 2019 Annual Report. However, we will continue to monitor areas of increasing uncertainty, namely the evolving impacts of COVID-19, geopolitical tensions and land access.

As announced in our Second Quarter Operations Review on 17 July 2020, despite various COVID-19 related challenges, all of our assets have continued to operate, with our first priority to protect the health and safety of all our employees and communities. A summary of the COVID-19 impact on our business is provided on page 38 of this report.

Market risks

Commodity prices, driven by demand for and supply of the Group's products, vary and may not be as expected over time. Exchange rate variations and geopolitical issues may offset or exacerbate this risk.

China's growth pathway could impact demand for the Group's products outside of expectations. China is the largest market for our products.

Strategic risks

Our ability to secure planned value by successfully executing divestments and acquisitions may vary.

Large capital investments require multi-year execution plans and are complex. The Group's ability to deliver projects to baseline plan, principally in terms of safety, cost and schedule, may vary due to changes in technical requirements, law and regulation, government or community expectations, or through commercial or economic assumptions proving inaccurate through the execution phase.

Strategic partnerships play a material role in delivering the Group's growth, production, cash and market positioning, and these may not always develop as planned.

Financial risks

External events and internal discipline may impact Group liquidity.

Resources risks

The success of the Group's exploration activity and estimates of Ore reserves and resources may vary.

Health, safety, environment and security risks

Our operations and projects are inherently hazardous, with the potential to cause illness or injury, damage to the environment, disruption to a community or a threat to personal security.

Climate Change

Climate change is a systemic challenge and will require coordinated actions between nations, between industries and by society at large. It requires a long-term perspective to address both physical climate change and low-carbon transition risks and uncertainties.

Communities and other key stakeholder risks

The Group's operations are located across a number of jurisdictions, which exposes the Group to a wide range of economic, political, societal and regulatory environments. We recognise the value of positive engagement with a range of stakeholders, and seek to develop collaborative and mutually-beneficial partnerships through our partner-to-operate strategy. Without positive engagement, actions by governments and other stakeholders can result in operational/project delays or loss of licence to operate. Legal or regulatory frameworks with respect to policies such as energy, land access, climate change and mineral law may also change in a way that affects ore reserves / resources or mine plans and/or may increase costs and the economic viability of a project.

Closure, reclamation and rehabilitation risks

Planning for the future of our sites after they cease their operating life is a core business function governed by our Closure Steering Committee. Estimated costs and liabilities are provided for, and updated annually, over the life of each operation. However, estimates may vary due to a number of factors that either create opportunities or challenges.

Governance risks

The Group's reputation and regulatory licences are dependent upon appropriate business conduct and are threatened by actual or perceived breaches of law, violations of our code of conduct and adverse impact on our reputation.

Operational and people risks

Accessing, developing and retaining talent as we and our industry evolves presents a constant challenge. The Group's ability to maintain its competitive position is dependent on the services of a wide range of internal and external skilled and experienced personnel and contracting partners.

Publication of half year results

In accordance with the UK Financial Conduct Authority's Disclosure Guidance & Transparency Rules and the Australian Securities Exchange Listing Rules, the half year results will be made public and are available on the Rio Tinto Group website.

Auditor's independence declaration

KPMG, the auditors of Rio Tinto Limited, have provided the auditor's independence declaration as required under section 307C of the Corporations Act 2001 in Australia. This has been reproduced on page 60 and forms part of this report.

The Directors' report is made in accordance with a resolution of the board.

Simon Thompson

Chairman

29 July 2020

FINANCIAL REPORT FOR THE HALF YEAR ENDED 30 JUNE 2020

Results for announcement to the market

NAME OF ENTITY

Rio Tinto Limited

ACN

004 458 404

Half yearly

*



HALF YEAR ENDED

30 June 2020

The half year financial information included in this announcement gives a true and fair view of the matters disclosed and is unaudited but has been reviewed by the auditors. The report has been prepared in accordance with International Accounting Standard 34 as adopted by the European Union ('EU IFRS') and an Order under section 340 of the Australian Corporations Act 2001 issued by the Australian Securities & Investments Commission on 24 July 2020.

The report should be read in conjunction with the Rio Tinto Annual report for 2019.

Results for announcement to the market

		<u>US\$ millions</u>
Consolidated sales revenue	down 6.6%	to 19,362
Net earnings attributable to members	down 19.7%	to 3,316
Underlying earnings attributable to members	down 3.7%	to 4,750
		<u>US cents</u>
Dividends	Amount per share	Franked amount per share
Interim dividend	155.00	155.00 (at 30%)
2019 Final dividend - paid 16 April 2020	231.00	231.00 (at 30%)
		<u>Australian cents</u>
Dividends	Amount per share	Franked amount per share
Interim dividend	216.47	216.47 (at 30%)
2019 Final dividend - paid 16 April 2020	349.74	349.74 (at 30%)
<p>Registrable transfers received by the Company up to 5pm (or 7pm in respect of the CHESS subregister) on 7 August 2020 will be registered before entitlements to the dividends are determined.</p> <p>A definition of underlying earnings is given on page 63 of the financial information, which accompanies this document.</p>		
<div>   </div>		
Tim Paine, Joint Company Secretary	Steve Allen, Joint Company Secretary	
29 July 2020	29 July 2020	

Group income statement

	Six months ended 30 June 2020 US\$m	Six months ended 30 June 2019 US\$m
Consolidated operations		
Consolidated sales revenue	19,362	20,722
Net operating costs (excluding items shown separately)	(12,217)	(12,818)
Impairment charges ^(a)	(1,015)	(2,349)
Exploration and evaluation costs	(280)	(287)
Profit relating to interests in undeveloped projects	—	8
Operating profit	5,850	5,276
Share of profit after tax of equity accounted units	198	208
Impairment after tax of equity accounted unit ^(a)	(119)	—
Profit before finance items and taxation	5,929	5,484
Finance items		
Net exchange (losses)/gains on net external and intragroup debt balances	(165)	104
Net losses on derivatives not qualifying for hedge accounting	(206)	(109)
Finance income	104	175
Finance costs ^(b)	(169)	(273)
Amortisation of discount	(214)	(195)
	(650)	(298)
Profit before taxation	5,279	5,186
Taxation	(1,828)	(2,255)
Profit after tax for the period	3,451	2,931
– attributable to owners of Rio Tinto (net earnings)	3,316	4,130
– attributable to non-controlling interests	135	(1,199)
Basic earnings per share^(c)	205.0c	252.5c
Diluted earnings per share^(c)	203.6c	250.7c

(a) Refer to Impairment charges note on pages 40 and 41.

(b) Finance costs in the income statement include hedging adjustments and are net of amounts capitalised of US\$175 million (30 June 2019: US\$166 million).

(c) For the purpose of calculating basic earnings per share, the weighted average number of Rio Tinto plc and Rio Tinto Limited shares outstanding during the period was 1,617.3 million (30 June 2019: 1,635.6 million), being the weighted average number of Rio Tinto plc shares outstanding of 1,246.5 million (30 June 2019: 1,265.1 million), plus the weighted average number of Rio Tinto Limited shares outstanding of 370.8 million (30 June 2019: 370.5 million). The profit figures used in the calculation of basic and diluted earnings per share are the profits attributable to owners of Rio Tinto.

For the purpose of calculating diluted earnings per share, the effect of dilutive securities is added to the weighted average number of shares. This effect is calculated under the treasury stock method.

Group statement of comprehensive income

	Six months ended 30 June 2020 US\$m	Six months ended 30 June 2019 US\$m
Profit after tax for the period	3,451	2,931
Other comprehensive loss		
Items that will not be reclassified to profit or loss:		
Actuarial losses on post-retirement benefit plans	(283)	(648)
Changes in the fair value of equity investments held at fair value through other comprehensive income (FVOCI)	(4)	(6)
Tax relating to these components of other comprehensive income	75	171
Share of other comprehensive losses of equity accounted units, net of tax	(6)	—
	(218)	(483)
Items that have been/may be subsequently reclassified to profit or loss:		
Currency translation adjustment ^(a)	(945)	269
Fair value movements:		
– Cash flow hedge gains/(losses)	69	(47)
– Cash flow hedge losses/(gains) transferred to the income statement	21	(7)
Net change in costs of hedging	10	14
Tax relating to these components of other comprehensive income	(46)	3
Share of other comprehensive (loss)/income of equity accounted units, net of tax	(32)	11
Other comprehensive loss for the period, net of tax	(1,141)	(240)
Total comprehensive income for the period	2,310	2,691
– attributable to owners of Rio Tinto	2,289	3,890
– attributable to non-controlling interests	21	(1,199)

- (a) Excludes a currency translation loss of US\$75 million for the period ended 30 June 2020 (30 June 2019: loss of US\$31 million) arising on Rio Tinto Limited's share capital, which is recognised in the Group statement of changes in equity on pages 33 and 34.

Group cash flow statement

	Six months ended 30 June 2020 US\$m	Six months ended 30 June 2019 US\$m
Cash flows from consolidated operations^(a)	8,643	9,111
Dividends from equity accounted units	183	318
Cash flows from operations	8,826	9,429
Net interest paid	(258)	(250)
Dividends paid to holders of non-controlling interests in subsidiaries	(215)	(57)
Tax paid	(2,725)	(2,733)
Net cash generated from operating activities	5,628	6,389
Cash flows from investing activities		
Purchases of property, plant and equipment and intangible assets	(2,693)	(2,391)
Disposals of subsidiaries, joint ventures, unincorporated joint operations and associates ^(b)	10	46
Purchases of financial assets ^(c)	(20)	(47)
Sales of financial assets ^(c)	87	7
Sales of property, plant and equipment and intangible assets	28	17
Net funding of equity accounted units	(14)	(12)
Other investing cash flows ^(d)	(333)	5
Net cash used in investing activities	(2,935)	(2,375)
Cash flows before financing activities	2,693	4,014
Cash flows from financing activities		
Equity dividends paid to owners of Rio Tinto	(3,607)	(6,843)
Proceeds from additional borrowings	38	142
Repayment of borrowings and associated derivatives ^(e)	(593)	(99)
Lease principal payments	(154)	(136)
Proceeds from issue of equity to non-controlling interests ^(f)	79	43
Own shares purchased from owners of Rio Tinto	(208)	(988)
Net cash flows used in financing activities	(4,445)	(7,881)
Effects of exchange rates on cash and cash equivalents	(21)	(34)
Net decrease in cash and cash equivalents	(1,773)	(3,901)
Opening cash and cash equivalents less overdrafts	8,027	10,889
Closing cash and cash equivalents less overdrafts ^(g)	6,254	6,988

(a) Cash flows from consolidated operations

Profit after tax for the period	3,451	2,931
Adjustments for:		
– Taxation	1,828	2,255
– Finance items	650	298
– Share of profit after tax of equity accounted units	(198)	(208)
– Impairment charges of investments in equity accounted units after tax	119	—
– Impairment charges	1,015	2,349
– Depreciation and amortisation	2,092	2,096
– Provisions (including exchange differences on provisions)	336	338
Utilisation of provisions	(254)	(237)
Utilisation of provision for post-retirement benefits	(97)	(87)
Change in inventories	(289)	(23)
Change in trade and other receivables	508	52
Change in trade and other payables	(262)	(401)
Other items ^(h)	(256)	(252)
	8,643	9,111

Group cash flow statement (continued)

- (b) Refer to Acquisitions and disposals note on page 42.
- (c) During the six months to 30 June 2020, the Group received net income of US\$84 million (30 June 2019 net purchase of US\$29 million) from its sales and purchases of investments within a separately managed portfolio of fixed income instruments. Purchases and sales of these securities are reported on a net cash flow basis within 'Sales of financial assets' or 'Purchases of financial assets' depending on the overall net position at each reporting date.
- (d) During 2020, Energy Resources of Australia Ltd (ERA) deposited US\$299 million into a trust fund controlled by the Government of Australia. ERA is entitled to reimbursement from the fund once specific phases of rehabilitation relating to the Ranger Project are completed. The fund is outside of the scope of IFRS 9 - 'Financial Instruments' and therefore classified as an "other receivable" within 'Trade and other receivables'. At 30 June 2020 the total amount held in the trust fund was US\$364 million (31 December 2019: US\$53 million).
- (e) On 11 May 2020, we repaid our €402 million (nominal value) Rio Tinto Finance plc Euro Bonds on their maturity. Our cross currency interest rate swaps, that were designated as being in fair value hedge relationship with the Euro bonds also matured. This realised mark to market losses of US\$91 million. The cash outflow relating to the repayment of the bond and the realised loss on the derivatives have been recognised within 'Repayment of borrowings and associated derivatives' and totalled US\$526 million.
- (f) During 2020 ERA issued and allotted additional share capital in order to raise funds for the rehabilitation of its mine site. Upon the issue of the new shares under the Entitlement Offer and Underwriting Agreement, our interest in ERA increased from 68.4% to 86.3%. We received net proceeds of US\$30 million from the owners of non-controlling interests in ERA. This has been recorded in "Proceeds from issue of equity to non-controlling interests". Other share subscriptions during the period did not change the Group's ownership percentage.
- (g) Closing cash and cash equivalents less overdrafts for the purposes of the cash flow statement differs from cash and cash equivalents on the Group balance sheet as per the following reconciliation:

Closing cash and cash equivalents less overdrafts	30 June 2020 US\$m	31 December 2019 US\$m	30 June 2019 US\$m
Balance per Group balance sheet	6,269	8,027	6,861
Bank overdrafts repayable on demand (unsecured)	(15)	—	(3)
Cash and cash equivalents included in assets held for sale	—	—	130
Balance per Group cash flow statement	6,254	8,027	6,988

- (h) Includes realised losses on currency forward contracts not designated in a hedge relationship of US\$200 million (30 June 2019: realised losses of US\$172 million).

Group balance sheet

	30 June 2020 US\$m	31 December 2019 US\$m
Non-current assets		
Goodwill	821	922
Intangible assets	2,502	2,637
Property, plant and equipment	55,836	57,372
Investments in equity accounted units	3,849	3,971
Inventories	183	139
Deferred tax assets	3,165	3,102
Trade and other receivables	1,968	1,716
Tax recoverable	4	5
Other financial assets	1,048	635
	69,376	70,499
Current assets		
Inventories	3,620	3,463
Trade and other receivables	2,448	3,027
Tax recoverable	133	116
Other financial assets	2,683	2,670
Cash and cash equivalents	6,269	8,027
	15,153	17,303
Total assets	84,529	87,802
Current liabilities		
Borrowings and other financial liabilities	(645)	(1,372)
Trade and other payables	(6,194)	(6,480)
Tax payable	(1,081)	(1,874)
Provisions including post-retirement benefits	(1,480)	(1,399)
	(9,400)	(11,125)
Non-current liabilities		
Borrowings and other financial liabilities	(13,473)	(13,341)
Trade and other payables	(752)	(794)
Tax payable	(420)	(376)
Deferred tax liabilities	(2,905)	(3,220)
Provisions including post-retirement benefits	(13,923)	(13,704)
	(31,473)	(31,435)
Total liabilities	(40,873)	(42,560)
Net assets	43,656	45,242
Capital and reserves		
Share capital ^(a)		
– Rio Tinto plc	207	207
– Rio Tinto Limited	3,373	3,448
Share premium account	4,314	4,313
Other reserves	8,370	9,177
Retained earnings	22,960	23,387
Equity attributable to owners of Rio Tinto	39,224	40,532
Attributable to non-controlling interests	4,432	4,710
Total equity	43,656	45,242

Group balance sheet (continued)

- (a) At 30 June 2020, Rio Tinto plc had 1,246.7 million ordinary shares in issue and held by the public, and Rio Tinto Limited had 371.2 million shares in issue and held by the public. There were no cross holdings of shares between Rio Tinto Limited and Rio Tinto plc at 30 June 2020 (31 December 2019: nil).

As required to be disclosed under the ASX Listing Rules, the net tangible assets per share amounted to US\$22.19 (31 December 2019: US\$22.81).

Group statement of changes in equity

Six months ended 30 June 2020	Attributable to owners of Rio Tinto					Non-controlling interests US\$m	Total equity US\$m
	Share capital US\$m	Share premium account US\$m	Other reserves US\$m	Retained earnings US\$m	Total US\$m		
Opening balance	3,655	4,313	9,177	23,387	40,532	4,710	45,242
Total comprehensive income for the period ^(a)	—	—	(818)	3,107	2,289	21	2,310
Currency translation arising on Rio Tinto Limited's share capital	(75)	—	—	—	(75)	—	(75)
Dividends	—	—	—	(3,607)	(3,607)	(320)	(3,927)
Share buy-back	—	—	—	(1)	(1)	—	(1)
Own shares purchased from Rio Tinto shareholders to satisfy share awards to employees ^(b)	—	—	(12)	(18)	(30)	—	(30)
Change in equity interest held by Rio Tinto	—	—	—	58	58	(58)	—
Treasury shares reissued and other movements	—	1	—	—	1	—	1
Equity issued to holders of non-controlling interests	—	—	—	—	—	79	79
Employee share options and other IFRS 2 charges to the income statement	—	—	23	34	57	—	57
Closing balance	3,580	4,314	8,370	22,960	39,224	4,432	43,656

	Six months ended 30 June 2020	Six months ended 30 June 2019
Dividends per share: Ordinary - paid during the period	231.0c	180.0c
Dividends per share: Special - paid during the period	—	243.0c
Ordinary dividends per share: proposed in the announcement of the results for the period	155.0c	151.0c
Special dividends per share: proposed in the announcement of the results for the period	—	61.0c

(a) Refer to Group statement of comprehensive income for further details.

(b) Net of contributions received from employees for share awards to employees.

Group statement of changes in equity (continued)

Six months ended 30 June 2019	Attributable to owners of Rio Tinto					Non-controlling interests US\$m	Total equity US\$m
	Share capital US\$m	Share premium account US\$m	Other reserves US\$m	Retained earnings US\$m	Total US\$m		
Opening balance	3,688	4,312	8,661	27,025	43,686	6,137	49,823
Adjustment for transition to new accounting pronouncements ^(a)	—	—	—	(113)	(113)	(2)	(115)
Restated opening balance	3,688	4,312	8,661	26,912	43,573	6,135	49,708
Total comprehensive income for the period ^(b)	—	—	229	3,661	3,890	(1,199)	2,691
Currency translation arising on Rio Tinto Limited's share capital	(31)	—	—	—	(31)	—	(31)
Dividends	—	—	—	(6,843)	(6,843)	(199)	(7,042)
Share buy-back ^(c)	(2)	—	2	(1,133)	(1,133)	—	(1,133)
Own shares purchased from Rio Tinto shareholders to satisfy share options ^(d)	—	—	—	(8)	(8)	—	(8)
Change in equity interest held by Rio Tinto	—	—	—	45	45	(45)	—
Treasury shares reissued and other movements	—	1	—	—	1	—	1
Equity issued to holders of non-controlling interests	—	—	—	—	—	43	43
Employee share options and other IFRS 2 charges to the income statement	—	—	31	40	71	—	71
Closing balance	3,655	4,313	8,923	22,674	39,565	4,735	44,300

- (a) This represents the impact to the Group of transitioning to the new accounting pronouncements; IFRS 16 'Leases' and IFRIC 23 'Uncertainty over Income Tax Treatments' on 1 January 2019.
- (b) Refer to Group statement of comprehensive income for further details.
- (c) Total amount of US\$1,133 million includes own shares purchased from owners of Rio Tinto plc as per the cash flow statement of US\$988 million adjusted for the movement in a financial liability recognised in respect of irrevocable contracts in place as at 30 June 2019 and 31 December 2018 to cover the share buy-back programme.
- (d) Net of contributions received from employees for share options.

Basis of preparation

The condensed consolidated interim financial statements included in this interim report have been prepared in accordance with International Accounting Standard ('IAS') 34 'Interim financial reporting' as adopted by the European Union ('EU'), the Disclosure Guidance and Transparency Rules sourcebook ('DTR') of the Financial Conduct Authority ('FCA') applicable to interim financial reporting and an Order under section 340 of the Australian Corporations Act 2001 issued by the Australian Securities and Investments Commission on 24 July 2020.

These condensed consolidated interim financial statements represent a 'condensed set of financial statements' as referred to in the DTR issued by the FCA. Accordingly, they do not include all of the information required for a full annual financial report and are to be read in conjunction with the Group's annual financial statements for the year ended 31 December 2019 and any public announcements made by the Group during the interim reporting period.

The 2019 annual financial statements were prepared on a going concern basis in accordance with the Companies Act 2006 applicable to companies reporting under International Financial Reporting Standards and in accordance with applicable UK law, applicable Australian law as amended by the Australian Securities and Investments Commission Order dated 24 July 2020 and Article 4 of the European Union IAS regulation and in accordance with:

- International Financial Reporting Standards as issued by the International Accounting Standards Board (IASB) and interpretations issued from time to time by the IFRS Interpretations Committee (IFRS IC) both as adopted by the European Union and which were mandatory for EU reporting, or had been early adopted by the Group, as at 31 December 2019; and
- International Financial Reporting Standards as issued by the IASB and interpretations issued from time to time by the IFRS IC which were mandatory, or had been early adopted by the Group, as at 31 December 2019.

These condensed consolidated financial statements are unaudited and do not constitute statutory accounts as defined in Section 434 of the United Kingdom Companies Act 2006. The financial information as at 31 December 2019 included in this report has been extracted from the full financial statements filed with the Registrar of Companies. The Auditors' report on these full financial statements was unqualified, did not include a reference to any matters to which the auditor drew attention by way of emphasis of matter and did not contain statements under section 498 (2) (regarding adequacy of accounting records and returns), or under section 498 (3) (regarding provision of necessary information and explanations) of the Companies Act 2006.

Accounting policies

The condensed consolidated interim financial statements have been drawn up on the basis of accounting policies, methods of computation and presentation consistent with those applied in the financial statements for the year ended 31 December 2019, and in the corresponding interim period, except for the modifications set out below. This basis of accounting is referred to as 'IFRS' in this report. Adoption of changes to IFRS applicable in 2020 did not have a significant impact on the Group's financial statements.

During the six months to 30 June 2020, the Group did not early adopt any amendments, standards or interpretations that have been issued but are not yet effective.

The Group's accounting policies and critical accounting judgements have been updated to include the Group's approach to materiality upon implementation of *Definition of Material (Amendments to IAS 1 and IAS 8)* at 1 January 2020 as follows:

Areas of judgment in the application of accounting policies:

- Materiality - judgment in determining when information can be expected to influence the decisions made by a user of the Financial Statements

Principal accounting policies:

Materiality:

The Group considers information to be material if correcting a misstatement, omission or obscuring could, in the light of surrounding circumstances, reasonably be expected to change the judgment of a reasonable person relying on the financial statements. The Group considers both quantitative and qualitative factors in determining whether information is material; the concept of materiality is therefore not driven purely by numerical values.

When considering the potential materiality of information, management makes an initial quantitative assessment using thresholds based on underlying earnings; for the six months ended 30 June 2020, overall Group materiality was US\$425 million (six months ended 30 June 2019: US\$350 million; year ended 31 December 2019: US\$350 million). However, other considerations can result in a determination that lower values are material or, occasionally, that higher values are immaterial. These considerations include whether a misstatement, omission or obscuring: masks a change or trend in key performance indicators; causes reported key metrics to change from a positive to negative values or vice-versa; affects compliance with regulatory requirements or other contractual requirements; could result in an increase to management's compensation; or might conceal an unlawful transaction.

In assessing materiality, management also applies judgment based on its understanding of the business and its internal and external financial statement users. The assessment will consider user expectations of numerical and narrative reporting. Sources used in making this assessment would include, for example: published analyst consensus measures, experience gained in formal and informal dialogue with users (including regulatory correspondence), and peer group benchmarking.

Other than as a result of implementing amendments to IAS 1 and IAS 8, the critical accounting judgments and key sources of estimation uncertainty for the half year are the same as those disclosed in the Group's consolidated financial statements for the year ended 31 December 2019.

Principal accounting policy information has also been expanded, to reflect the increased impact in 2020 of arrangements accounted for under the following policies:

Financial instruments - Financial assets held at fair value through profit or loss (FVPL) - refer to note 1(q)(i)(c) to the 2019 Annual Report:

The classification applies to the following assets. In all cases transaction costs are immediately expensed to the income statement:

- Debt instruments that do not meet the criteria of amortised cost or fair value through other comprehensive income. An example would be where trade receivable invoices for certain customers are routinely factored.

Accounting policies (continued)

Close-down, restoration and environmental obligations - refer to note 1(l) of the 2019 Annual Report:

- In the context of current market volatility and uncertainty, the Group has taken a long term view of interest rates and a broader set of relevant factors into account in determining the appropriate discount rate for close-down, restoration and environmental obligations.
- In some cases, Group companies make a contribution to trust funds in order to meet or reimburse future environmental and decommissioning costs. Amounts due for reimbursement from trust funds are not offset against the corresponding closure provision unless payments into the fund have the effect of passing the closure obligation to the trust.

The Rio Tinto financial information by business unit and the geographic analysis of sales by destination provided on pages 67 to 70 and 50 of this press release respectively, satisfy the disclosure requirements of IFRS 8 'Operating Segments' for interim financial statements and also provide additional voluntary disclosure which the Group considers is useful to the users of the financial statements.

International financial reporting standards mandatory beyond 2020

The Group disclosed information relating to standards and pronouncements mandatory beyond 2020 in the financial statements for the year ended 31 December 2019, and continues to evaluate the impact of these pronouncements.

COVID-19 impact

As announced in our Second Quarter Operations Review on 17 July 2020, despite various COVID-19 related challenges, all of our assets have continued to operate, with our first priority to protect the health and safety of all our employees and communities.

During the COVID-19 pandemic, we have implemented strict protocols globally across the business. These range from physical distancing to travel restrictions, roster changes and team splits, to flexible working arrangements, rapid screening and personal hygiene controls. The financial impact thus far has been limited and we delivered a strong performance, particularly in iron ore and bauxite, demonstrating resilience of our business and ability to adapt in difficult conditions.

Key impacts to date on our markets, operations and workforce and our products are as follows:

- Changes to demand resulting in lower commodity prices, in particular, lower average realised prices achieved for copper, aluminium and diamonds. In the diamonds industry, with many countries restricting the movement of citizens and with shops being closed, there has been a significant disruption to the global demand for diamonds resulting in negative sales mix and volume impact.
- Volume impacts, both in response to market demand and in response to government directives. At Richards Bay Minerals (RBM), furnaces are gradually ramping up production following easing of restrictions in South Africa. We continued to focus on the optimisation of IOC product mix to match market demand, moving from pellet to concentrate. In Aluminium, in response to market conditions we have reduced the proportion of primary metal being produced as value-added products, which represented 40% of primary metal sold in the first half of 2020 (first half 2019: 54%).
- Changes to operating costs, including additional costs incurred to manage the impact on our assets (e.g. costs relating to controls such as cleaning, screening and roster changes) and the effect of favourable exchange rate and input cost movements.
- Capital expenditure is expected to be around US\$6 billion in 2020. This is a reduction in capital expenditure from our original guidance of US\$7 billion. This is due to a stronger US dollar against our major operating currencies and impact of COVID-19 on our operations.

While uncertainties continue to exist in our business environment, we are focused on our underlying resilience and ability to adapt in a fast-moving environment. Full details of initiatives taken to date can be found on our website.

Going concern

Management has prepared cash flow forecast scenarios that represent plausible downside scenarios to the business and global economy arising from the COVID-19 pandemic over the next 18 months, which have been reviewed by the directors. These forecasts demonstrate that the Group has sufficient cash, other liquid resources and undrawn credit facilities to enable the Group to meet its obligations as they fall due. As such the directors considered it appropriate to adopt the going concern basis of accounting in preparing the interim financial information.

Alternative performance measures

The Group presents certain Alternative performance measures (APMs), including underlying earnings, which are reconciled to directly comparable IFRS financial measures on pages 61 to 66 of this report but do not form part of these condensed consolidated interim financial statements. These APMs are used by management to assess the performance of the business and may therefore be useful to investors. They are not a substitute for the IFRS measures and should be considered supplementary to those measures.

Reconciliation with Australian Accounting Standards

The Group's financial statements have been prepared in accordance with IFRS as defined on page 35, which differs in certain respects from the version of IFRS that is applicable in Australia, referred to as Australian Accounting Standards ('AAS').

Prior to 1 January 2004, the Group's financial statements were prepared in accordance with UK GAAP. Under IFRS, goodwill on acquisitions prior to 1998, which was eliminated directly against equity in the Group's UK GAAP financial statements, has not been reinstated. This was permitted under the rules governing the transition to IFRS set out in IFRS 1. The equivalent Australian Standard, AASB 1, does not provide for the netting of goodwill against equity. As a consequence, shareholders' funds under AAS include the residue of such goodwill, which amounted to US\$380 million at 30 June 2020 (31 December 2019: US \$379 million).

Save for the exception described above, the Group's financial statements drawn up in accordance with IFRS are consistent with the requirements of AAS.

Impairment charges

	Six months ended 30 June 2020				Six months ended 30 June 2019
	Pre-tax US\$m	Taxation US\$m	Non-controlling interest US\$m	Net amount US\$m	Pre-tax US\$m
Aluminium – Pacific Aluminium	(489)	17	—	(472)	—
Aluminium – ISAL	(204)	(65)	—	(269)	(109)
Copper & Diamonds – Diavik	(441)	149	—	(292)	—
Copper & Diamonds – Oyu Tolgoi	—	—	—	—	(2,240)
Total impairment charge	(1,134)	101	—	(1,033)	(2,349)
Allocated as:					
Intangible assets	(4)				(1)
Property, plant and equipment	(1,011)				(2,348)
Investment in equity accounted units ('EAUs')	(119)				—
Total impairment charge	(1,134)				(2,349)
Comprising:					
Impairment charges of consolidated balances				(1,015)	(2,349)
Impairment charges related to EAUs (pre-tax)				(148)	—
Total impairment charges in the Rio Tinto financial information by business unit (page 67)				(1,163)	(2,349)
Taxation (including related to EAUs)				130	(16)
Non-controlling interests				—	1,506
Total impairment in the income statement				(1,033)	(859)

2020

Aluminium - Pacific Aluminium, Australia and New Zealand

On 9 July 2020, we announced the conclusion of the NZAS strategic review and gave Meridian Energy 14 months' notice for the termination of the power contract. As a result of the decision to wind-down operations an impairment trigger has been identified. The net present value of post-tax cash flows over the remaining life for this cash-generating unit was negative and therefore the non-current assets of the smelter have been fully impaired.

The high operating costs and challenging outlook for the aluminium industry has also resulted in impairment triggers being identified at the Bell Bay aluminium smelter in Tasmania, Australia and at Boyne Smelter in Queensland, Australia. Bell Bay has a power contract to 2025 with Hydro Tasmania and with the current market context the forecast net present value of cash flows over that period is negative. The property, plant and equipment of the Bell Bay smelter has therefore been fully impaired. The recoverable amount for our share of the Boyne Smelter cash-generating unit which also includes the Gladstone Power Station has been determined as US\$273 million based on post-tax cash flows expressed in real-terms and discounted at 6.6%. Accordingly our share of impairment after tax in the equity accounted unit is US\$119 million (US\$148 million pre-tax) related to the smelter and US\$26 million (US\$36 million pre-tax) related to the power station.

Aluminium - ISAL Smelter, Iceland

At 30 June 2019, the non-current assets of the ISAL cash-generating unit were tested for impairment and a pre-tax impairment charge of US\$109 million was recognised against the property, plant and equipment of the ISAL Smelter and our 53.3% interest in the Aluchemie anode plant to write the assets down to their then recoverable value.

The strategic review announced in February 2020 and the challenging market conditions have been identified as a further impairment trigger. The net present value of post-tax cash flows projected over the remaining life for this cash-generating unit does not support retaining any carrying value for the non-current assets of the cash-generating unit, which have therefore been fully impaired.

Impairment charges (continued)

Copper & Diamonds - Diavik, Canada

The COVID-19 pandemic has significantly disrupted the global demand for diamonds with many countries restricting the movement of citizens and closing retail outlets. Our 40% joint venture partner at the Diavik diamond mine filed for creditor protection in April 2020 and has since defaulted on its cash calls. Together these circumstances have been identified as an impairment trigger. The net present value of post-tax cash flows projected over the remaining life of the Diavik diamond mine to 2025 does not support retaining any carrying value for the property, plant and equipment and intangible assets of the cash generating unit, which have therefore been fully impaired.

2019

Copper and Diamonds - Oyu Tolgoi, Mongolia

On 16 July 2019 we announced that the first sustainable production from the Oyu Tolgoi underground project could be delayed by 16 to 30 months compared with the original feasibility study guidance in 2016. We also announced that development capital spend for the project may increase by between US\$1.2 billion and US\$1.9 billion in excess of the US\$5.3 billion previously disclosed. We identified these matters as an impairment trigger and prepared an assessment of the recoverable amount for the cash-generating unit (CGU) and used a fair value less cost of disposal (FVLCD) model, as prescribed by IAS 36 "Impairment of assets".

In arriving at a recoverable amount, as at 30 June 2019, we estimated post-tax cash flows expressed in real terms over the current life of mine plus anticipated future expansions, utilising mineral resources. The mineral resources incorporate almost two billion tonnes of ore, which contributes approximately 20% to the total recoverable amount. We discounted the cash flows using a post-tax discount rate of 8.3% expressed in real terms. Due to the inputs used, the recoverable amount of the Oyu Tolgoi CGU was classified as level 3 under the fair value hierarchy.

At 30 June 2019 we determined the recoverable amount to be US\$8.3 billion on a post-tax basis which resulted in a pre-tax impairment charge of US\$2.2 billion (100% basis). This was allocated to mining properties and the underground development assets under construction. The net adjustment to tax represented an increase to deferred tax assets of US\$320 million for the temporary difference corresponding to the impairment and a decrease in deferred tax assets of US\$359 million for tax losses that are now expected to expire without utilisation.

The post-tax impairment charge of US\$2.3 billion was allocated 66% to non-controlling interests with the remaining 34% to Rio Tinto shareholders (US\$0.8 billion) in proportion to the equity ownership interest in the project.

Acquisitions and disposals

Acquisitions

There were no material acquisitions during the six months ended 30 June 2020 or in the comparative six months ended 30 June 2019.

Disposals

There were no material disposals during the six months ended 30 June 2020 or in the comparative six months ended 30 June 2019.

During the six months to 30 June 2020, we received additional proceeds of US\$10 million in respect of our non-contingent royalty receivable from Yancoal Australia Limited. This related to the sale of Coal & Allied Industries Limited, which completed in 2017. In the comparative period to 30 June 2019, we received US \$20 million relating to the same transaction and proceeds of US\$26 million arising from working capital adjustments on the sale of the Hail Creek coal mine, which completed in 2018.

Prima facie tax reconciliation

	Six months ended 30 June 2020	Six months ended 30 June 2019
	US\$m	US\$m
Profit before taxation	5,279	5,186
Deduct: share of profit after tax of equity accounted units ^(a)	(198)	(208)
Add back: impairment after tax of investment in equity accounted unit ^(a)	119	—
Parent companies' and subsidiaries' profit before tax	5,200	4,978
Prima facie tax payable at UK rate of 19% (2019: 19%)	988	946
Higher rate of taxation on Australian underlying earnings	707	710
Impact of items excluded in arriving at underlying earnings ^(b) :		
– Impairment charges ^(c)	92	462
– Exchange and gains/losses on derivatives	18	(7)
– Losses from increases to closure estimates (non-operating and fully impaired sites)	(21)	—
– Other exclusions	—	5
Other tax rates applicable outside the UK and Australia on underlying earnings	(79)	(19)
Amounts (over)/under provided in prior years	(6)	92
Write-down of previously recognised deferred tax assets	12	—
Other items	117	66
Total taxation charge^(a)	1,828	2,255

- (a) This tax reconciliation relates to the Group's parent companies, subsidiaries and joint operations, and excludes equity accounted units. The Group's share of profit of equity accounted units is net of tax charges of US\$111 million (30 June 2019: US\$118 million). Impairment after tax of investment in equity accounting unit is net of tax credits of US\$29 million (30 June 2019: US\$nil).
- (b) The impact for each item includes the effect of tax rates applicable outside the UK.
- (c) The tax impact of impairments includes the write down of deferred tax assets at ISAL and NZAS and non-recognition of deferred tax on those impairments. The tax impact also includes recognition at local tax rates of deferred tax assets arising on the impairments of Bell Bay, Gladstone Power Station and Diavik. In the comparative period to 30 June 2019, the tax impact of impairment includes the write down of deferred tax in respect of prior year tax losses in Mongolia and recognition of deferred tax on impaired assets. Refer to the Impairment charges note on pages 40 and 41.

Consolidated net debt

	Financing liabilities ^(b)			Other assets		Net debt
	Borrowings excluding overdrafts ^(a)	Lease Liabilities	Debt-related derivatives (included in Other financial liabilities/assets)	Cash/ overdrafts ^(b)	Other Investments ^(c)	
For the six months ended 30 June 2020	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m
Analysis of changes in consolidated net debt						
Opening balance	(12,806)	(1,309)	(147)	8,027	2,584	(3,651)
Foreign exchange adjustment	76	33	(61)	(21)	—	27
Cash movements excluding exchange movements	464	154	91	(1,752)	(84)	(1,127)
Other non-cash movements ^(d)	(323)	(53)	280	—	21	(75)
Closing balance	(12,589)	(1,175)	163	6,254	2,521	(4,826)

- (a) Borrowings excluding overdrafts (including lease liabilities) of US\$13,764 million at 30 June 2020 (31 December 2019: US\$14,115 million) differ from total borrowings and other financial liabilities of US\$14,118 million (31 December 2019: US\$14,713 million) on the balance sheet as they exclude overdrafts of US\$15 million (31 December 2019: nil), other current financial liabilities of US\$57 million (31 December 2019: US\$350 million) and other non-current financial liabilities of US\$282 million (31 December 2019: US\$248 million).
- (b) At 30 June 2020 there were overdrafts of US\$15 million classified as financial liabilities. There were no overdrafts included in the opening balance at 1 January 2020.
- (c) Other investments comprise US\$2,521 million (31 December 2019: US\$2,584 million) of highly liquid financial assets held in managed investment funds classified as held at fair value through profit or loss.
- (d) Other movements in lease liabilities include the net impact of additions, modifications and terminations during the period.

Provisions and post-retirement benefits

	Pensions and post-retirement healthcare	Other employee entitlements	Close-down and restoration/environmental (a)(b)	Other	Total
For the six months ended 30 June 2020	US\$m	US\$m	US\$m	US\$m	US\$m
Opening balance	2,714	354	11,090	945	15,103
Adjustment on currency translation	(81)	(6)	(194)	(17)	(298)
Adjustments to property, plant and equipment:					
– changes in estimate	—	—	72	12	84
Charged/(credited) to profit:					
– increases to existing and new provisions	97	52	275	80	504
– decreases to existing provisions and unused amounts reversed	—	(6)	(94)	(68)	(168)
– amortisation of discount	—	—	214	2	216
Utilised in the period	(97)	(26)	(155)	(73)	(351)
Actuarial losses recognised in equity	345	—	—	—	345
Transfers and other movements	—	—	(2)	(30)	(32)
Closing balance	2,978	368	11,206	851	15,403
Balance sheet analysis:					
Current	71	282	612	515	1,480
Non-current	2,907	86	10,594	336	13,923
Total	2,978	368	11,206	851	15,403

- (a) Provisions of US\$11,206 million (31 December 2019: US\$11,090 million) for close-down and restoration costs and environmental clean-up obligations are based on estimates of future cash flows. These estimates have been discounted to their present value at a real discount rate of 2% per annum. If the discount rate was decreased by 1% then the provision would be US\$2.1 billion higher, of which approximately US\$1.9 billion would be capitalised within 'Property, plant and equipment' and US\$0.2 billion would be charged to the income statement.
- (b) Close-down and restoration/environmental liabilities at 30 June 2020 have not been adjusted for amounts of US\$473 million (31 December 2019: US\$166 million) arising from closure related receivables from the co-owners of the Diavik Joint Venture, the ERA trust fund and other financial assets held for the purposes of meeting these obligations.

Financial instruments disclosures

Except where stated, the information given below relates to the financial instruments of the parent companies and their subsidiaries and joint operations, and excludes those of equity accounted units.

Fair values disclosure of financial instruments

The carrying amounts and fair values of all of the Group's financial instruments which are not carried at an amount which approximates their fair value at 30 June 2020 and 31 December 2019 are shown in the following table. The fair values of the Group's cash and loans to equity accounted units approximate their carrying values as a result of their short maturity or because they carry floating rates of interest.

	30 June 2020		31 December 2019	
	Carrying value US\$m	Fair value US\$m	Carrying value US\$m	Fair value US\$m
Current borrowings and bank overdrafts	(313)	(313)	(720)	(720)
Non-current borrowings	(12,291)	(14,413)	(12,086)	(13,958)
Total	(12,604)	(14,726)	(12,806)	(14,678)

Borrowings with a carrying value of US\$7.5 billion (31 December 2019: US\$7.7 billion) relate to listed bonds. These have a fair value of US\$9.2 billion (31 December 2019: US\$9.1 billion) calculated using level 1 observable market price inputs.

Borrowings with a carrying value of US\$4.2 billion (31 December 2019: US\$4.2 billion) relate to Oyu Tolgoi project finance and have a fair value of US\$4.7 billion (31 December 2019: US\$4.7 billion). We use different valuation inputs for the pre-and post-completion phases to reflect Rio Tinto's completion support guarantee during the pre-completion phase. To measure the fair value of the project finance pre-completion our valuation input includes market yield over the pre-completion period, the variability of which we consider a reasonable indicator of fair value movements on amounts outstanding under the project finance facility. Post-completion, we estimate the fair value with reference to the annual interest rate on each tranche of the facility, and after considering factors that could indicate a change in the credit assessment of Oyu Tolgoi LLC as a counterparty to project finance. These factors include in-country risk relating to the Oyu Tolgoi project, and the assumed date of transition from pre-completion to post-completion. These valuation inputs are considered to be level 3. Transition from pre-completion to post-completion is determined by a set of tests for both completion of physical infrastructure and the ability to extract and process ore of defined grades over a defined period.

The remaining borrowings have a fair value measured by discounting estimated cash flows with an applicable market quoted yield and are categorised as level 2 in the fair value hierarchy.

New interest rate swaps and debt maturity

During the six months to 30 June 2020 we have entered into US\$1.5 billion of interest rate swaps to convert the remaining fixed Alcan debt to floating interest rates. This is in accordance with our floating interest rate policy. We have put these swaps into fair value hedge relationships with the respective tranches of debt.

The main sources of ineffectiveness for the Group's fair value hedges include changes in the timing of the cash flows of the hedging instrument compared to the underlying hedged item, and changes in the credit risk of parties to the hedging relationships. The total ineffectiveness recorded in the income statement by the Group is not material.

At 30 June 2020 the fair value of our interest rate and cross currency interest rate swaps are US\$444 million (31 December 2019: US\$151 million) asset and US\$281 million (31 December 2019: US\$298 million) liability, respectively. These are included within 'Other financial assets' and 'Borrowings and Other financial liabilities'.

Financial instruments disclosures (continued)

The effective interest rate of our borrowings, impacted by swaps, are summarised below. All nominal values are fully hedged unless otherwise stated:

	Nominal value	Weighted average interest rate after swaps	Swap maturity	Carrying Value at 30 June 2020	Carrying Value at 31 December 2019
Borrowings in a hedge relationship	US\$m		Year	US\$m	US\$m
Rio Tinto Finance plc Euro Bonds 2.0% due 2020 ^(a)	526	3 month LIBOR +1.35%	2020	—	455
Rio Tinto Finance plc Euro Bonds 2.875% due 2024	546	3 month LIBOR +1.64%	2024	510	508
Rio Tinto Finance (USA) Limited Bonds 3.75% 2025	1,200	3 month LIBOR +1.39%	2025	1,313	1,229
Rio Tinto Finance (USA) Limited Bonds 7.125% 2028	750	3 month LIBOR +3.27%	2028	1,033	958
Alcan Inc. Debentures 7.25% due 2028	100	3 month LIBOR +5.43%	2024	109	104
Rio Tinto Finance plc Sterling Bonds 4.0% due 2029	807	3 month LIBOR +2.65%	2024	655	647
Alcan Inc. US\$400m Debentures 7.25% due 2031 ^(b)	400	3 month LIBOR +5.72%	2025	442	—
Alcan Inc. US\$750m Global Notes 6.125% due 2033 ^(b)	750	3 month LIBOR +5.67%	2025	747	—
Alcan Inc. US\$300m Global Notes 5.75% due 2035 ^(b)	300	3 month LIBOR +5.18%	2025	293	—
Rio Tinto Finance (USA) Limited Bonds 5.2% 2040	1,150	3 month LIBOR +3.79%	2022	1,179	1,137
Rio Tinto Finance (USA) plc Bonds 4.75% 2042	500	3 month LIBOR +3.42%	2023	506	483
Rio Tinto Finance (USA) plc Bonds 4.125% 2042	750	3 month LIBOR +2.83%	2023	750	716

- (a) On 11 May 2020 we repaid, in full, the nominal amount of the Rio Tinto Finance plc Euro Bonds 2% due 2020.
- (b) In 2020 we entered into new swaps to convert the interest payable in relation to these bonds from fixed to floating rates.

Valuation hierarchy of financial instruments carried at fair value on a recurring basis

The table below shows the financial instruments carried at fair value by valuation method in accordance with IFRS 9 at 30 June 2020:

	Total US\$m	Level 1 ^{(a)(i)} US\$m	Level 2 ^{(b)(i)} US\$m	Level 3 ^{(c)(i)} US\$m	Held at amortised cost US\$m
Assets					
Cash and cash equivalents ^(d)	6,269	4,338	—	—	1,931
Investments in equity shares and funds	51	20	—	31	—
Other investments, including loans ^(e)	2,819	2,544	—	198	77
Trade and other receivables ^(f)	2,314	7	892	—	1,415
	11,453	6,909	892	229	3,423
Derivatives (net)					
Forward contracts: designated as hedges ^(g)	207	—	4	203	—
Forward contracts and option contracts, not designated as hedges ^(g)	152	3	16	133	—
Derivatives related to net debt ^(h)	163	—	163	—	—
Liabilities					
Trade and other financial payables	(5,019)	—	(29)	—	(4,990)
Total	6,956	6,912	1,046	565	(1,567)

Financial instruments disclosures (continued)

The table below shows the financial instruments carried at fair value by valuation method in accordance with IFRS 9 at 31 December 2019:

	Total US\$m	Level 1 ^{(a)(i)} US\$m	Level 2 ^{(b)(i)} US\$m	Level 3 ^{(c)(i)} US\$m	Held at amortised cost US\$m
Assets					
Cash and cash equivalents ^(d)	8,027	5,320	—	—	2,707
Investments in equity shares and funds	61	26	—	35	—
Other investments, including loans and pooled funds ^(e)	2,839	2,607	—	211	21
Trade and other financial receivables ^(f)	2,938	15	1,122	—	1,801
	13,865	7,968	1,122	246	4,529
Derivatives (net)					
Forward contracts and option contracts: designated as hedges ^(g)	42	—	—	42	—
Forward contracts and option contracts, not designated as hedges ^(g)	120	—	25	95	—
Derivatives related to net debt ^(h)	(147)	—	(147)	—	—
Liabilities					
Trade and other financial payables	(5,398)	—	(57)	—	(5,341)
Total	8,482	7,968	943	383	(812)

- (a) Valuation is based on unadjusted quoted prices in active markets for identical financial instruments.
- (b) Valuation is based on inputs that are observable for the financial instruments; which include quoted prices for similar instruments or identical instruments in markets which are not considered to be active, or inputs, either directly or indirectly based on observable market data.
- (c) Valuation is based on inputs for the asset or liability that are not based on observable market data (unobservable inputs).
- (d) Cash and cash equivalents include money market funds which are treated as fair value through profit or loss ('FVPL') under IFRS 9 with the fair value movements going into finance income.
- (e) Other investments, including loans and pooled funds, comprise: cash deposits in rehabilitation funds, government bonds, managed investment funds and royalties. The royalties receivable are valued based on expected mine production as well as forward commodity prices.
- (f) Trade receivables include provisionally priced invoices. The related Revenue is initially based on forward market selling prices for the quotation periods stipulated in the contracts with changes between the provisional price and the final price are recorded separately within Other revenue. The selling price can be measured reliably for the Group's products, as it operates in active and freely traded commodity markets. At 30 June 2020, US\$780 million (31 December 2019: US\$1,040 million) of provisionally priced receivables were recognised.
- (g) Level 3 derivatives mainly consist of derivatives embedded in electricity purchase contracts linked to the LME with terms expiring between 2025 and 2029 (31 December 2019: 2025 and 2030). The embedded derivatives are measured using discounted cash flows and option model valuation techniques.

Financial instruments disclosures (continued)

- (h) Interest rate and currency interest rate swaps are valued using applicable market quoted swap yield curves adjusted for relevant basis and credit default spreads. Currency interest rate swap valuations also use market quoted foreign exchange rates. A discounted cash flow approach is used to derive fair value from these inputs applied to the underlying cash flows.
- (i) There were no material transfers between Level 1 and Level 2 or between Level 2 and Level 3 for the six months to 30 June 2020 or the year to 31 December 2019.

Level 3 Financial instruments

The table below shows the summary of changes in the fair value of the Group's Level 3 financial assets and financial liabilities for the six months to 30 June 2020.

	30 June 2020 US\$m
Level 3 Financial assets and liabilities	
Opening balance	383
Currency translation adjustments	(12)
Total realised losses included in:	
– net operating costs	(17)
Total unrealised gains included in:	
– net operating costs	48
Total unrealised gains transferred into other comprehensive income	175
Disposals/maturity of financial instruments	(12)
Closing balance	565
Total gains included in the income statement for assets and liabilities held at period end	31

Sensitivity analysis in respect of level 3 financial instruments

Forward contracts and options whose fair value is determined using unobservable inputs are calculated using appropriate discounted cash flow and option model valuation techniques.

To value the long-term aluminium embedded derivatives, we use unobservable inputs when the term of the derivative extends beyond observable market prices. In 2020 and 2019, changing the level 3 inputs to reasonably possible alternative assumptions does not change the fair value significantly, taking into account the expected remaining term of contracts. The fair value of the long-term aluminium embedded derivatives is US\$326 million at 30 June 2020 (31 December 2019: US\$120 million),

We also have royalty receivables, with a carrying value of US\$111 million (31 December 2019: US\$124 million), arising from the sale of our coal assets in prior periods. These are classified as 'Other investments, including loans' within 'Other financial assets'. The fair values are determined using level 3 unobservable inputs.

The main unobservable input is the long-term coal price used over the life of the royalty receivable. A 15% increase in the coal spot price would result in a US\$177 million increase (31 December 2019: US\$214 million increase) in the carrying value. A 15% decrease in the coal spot price would result in a US\$44 million decrease (31 December 2019: US\$57 million decrease) in the carrying value. We have used a 15% assumption to calculate our exposure as it represents the annual coal price movement that we deem to be reasonably probable (on an annual basis over the long run).

Segmental information

The Rio Tinto financial information by business unit on pages 67 to 70 satisfies the disclosure requirements of IFRS 8 'Operating Segments' for interim financial statements by showing our product group metrics. We also provide additional voluntary business unit disclosure which the Group considers is useful to the users of the financial statements.

Geographical analysis (by destination)

	Six months ended 30 June 2020	Six months ended 30 June 2019	Six months ended 30 June 2020	Six months ended 30 June 2019
	%	%	US\$m	US\$m
Consolidated sales revenue by destination^(a)				
China	54.9 %	49.8 %	10,633	10,321
Asia (excluding China and Japan)	11.1 %	11.2 %	2,155	2,331
United States of America	12.4 %	13.7 %	2,392	2,834
Japan	8.3 %	8.7 %	1,598	1,793
Europe (excluding UK)	5.9 %	7.1 %	1,143	1,466
Canada	2.9 %	4.0 %	585	821
Australia	1.8 %	1.6 %	351	325
UK	0.6 %	0.5 %	112	115
Other countries	2.1 %	3.4 %	393	716
Consolidated sales revenue	100.0 %	100.0 %	19,362	20,722

- (a) Consolidated sales revenue by geographical destination is based on the ultimate country of destination of the product, if known. If the eventual destination of the product sold through traders is not known then revenue is allocated to the location of the product at the time when control is transferred. Rio Tinto is domiciled in both the UK and Australia.

Product analysis (by revenue type)

Consolidated sales revenue by product	Six months ended 30 June 2020			Six months ended 30 June 2019		
	Revenue from contracts with customers US\$m	Other revenue ^(a) US\$m	Consolidated sales revenue US\$m	Revenue from contracts with customers ^(b) US\$m	Other revenue ^(a) US\$m	Consolidated sales revenue ^(b) US\$m
Iron ore ^(b)	12,182	82	12,264	11,534	543	12,077
Aluminium, Alumina and Bauxite	4,454	(19)	4,435	5,057	(29)	5,028
Copper	642	(9)	633	1,061	11	1,072
Industrial minerals	991	(7)	984	1,117	(6)	1,111
Gold	214	4	218	393	—	393
Diamonds	141	—	141	271	—	271
Uranium	149	—	149	147	—	147
Other ^(b)	543	(5)	538	622	1	623
Consolidated sales revenue	19,316	46	19,362	20,202	520	20,722
Share of equity accounted unit sales and intra-subsidiary/equity accounted unit sales			971			1,087
Gross sales revenue			20,333			21,809

- (a) Certain of the Group's products may be provisionally priced at the date revenue is recognised based on forward rates. The subsequent changes in value of provisionally priced receivables through to settlement is classified as 'Other revenue' above.
- (b) The 30 June 2019 comparatives have been amended to correct the allocation of sales revenue by product. The most significant impacts are an increase in Other product revenues of US\$37 million and a decrease in Iron ore revenues of US\$37 million. For 30 June 2020 Uranium product sales have been separately presented from Other revenues along with the comparative. This was following consideration of the materiality of the Other category.

Other disclosures

Capital commitments at 30 June 2020

Capital commitments, excluding the Group's share of joint venture capital commitments, were US\$3,649 million (31 December 2019: US\$4,053 million). Capital commitments include open purchase orders for managed operations and expenditure on major projects authorised to date by the Rio Tinto Investment Committee for non-managed operations. On a legally enforceable basis capital commitments would be approximately US\$1.3 billion (31 December 2019: US\$0.9 billion) as many of the contracts relating to the Group's projects have various cancellation clauses.

The Group's share of joint venture capital commitments was US\$85 million (31 December 2019: US\$93 million).

Contingent liabilities (subsidiaries and joint operations)

Contingent liabilities, indemnities and other performance guarantees were US\$155 million at 30 June 2020 (31 December 2019: US\$204 million).

Indemnities and other performance guarantees represent the potential outflow of funds from the Group for the satisfaction of obligations including those under contractual arrangements (for example undertakings related to supplier agreements) not provided for in the balance sheet, where the likelihood of the guarantees or indemnities being called is assessed as possible rather than probable or remote. There were no material contingent liabilities arising in relation to the Group's joint ventures and associates.

In October 2017, Rio Tinto announced that it had been notified by the U.S. Securities and Exchange Commission (SEC) that the SEC had filed a complaint in relation to Rio Tinto's disclosures and timing of the impairment of Rio Tinto Coal Mozambique (RTCM). The impairment was reflected in Rio Tinto's 2012 year-end accounts. The SEC alleges that Rio Tinto, a former chief executive, Tom Albanese, and a former chief financial officer, Guy Elliott, committed violations of the antifraud, reporting, books and records and internal control provisions of the federal securities law by not accurately disclosing the value of RTCM and not impairing it when Rio Tinto published its 2011 year-end accounts in February 2012 or its 2012 interim results in August 2012. In June 2019, the court dismissed an associated US class action on behalf of securities holders. The dismissal is being appealed by the securities holders.

In March 2018, the Australian Securities and Investments Commission (ASIC) filed civil proceedings in the NSW District Registry of the Federal Court of Australia against Rio Tinto Limited, Albanese, and Elliott. On 1 May 2018, ASIC expanded its proceedings. ASIC alleges that Rio Tinto committed violations of the disclosure, accounting, and misleading or deceptive conduct provisions of the Corporations Act by making misleading or deceptive statements related to RTCM in its 2011 Annual report and its 2012 interim financial statements, not complying with accounting standards in respect of its 2012 interim financial statements, and not disclosing an impairment of RTCM in its 2012 interim financial statements. ASIC further alleges Albanese and Elliott breached their duties as directors or officers, and failed to take all reasonable steps to comply with relevant accounting requirements.

Rio Tinto believes that the SEC case and the ASIC proceedings are unwarranted and will defend the allegations vigorously.

In addition, Rio Tinto continues to co-operate fully with relevant authorities in connection with their investigations in relation to contractual payments totalling US\$10.5 million made to a consultant who had provided advisory services in 2011 on the Simandou project in Guinea. In August 2018, the court dismissed a related US class action commenced on behalf of securities holders.

The outcomes of these matters remain uncertain, but they could ultimately expose the Group to material financial cost. The board is giving these matters its full and proper attention and a dedicated board committee continues to monitor the progress of these matters, as appropriate.

Other disclosures (continued)

The Group has not established provisions for certain additional legal claims in cases where we have assessed that a payment is either not probable or cannot be reliably estimated. A number of Group companies are, and will likely continue to be, subject to various legal proceedings and investigations that arise from time to time. As a result, the Group may become subject to substantial liabilities that could affect our business, financial position and reputation. Litigation is inherently unpredictable and large judgements may at times occur. The Group may incur, in the future, judgements or enter into settlements of claims that could lead to material cash outflows. We do not believe that any of these proceedings will have a materially adverse effect on our financial position.

Related party matters

Purchases and sales relate largely to amounts charged by equity accounted units for toll processing of alumina and purchases of bauxite and aluminium. Details of the Group's principal equity accounted units are given in the 2019 Annual report.

	Six months ended 30 June 2020	Six months ended 30 June 2019
	US\$m	US\$m
Income statement items		
Purchases from equity accounted units	(519)	(529)
Sales to equity accounted units	119	141
Cash flow statement items		
Dividends from equity accounted units	183	318
Net funding of equity accounted units	(14)	(12)
	30 June 2020	31 December 2019
	US\$m	US\$m
Balance sheet items		
Investments in equity accounted units ^(a)	3,849	3,971
Loans to equity accounted units	39	39
Trade and other receivables: amounts due from equity accounted units	231	259
Trade and other payables: amounts due to equity accounted units	(228)	(271)

(a) Investments in equity accounted units include quasi equity loans.

Rio Tinto plc has provided a number of guarantees in relation to various pension funds. Subject to certain conditions, Rio Tinto plc would pay any contributions due from Group companies participating in these funds in the event that the companies fail to meet their contribution requirements.

Other disclosures (continued)

Summary financial information for subsidiaries that have non-controlling interests that are material to the Group

This summarised financial information is shown on a 100% basis. It represents the amounts shown in the subsidiaries' financial statements prepared in accordance with IFRS under Group accounting policies, including fair value adjustments, and before intercompany eliminations

	Iron Ore Company of Canada 2020 US\$m	Iron Ore Company of Canada 2019 US\$m	Energy Resources of Australia 2020 US\$m	Energy Resources of Australia 2019 US\$m	Turquoise Hill^{(a)(b)(c)} 2020 US\$m	Turquoise Hill ^{(a)(b)(c)} 2019 US\$m
Income statement summary for six months ended 30 June						
Revenue	1,011	1,027	108	118	409	735
Profit/(loss) after tax	257	260	27	36	(23)	(2,054)
– attributable to non-controlling interests	106	108	6	11	(89)	(1,413)
– attributable to Rio Tinto	151	152	21	25	66	(641)
Other comprehensive (loss)/income	(91)	51	22	1	(2)	1
Total comprehensive income/(loss)	166	311	49	37	(25)	(2,053)
	30 June 2020 US\$m	31 December 2019 US\$m	30 June 2020 US\$m	31 December 2019 US\$m	30 June 2020 US\$m	31 December 2019 US\$m
Balance sheet summary as at:						
Non-current assets	2,397	2,585	393	76	10,155	9,589
Current assets	741	610	270	258	1,793	2,449
Current liabilities	(394)	(532)	(131)	(127)	(457)	(493)
Non-current liabilities	(847)	(927)	(428)	(462)	(4,375)	(4,405)
Net assets/(liabilities)	1,897	1,736	104	(255)	7,116	7,140
– attributable to non-controlling interests	787	718	19	—	2,240	2,369
– attributable to Rio Tinto	1,110	1,018	85	(255)	4,876	4,771
	2020 US\$m	2019 US\$m	2020 US\$m	2019 US\$m	2020 US\$m	2019 US\$m
Cash flow statement summary for six months ended 30 June						
Cash flow from operations	403	509	17	23	29	287
Dividends paid to non-controlling interests	—	(52)	—	—	—	—

- Turquoise Hill Resources Ltd holds a controlling interest in Oyu Tolgoi LLC ("OT").
- Under the terms of the project finance facility held by OT, there are certain restrictions on the ability of OT to make shareholder distributions.
- Since 2011, Turquoise Hill has funded common share investments in OT on behalf of Erdenes Oyu Tolgoi LLC ("Erdenes"). In accordance with the Amended and Restated Shareholders Agreement dated 8 June 2011, such funded amounts earn interest at an effective annual rate of LIBOR plus 6.5% and are repayable to them via a pledge over Erdenes' share of future OT common share dividends. Erdenes also has the right to reduce the outstanding balance by making payments directly to Turquoise Hill. Common share investments funded on behalf of Erdenes are recorded as a reduction to the net carrying value of non-controlling interests. As at 30 June 2020, the cumulative amount of such funding was US\$1,327 million (31 December 2019: US\$1,241 million), excluding accrued interest of US\$734 million (31 December 2019: US\$655 million) relating to this funding.

Other disclosures (continued)

Summary financial information for subsidiaries that have non-controlling interests that are material to the Group (continued)

	Robe River Mining Co Pty	Robe River Mining Co Pty	Other companies and eliminations ^(d)	Other companies and eliminations ^(d)	Robe River	Robe River
	2020	2019	2020	2019	2020	2019
	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m
Income statement summary for six months ended 30 June						
Revenue	734	614	851	716	1,585	1,330
Profit after tax	403	344	424	338	827	682
– attributable to non-controlling interests	158	134	—	—	158	134
– attributable to Rio Tinto	245	210	424	338	669	548
Other comprehensive loss	(88)	(18)	(38)	(11)	(126)	(29)
Total comprehensive income	315	326	386	327	701	653
	30 June 2020	Adjusted ^(e) 31 December 2019	30 June 2020	Adjusted ^(e) 31 December 2019	30 June 2020	Adjusted ^(e) 31 December 2019
	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m
Balance sheet summary as at:						
Non-current assets ^(e)	2,979	2,945	3,673	3,687	6,652	6,632
Current assets ^(e)	1,124	1,161	2,668	2,531	3,792	3,692
Current liabilities ^(e)	(705)	(204)	(859)	(303)	(1,564)	(507)
Non-current liabilities ^(e)	(365)	(376)	(3,495)	(4,050)	(3,860)	(4,426)
Net assets	3,033	3,526	1,987	1,865	5,020	5,391
– attributable to non-controlling interests	1,210	1,404	—	—	1,210	1,404
– attributable to Rio Tinto	1,823	2,122	1,987	1,865	3,810	3,987
	2020	2019	2020	2019	2020	2019
	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m
Cash flow statement summary for six months ended 30 June						
Cash flow from operations	665	528	1,066	920	1,731	1,448
Dividends paid to non-controlling interests	(211)	—	—	—	(211)	—

(d) "Other companies and eliminations" includes North Mining Limited (a wholly-owned subsidiary of the Group which accounts for its interest in Robe River) and goodwill of US\$342 million at 30 June 2020 (31 December 2019: US\$349 million) that arose on the Group's acquisition of its interest in Robe River.

(e) The 31 December 2019 comparative has been adjusted to more appropriately classify certain intercompany balances.

Other disclosures (continued)

Summary information for joint ventures that are material to the Group

This summarised financial information is shown on a 100% basis. It represents the amounts shown in the joint ventures' financial statements prepared in accordance with IFRS under Group accounting policies, including fair value adjustments and amounts due to and from Rio Tinto.

	Minera Escondida Ltda 2020 US\$m	Minera Escondida Ltda 2019 US\$m	Sohar Aluminum Co. L.L.C. 2020 US\$m	Sohar Aluminum Co. L.L.C. 2019 US\$m
Income statement summary for six months ended 30 June				
Revenue	3,137	3,537	325	325
Depreciation and amortisation	(797)	(790)	(55)	(60)
Other operating costs	(1,243)	(1,640)	(225)	(220)
Operating profit	1,097	1,107	45	45
Finance expense	(70)	(80)	(15)	(15)
Income tax	(370)	(387)	(5)	(5)
Profit after tax	657	640	25	25
Other comprehensive loss	(27)	—	—	—
Total comprehensive income	630	640	25	25
Balance sheet summary as at:				
	30 June 2020 US\$m	31 December 2019 US\$m	30 June 2020 US\$m	31 December 2019 US\$m
Non-current assets	12,004	12,450	2,990	3,045
Current assets	2,393	2,250	250	290
Current liabilities	(1,547)	(1,827)	(185)	(205)
Non-current liabilities	(4,540)	(4,670)	(745)	(845)
Net assets	8,310	8,203	2,310	2,285
Assets and liabilities above include:				
– cash and cash equivalents	533	603	20	20
– current financial liabilities	(783)	(807)	(110)	(110)
– non-current financial liabilities	(2,217)	(2,380)	(575)	(675)
Cash flow statement summary for six months ended 30 June				
	2020 US\$m	2019 US\$m	2020 US\$m	2019 US\$m
Dividends received from joint venture (Rio Tinto share)	183	315	—	—

Events after the balance sheet date

There were no significant events identified after the balance sheet date.

Directors' declaration

Directors' statement of responsibility

In the directors' opinion:

The condensed consolidated interim financial statements on pages 27 to 55 including the notes have been prepared in accordance with IAS 34 'Interim Financial Reporting' as adopted by the European Union, the Disclosure Guidance and Transparency Rules sourcebook ('DTR') of the Financial Conduct Authority in the United Kingdom, applicable accounting standards and the Australian Corporations Act 2001 as modified by an order of the Australian Securities and Investments Commission issued on 24 July 2020, using the most appropriate accounting policies for Rio Tinto's business and supported by reasonable and prudent judgements.

The condensed consolidated interim financial statements give a true and fair view of the Rio Tinto Group's financial position as at 30 June 2020 and of its performance, as represented by the results of its operations, comprehensive income and expense and its cash flows for the six months then ended. There are reasonable grounds to believe that each of the Rio Tinto Group, Rio Tinto Limited and Rio Tinto plc will be able to pay its debts as and when they become due and payable.

The interim management report includes a fair review of the information required by DTR 4.2.7R and DTR 4.2.8R, namely:

- an indication of important events that have occurred during the first six months and their impact on the condensed set of consolidated financial statements, and a description of the principal risks and uncertainties for the remaining six months of the financial year; and
- material related-party transactions in the first six months and any material changes in the related-party transactions described in the last annual report.

Signed in accordance with a resolution of the Board of Directors.

Jean-Sébastien Jacques

Chief executive
29 July 2020

Simon Thompson

Chairman
29 July 2020

Independent Auditors' Review Reports of KPMG LLP ("KPMG UK") to Rio Tinto plc and of KPMG ("KPMG Australia") to the members of Rio Tinto Limited

Conclusions

For the purposes of these reports, the terms 'we' and 'our' denote KPMG UK in relation to UK responsibilities and reporting obligations to Rio Tinto plc, and KPMG Australia in relation to Australian responsibilities and reporting obligations to the members of Rio Tinto Limited.

We have reviewed the accompanying interim financial information ("Interim Financial Statements") in the Interim Results 2020 ("Interim Report") of the Rio Tinto Group ('the Group') as at and for the six months ended 30 June 2020, which comprises the:

- Group income statement;
- Group statement of comprehensive income;
- Group cash flow statement;
- Group balance sheet;
- Group statement of changes in equity; and
- the explanatory notes to the Interim Financial Statements on pages 35 to 55 (including the Rio Tinto financial information by business unit on pages 67 to 70).

The Rio Tinto Group consists of Rio Tinto plc, Rio Tinto Limited and the entities they controlled at 30 June 2020 or during the six months ended 30 June 2020. KPMG Australia considers the Directors' Declaration to be part of the Interim Financial Statements when forming its conclusion.

Review conclusion by KPMG UK

Based on our review, nothing has come to our attention that causes us to believe that the Interim Financial Statements are not prepared, in all material respects, in accordance with International Accounting Standard 34 'Interim Financial Reporting' as adopted by the European Union ("IAS 34") and the Disclosure Guidance and Transparency Rules ("the DTR") of the UK's Financial Conduct Authority ("the UK FCA").

In conducting our review, KPMG UK has complied with the ethical and independence requirements of the UK FRC Ethical Standard as applied to listed public interest entities.

Review conclusion by KPMG Australia

Based on our review, which is not an audit, we have not become aware of any matter that makes us believe that the Interim Financial Statements, including the Directors' Declaration, are not in accordance with the Australian Corporations Act 2001 as amended by the Australian Securities and Investments Commission Order dated 24 July 2020, including:

- a. giving a true and fair view of the Group's financial position as at 30 June 2020 and of its performance for the six months ended on that date; and
- b. complying with International Accounting Standard 34 'Interim Financial Reporting' as adopted by the European Union ("IAS 34") and the Australian Corporations Regulations 2001.

As auditor of Rio Tinto Limited, ASRE 2410 requires that we comply with the ethical requirements relevant to the audit of the annual consolidated financial report. In conducting our review, KPMG Australia has complied with the independence requirements of the Australian Corporations Act 2001.

Scope of our reviews

KPMG UK conducted its review in accordance with International Standard on Review Engagements (UK and Ireland) 2410 'Review of Interim Financial Information Performed by the Independent Auditor of the Entity' issued by the Auditing Practices Board for use in the UK.

KPMG Australia conducted its review in accordance with Auditing Standard on Review Engagements ASRE 2410 Review of a Financial Report Performed by the Independent Auditor of the Entity ("ASRE 2410"), as issued by the Australian Auditing and Assurance Standards Board.

A review of the Interim Financial Statements consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. We read the other information that accompanies the Interim Financial Statements and is contained in the Interim Report, and consider whether it contains any apparent misstatements or material inconsistencies with the information in the Interim Financial Statements.

A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK) or Australian Auditing Standards and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Directors' responsibilities

The Interim Report is the responsibility of, and has been approved by, the Directors of Rio Tinto plc and the Directors of Rio Tinto Limited.

The Directors of Rio Tinto plc are responsible for:

- preparing the Interim Report in accordance with the DTR of the UK FCA; and
- the preparation of Interim Financial Statements in accordance with International Accounting Standard 34 'Interim Financial Reporting' as adopted by the European Union.

The Directors of Rio Tinto Limited are responsible for:

- the preparation of Interim Financial Statements, including the Directors' Declaration, that give a true and fair view in accordance with International Accounting Standard 34 'Interim Financial Reporting' as adopted by the European Union and the Australian Corporations Act 2001 as amended by the Australian Securities and Investments Commission Order dated 24 July 2020; and
- such internal control as the Directors of Rio Tinto Limited determine is necessary to enable the preparation of the Interim Financial Statements, including the Directors' Declaration, that give a true and fair view and are free from material misstatement, whether due to fraud or error.

Respective responsibilities of KPMG UK and KPMG Australia

KPMG UK's responsibility is to express to Rio Tinto plc a conclusion on the Interim Financial Statements based on its review.

KPMG Australia's responsibility is to express a conclusion on the Interim Financial Statements, including the Directors' Declaration, based on its review.

The purpose of our review work and to whom we owe our responsibilities

KPMG UK's report is made solely to Rio Tinto plc in accordance with the terms of KPMG UK's engagement to assist Rio Tinto plc in meeting the requirements of the DTR of the UK FCA. Our review work has been undertaken so that we might state to Rio Tinto plc those matters we are required to state to it in this report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than Rio Tinto plc for our review work, for this report, or for the conclusions we have reached.

KPMG Australia's report is made solely to Rio Tinto Limited's members, as a body, in accordance with the Australian Corporations Act 2001 as amended by the Australian Securities and Investments Commission Order dated 24 July 2020. Our review work has been undertaken so that we might state to the members of Rio Tinto Limited those matters we are required to state to them in this report, and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than Rio Tinto Limited's members, as a body, for our review work, for this report, or for the conclusion we have reached.

Stephen Oxley
for and on behalf of KPMG LLP
Chartered Accountants
London
29 July 2020

Trevor Hart
Partner
Perth
29 July 2020

KPMG
29 July 2020

KPMG, an Australian partnership and KPMG LLP, a UK limited liability partnership, are member firms of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

KPMG Australia's liability limited by a scheme approved under Professional Standards Legislation.

Lead Auditor's Independence Declaration under Section 307C of the Australian Corporations Act 2001

To the Directors of Rio Tinto Limited

I declare that, to the best of my knowledge and belief, in relation to the review of Rio Tinto Limited for the half-year ended 30 June 2020 there have been:

- a) no contraventions of the auditor independence requirements as set out in the *Australian Corporations Act 2001* in relation to the review; and
- b) no contraventions of any applicable code of professional conduct in relation to the review.

This declaration is in respect of Rio Tinto Limited and the entities it controlled during the financial period.

KPMG

Trevor Hart
Partner
Perth
29 July 2020

Liability limited by a scheme approved under Professional Standards Legislation

Alternative performance measures

The Group presents certain alternative performance measures ("APMs") which are reconciled to directly comparable IFRS financial measures below. These APMs are used by management to assess the performance of the business and provide additional information which investors may find useful. APMs are presented in order to give further insight into the underlying business performance of the Group's operations.

APMs are not consistently defined and calculated by all companies, including those in the Group's industry. Accordingly, these measures used by the Group may not be comparable with similarly titled measures and disclosures made by other companies. Consequently, these APMs should not be regarded as a substitute for the IFRS measures and should be considered supplementary to those measures.

The following tables present the Group's key financial measures not defined according to IFRS and a reconciliation between those APMs and their nearest respective IFRS measure.

APMs derived from the Income statement

The following income statement measures are used by the Group to provide greater understanding of the underlying business performance of its operations and to enhance comparability of reporting periods. They indicate how we are managing costs, productivity and generating revenue from our assets.

Gross sales revenue

Gross sales revenue includes the sales revenue of equity accounted units on a proportionately consolidated basis (after adjusting for sales to subsidiaries) in addition to consolidated sales. Consolidated sales revenue includes subsidiary sales to equity accounted units which are not included in gross sales revenue.

Gross revenue measures revenue on a basis that is comparable to our EBITDA metric.

	Six months ended 30 June 2020 US\$m	Six months ended 30 June 2019 US\$m
Consolidated sales revenue	19,362	20,722
Share of equity accounted unit sales and intra-subsidiary/equity accounted unit sales	971	1,087
Gross sales revenue	20,333	21,809

Alternative performance measures (continued)

EBITDA and Underlying EBITDA

Earnings before interest, tax, depreciation and amortisation ("EBITDA") of subsidiaries and the Group's share of EBITDA relating to equity accounted units represents profit before: tax, net finance items, depreciation, impairment and amortisation charged to the income statement in the period.

Underlying EBITDA represents profit before tax, net finance items, depreciation, impairment and amortisation excluding the EBITDA impact of the same items that are excluded in arriving at underlying earnings (defined below).

	Six months ended 30 June 2020 US\$m	Six months ended 30 June 2019 US\$m
Profit after tax	3,451	2,931
Less (profits)/losses attributable to non-controlling interests	(135)	1,199
Net earnings	3,316	4,130
Depreciation and amortisation in subsidiaries excluding capitalised depreciation	1,974	2,059
Impairment charges	1,134	2,349
Depreciation and amortisation in equity accounted units	314	299
Finance items in subsidiaries	650	298
Taxation in subsidiaries	1,828	2,255
Taxation and finance items in equity accounted units (excluding tax credit on EAU impairment)	170	176
Add back profits/(losses) attributable to non-controlling interests	135	(1,199)
EBITDA	9,521	10,367
Gains on embedded commodity derivatives not qualifying for hedge accounting (including exchange)	(53)	(42)
Change in closure estimates (non-operating and fully impaired sites)	172	—
Change in other exclusions	—	(75)
Underlying EBITDA	9,640	10,250

Underlying EBITDA margin

Underlying EBITDA margin is defined as Group underlying EBITDA divided by gross sales revenue.

	Six months ended 30 June 2020 US\$m	Six months ended 30 June 2019 US\$m
Underlying EBITDA	9,640	10,250
Gross sales revenue	20,333	21,809
EBITDA margin	47 %	47 %

Alternative performance measures (continued)

Underlying Earnings

Underlying earnings represent net earnings attributable to the owners of Rio Tinto, adjusted to exclude items which do not reflect the underlying performance of the Group's operations.

Exclusions from underlying earnings are those gains and losses, that individually, or in aggregate if of a similar type, are of a nature and size to require exclusion in order to provide additional insight into underlying business performance.

The following items are excluded from net earnings in arriving at underlying earnings in each period irrespective of the magnitude:

- Net gains/(losses) on disposal and consolidation of interests in businesses.
- Impairment charges and reversals.
- Profit/(loss) after tax from discontinued operations.
- Certain exchange and derivative gains and losses (as defined in the table below)

Reconciliation of underlying earnings to net earnings

Six months ended 30 June	Pre-tax US\$m	Taxation US\$m	Non- controlling interests US\$m	Net amount for six months ended 30 June 2020 US\$m	Net amount for six months ended 30 June 2019 US\$m
Underlying earnings	6,910	(2,026)	(134)	4,750	4,932
Items excluded from underlying earnings:					
Impairment charges ^(a)	(1,134)	101	—	(1,033)	(859)
Exchange and derivative gains/(losses):					
- Exchange (losses)/gains on net debt and intragroup balances ^(b)	(167)	17	1	(149)	94
- Losses on currency and interest rate derivatives not qualifying for hedge accounting ^(c)	(205)	38	—	(167)	(75)
- Gains on commodity derivatives not qualifying for hedge accounting ^(d)	47	(12)	(2)	33	19
Net losses from movements to closure estimates (non-operating and fully impaired sites) ^(e)	(172)	54	—	(118)	—
Other exclusions ^(f)	—	—	—	—	19
Total excluded from underlying earnings	(1,631)	198	(1)	(1,434)	(802)
Net earnings	5,279	(1,828)	(135)	3,316	4,130

Exclusions from underlying earnings relating to equity accounted units are stated after tax and included in the column 'Pre-tax'. Items (a) to (f) below are excluded from net earnings in arriving at underlying earnings.

- (a) Refer to Impairment charges note on pages 40 and 41.
- (b) Exchange (losses)/gains on external net debt and intragroup balances for the period ended 30 June 2020 comprise of post-tax foreign exchange losses on net debt of US\$170 million and post-tax gains of US\$21 million on intragroup balances, primarily as a result of the Australian and Canadian dollars both weakening against the US dollar.

Exchange gains on external net debt and intragroup balances for the period ended 30 June 2019 comprise post-tax foreign exchange gains on net debt of US\$47 million and post-tax gains of US \$47 million on intragroup balances, primarily as a result of the strengthening of the Canadian dollar against the US dollar.

Alternative performance measures (continued)

- (c) Valuation changes on currency and interest rate derivatives, which are ineligible for hedge accounting, other than those embedded in commercial contracts, and the currency revaluation of embedded US dollar derivatives contained in contracts held by entities whose functional currency is not the US dollar.
- (d) Valuation changes on commodity derivatives embedded in commercial contracts and other financial commodity derivatives, that are ineligible for hedge accounting, but for which there will be an offsetting change in future Group earnings.
- (e) In 2020 the pre-feasibility study for the Gove refinery closure was completed, resulting in an increase to the closure provision. As a non-operating asset, this increase has been recognised through the income statement. Also in 2020, the feasibility study for the Argyle mine closure was completed, resulting in a decrease to the closure provision. As the assets at Argyle had previously been fully impaired this decrease has been recognised through the income statement, in line with previous movements to the closure provision. These movements have been excluded from underlying earnings.
- (f) As a result of increased uncertainty over timing of production from the Oyu Tolgoi underground project (refer to Impairment charges note on page 41, we now expect to utilise low value stockpiles sooner than previously expected. The net realisable value provision held in respect of these inventories was written back as at 30 June 2019, resulting in post-tax income of US\$19 million (Rio Tinto share). This was excluded from underlying earnings, consistent with the related impairment charge recognised in the period ended 30 June 2019.

Basic underlying earnings per share

Basic underlying earnings per share is calculated as underlying earnings divided by the weighted average number of shares outstanding during the period.

On a per share basis, this allows the comparability of underlying financial performance adjusted to exclude items which do not reflect the underlying performance of the Group's operations.

	Six months ended 30 June 2020	Six months ended 30 June 2019
	US\$m	US\$m
Basic earnings per ordinary share	205.0c	252.5c
Items excluded from underlying earnings per share	88.7c	49.0c
Basic underlying earnings per ordinary share	293.7c	301.5c

Alternative performance measures (continued)

APMs derived from Cash flow statement

Capital expenditure

Capital expenditure comprises sustaining and development expenditure on property, plant and equipment, and on intangible assets. This is equivalent to 'Purchases of property, plant and equipment and intangible assets in the cash flow statement', hence, presented gross, before taking into account any cash received from disposals of property, plant and equipment and intangible assets.

This measure is used to support management's objective of effective and efficient capital allocation as we need to invest in existing assets in order to maintain and improve productive capacity, and in new assets to grow the business.

Free cash flow

Free cash flow is defined as net cash generated from operating activities minus purchases of property, plant and equipment and intangibles and payments of lease principal, plus proceeds from the sale of property, plant and equipment and intangible assets.

This measures the net cash returned by the business after the expenditure of sustaining and development capital. This cash can be used for shareholder returns, reducing debt and other investing/financing activities.

	Six months ended 30 June 2020	Six months ended 30 June 2019
	US\$m	US\$m
Net cash generated from operating activities	5,628	6,389
Less: Purchase of property, plant and equipment and intangible assets	(2,693)	(2,391)
Less: Lease principal payments	(154)	(136)
Add: Sales of property, plant and equipment and intangible assets	28	17
Free cash flow	2,809	3,879

APMs derived from the Balance sheet

Net debt

Net debt is total borrowings plus lease liabilities less cash and cash equivalents and other liquid investments, adjusted for derivatives related to net debt.

Net debt measures how we are managing our balance sheet and capital structure. Refer to Consolidated net debt note for the reconciliation on page 44.

Net gearing ratio

Net gearing ratio is defined as net debt divided by the sum of net debt and total equity at the end of each period. It demonstrates the degree to which the Group's operations are funded by debt versus equity.

	30 June 2020	31 December 2019
	US\$m	US\$m
Net debt	4,826	3,651
Net debt	4,826	3,651
Total equity	43,656	45,242
Total capital	48,482	48,893
Net gearing ratio	10 %	7 %

Alternative performance measures (continued)

Operating assets

The Group's Operating assets comprises of our share of net assets before deducting net debt.

This measure shows the net value of assets and liabilities used to generate profits

	30 June 2020	31 December 2019
	US\$m	US\$m
Equity attributable to owners of Rio Tinto	39,224	40,532
Add: Net debt	4,826	3,651
Operating assets	44,050	44,183

Return on capital employed

Return on capital employed ("ROCE") is defined as annualised underlying earnings excluding net interest divided by average capital employed (operating assets before net debt).

ROCE measures how efficiently we generate profits from investment in our portfolio of assets.

	30 June 2020	30 June 2019
	US\$m	US\$m
Net earnings	3,316	4,130
Items added back to derive underlying earnings (refer to page 63)	1,434	802
Underlying earnings	4,750	4,932
Adjusted for 'Net interest':		
Finance income per the income statement	(104)	(175)
Finance costs per the income statement	169	273
Tax on finance cost	(41)	(25)
Non-controlling interest share of net finance costs	(54)	(4)
Net interest cost in Equity Accounted Units (Rio Tinto Share)	16	20
Net interest	(14)	89
Adjusted underlying earnings	4,736	5,021
Annualised adjusted underlying earnings	9,472	10,042
Equity attributable to owners of Rio Tinto - beginning of the period	40,532	43,686
Net debt/(cash) - beginning of the period	3,651	(255)
Capital employed - beginning of the period	44,183	43,431
Equity attributable to owners of Rio Tinto - end of the period	39,224	39,565
Net debt - end of the period	4,826	4,885
Capital employed - end of the period	44,050	44,450
Average capital employed	44,117	43,941
Return on capital employed	21 %	23 %

Rio Tinto financial information by business unit

	Rio Tinto interest %	Gross revenue ^(a)		EBITDA ^(b)		Net earnings ^(c)	
		for the 6 months ended		for the 6 months ended		for the 6 months ended	
		30 June 2020	Adjusted ^(f) 30 June 2019	30 June 2020	Adjusted ^(f) 30 June 2019	30 June 2020	Adjusted ^(f) 30 June 2019
		US\$m	US\$m	US\$m	US\$m	US\$m	US\$m
Iron Ore							
Pilbara	(d)	11,246	11,039	7,702	7,528	4,628	4,548
Dampier Salt	68.4	112	128	25	38	8	14
Evaluation projects/other	(e)	252	41	(37)	(14)	(77)	(56)
Intra-segment	(e)	(145)	—	8	—	4	—
Total Iron Ore		11,465	11,208	7,698	7,552	4,563	4,506
Aluminium	(f)						
Bauxite		1,170	1,197	514	503	257	252
Alumina		1,096	1,485	115	370	38	169
Primary Metal		2,111	2,490	284	306	(59)	(14)
Pacific Aluminium		965	1,112	5	(54)	(50)	(96)
Intra-segment and other		(1,262)	(1,686)	33	27	24	20
Integrated operations		4,080	4,598	951	1,152	210	331
Other product group items		407	502	3	11	(3)	8
Product group operations		4,487	5,100	954	1,163	207	339
Evaluation projects/other		—	—	(29)	(36)	(14)	(24)
Total Aluminium		4,487	5,100	925	1,127	193	315
Copper & Diamonds							
Rio Tinto Kennecott	100.0	635	892	193	425	(12)	171
Escondida	30.0	941	1,061	564	568	204	213
Oyu Tolgoi and Turquoise Hill	(g)	409	735	89	306	11	52
Diamonds	(h)	141	271	(12)	69	(40)	(5)
Product group operations		2,126	2,959	834	1,368	163	431
Evaluation projects/other		(2)	—	(164)	(155)	(95)	(83)
Total Copper & Diamonds		2,124	2,959	670	1,213	68	348
Energy & Minerals							
Iron Ore Company of Canada	58.7	1,086	1,075	473	526	156	171
Rio Tinto Iron & Titanium	(i)	773	983	222	339	80	144
Rio Tinto Borates	100.0	293	304	83	98	47	54
Uranium	(j)	150	146	11	39	(1)	13
Product group operations		2,302	2,508	789	1,002	282	382
Simandou iron ore project	(k)	—	—	(2)	(6)	(1)	(3)
Evaluation projects/other		29	31	(48)	(42)	(49)	(38)
Total Energy & Minerals		2,331	2,539	739	954	232	341
Other operations	(l)	8	10	(10)	(88)	(28)	(80)
Inter-segment transactions		(82)	(7)	(18)	—	(6)	—
Product group total		20,333	21,809	10,004	10,758	5,022	5,430
Central pension costs, share-based payments and insurance				102	77	97	77
Restructuring, project and one-off costs				(72)	(175)	(53)	(119)
Central costs				(273)	(272)	(233)	(258)
Central exploration and evaluation				(121)	(138)	(97)	(109)
Net interest						14	(89)
Underlying EBITDA/earnings				9,640	10,250	4,750	4,932
Items excluded from underlying EBITDA/earnings				(119)	117	(1,434)	(802)
EBITDA/net earnings				9,521	10,367	3,316	4,130
Reconciliation to Group income statement							
Share of equity accounted unit sales and intra-subsiary/equity accounted unit sales		(971)	(1,087)				
Depreciation and amortisation in subsidiaries excluding capitalised depreciation				(1,974)	(2,059)		
Impairment charges				(1,163)	(2,349)		
Depreciation and amortisation in equity accounted units				(314)	(299)		
Taxation and finance items in equity accounted units				(141)	(176)		
Consolidated sales revenue/profit before finance items and taxation		19,362	20,722	5,929	5,484		

Rio Tinto financial information by business unit (continued)

	Rio Tinto interest %	Capital expenditure ^(m)		Depreciation and amortisation		Operating assets ⁽ⁿ⁾	
		for the 6 months ended		for the 6 months ended		As at	
		30 June 2020	30 June 2019	30 June 2020	30 June 2019	30 June 2020	31 December 2019
		US\$m	US\$m	US\$m	US\$m	US\$m	US\$m
Adjusted ^(f)							
Iron Ore							
Pilbara	(d)	1,179	663	831	817	14,430	13,865
Dampier Salt	68.4	6	6	9	9	158	152
Evaluation projects/other	(e)	—	—	—	—	163	2
Intra-segment	(e)	—	—	—	—	(58)	—
Total Iron Ore		1,185	669	840	826	14,693	14,019
Aluminium	(f)						
Bauxite		53	242	139	112	2,406	2,597
Alumina		74	114	59	96	1,885	2,009
Primary Metal		303	303	325	312	8,905	9,674
Pacific Aluminium		54	52	71	77	357	970
Intra-segment and other		(2)	—	—	—	817	780
Integrated operations		482	711	594	597	14,370	16,030
Other product group items		—	—	—	—	—	—
Product group operations		482	711	594	597	14,370	16,030
Evaluation projects/other		—	—	—	—	—	—
Total Aluminium		482	711	594	597	14,370	16,030
Copper & Diamonds							
Rio Tinto Kennecott	100.0	320	179	223	216	2,249	2,012
Escondida	30.0	118	147	239	237	2,869	2,871
Oyu Tolgoi and Turquoise Hill	(g)	548	651	104	109	7,569	6,780
Diamonds	(h)	20	23	58	77	24	195
Product group operations		1,006	1,000	624	639	12,711	11,858
Evaluation projects/other		3	2	2	3	161	152
Total Copper & Diamonds		1,009	1,002	626	642	12,872	12,010
Energy & Minerals							
Iron Ore Company of Canada	58.7	51	73	88	84	715	803
Rio Tinto Iron & Titanium	(i)	60	95	95	99	3,168	3,507
Rio Tinto Borates	100.0	16	17	25	30	511	525
Uranium	(j)	—	3	—	1	(5)	(363)
Product group operations		127	188	208	214	4,389	4,472
Simandou iron ore project	(k)	(2)	—	—	—	22	20
Evaluation projects/other		—	—	—	—	37	37
Total Energy & Minerals		125	188	208	214	4,448	4,529
Other operations	(l)	1	2	99	80	(288)	(83)
Inter-segment transactions						103	127
Product group total		2,802	2,572	2,367	2,359	46,198	46,632
Other items		22	25	39	36	(2,148)	(2,449)
Less: equity accounted units		(159)	(223)	(314)	(299)		
Total		2,665	2,374	2,092	2,096	44,050	44,183
Add back: Proceeds from disposal of property, plant and equipment		28	17				
Total capital expenditure per cash flow statement		2,693	2,391				
Less: Net debt						(4,826)	(3,651)
Equity attributable to owners of Rio Tinto						39,224	40,532

Notes to financial information by business unit

Business units are classified according to the Group's management structure.

The disclosures in this note include certain Alternative performance measures (APMs). For more information on the APMs used by the Group, including definitions and calculations, please refer to pages 61 to 66.

- (a) Gross sales revenue includes the sales revenue of equity accounted units on a proportionately consolidated basis (after adjusting for sales to subsidiaries) in addition to consolidated sales. Consolidated sales revenue includes subsidiary sales to equity accounted units which are not included in gross sales revenue.
 - (b) EBITDA of subsidiaries and the Group's share of EBITDA relating to equity accounted units represents profit before: tax, net finance items, depreciation and amortisation charged to the income statement in the period. Underlying EBITDA excludes the EBITDA impact of the same items that are excluded from underlying earnings.
 - (c) Represents profit after tax for the period attributable to the owners of the Rio Tinto Group. Business unit earnings are stated before finance items but after the amortisation of discount related to provisions. Earnings attributed to business units do not include amounts that are excluded in arriving at underlying earnings.
 - (d) Pilbara represents the Group's 100% holding in Hamersley, 50% holding of Hope Downs Joint Venture and 65% holding of Robe River Iron Associates. The Group's net beneficial interest in Robe River Iron Associates is 53% as 30% is held through a 60% owned subsidiary and 35% is held through a 100% owned subsidiary.
 - (e) Gross revenue, EBITDA, Net Earnings and Operating assets within Evaluation projects/other include activities relating to our portside trading business in China. Transactions between the Pilbara and our portside trading business in China are eliminated through the Iron Ore 'intra-segment' line.
 - (f) In order to reflect the evolution of the Aluminium business, the following changes have been implemented:
 - The consolidation line for Bauxite & Alumina has been removed to reflect the less integrated nature of the business and the evolution of the Bauxite segment towards a primarily export oriented business. As a result of this change, the intra-group segment elimination for Gross revenue, EBITDA, Net Earnings and Operating assets between bauxite and alumina are now reported on line 'Inter-segment and other. The intra-group segment eliminations for the six months to 30 June 2020 would have been US\$(364) million, US\$4 million, US\$3 million and US\$(24) million respectively. For the six months to 30 June 2019 the eliminations were US\$(425) million, US\$(2) million, US\$(1) million and US\$21 million.
 - The EBITDA and Net Earnings for the six months ended 30 June 2019 have been restated to include the impact of the legacy alumina contracts (US\$155 million and US\$122 million, respectively) in the Alumina segment instead of being included in the Other product group items line, in order to provide a comprehensive view of the performance of the Alumina segment.
 - The Gross revenue, EBITDA and Net Earnings for the six months ended 30 June 2019 have been restated to reallocate the margin generated by internal shipping activities to Bauxite (US\$15 million, US\$31 million and US\$21 million, respectively) and Alumina (US\$30 million, US\$64 million and US\$44 million, respectively) segments, instead of being included in the Evaluation project/Other line in order to provide a comprehensive view of the performance of the Bauxite and Alumina segments.
- Gross revenue, EBITDA, Net Earnings and Operating assets of the overall Rio Tinto Aluminium business were not impacted by these changes.
- (g) Our interest in Oyu Tolgoi is held indirectly through our 50.8% investment in Turquoise Hill Resources Ltd (TRQ), where TRQ's principal asset is its 66% investment in Oyu Tolgoi LLC, which owns the Oyu Tolgoi copper-gold mine.
 - (h) Includes our interests in Argyle (100%) and Diavik (60%).
 - (i) Includes our interests in Rio Tinto Fer et Titane (100%), QIT Madagascar Minerals (QMM, 80%) and Richards Bay Minerals (attributable interest of 74%).
 - (j) Includes our interest in Energy Resources of Australia Ltd (ERA) and, up until the sale of our interest in Rössing Uranium Limited (Rössing) (68.6%) on 16 July 2019, our interest in Rössing. In February 2020, our interest in ERA increased from 68.4% to 86.3% as a result of new ERA shares being issued to Rio Tinto under the Entitlement Offer and Underwriting Agreement to raise funds for the rehabilitation obligations in the Ranger Project Area.

Notes to financial information by business unit (continued)

- (k) Simfer Jersey Limited, a company incorporated in Jersey in which the Group has a 53% interest, has an 85% interest in Simfer S.A., the company that manages the Simandou mining project in Guinea. The Group therefore has a 45.05% indirect interest in Simfer S.A. These entities are consolidated as subsidiaries and together referred to as the Simandou iron ore project.
- (l) Other operations include our 100% interest in the Gove alumina refinery (under rehabilitation), Rio Tinto Marine and, the remaining legacy liabilities of Rio Tinto Coal Australia. These include provisions for onerous contracts, in relation to rail infrastructure capacity, partly offset by financial assets and receivables relating to contingent royalties and disposal proceeds.
- (m) Capital expenditure is the net cash outflow on purchases less sales of property, plant and equipment, capitalised evaluation costs and purchases less sales of other intangible assets. The details provided include 100% of subsidiaries' capital expenditure and Rio Tinto's share of the capital expenditure of joint operations and equity accounted units.
- (n) Operating assets of the Group comprise equity attributable to Rio Tinto before deducting net debt. Operating assets of business units are comprised of net assets excluding post-retirement assets and liabilities, net of tax, and before deducting net debt. Operating assets are stated after the deduction of non-controlling interests - these are calculated by reference to the net assets of the relevant companies (i.e. inclusive of such companies' debt and amounts due to or from Rio Tinto Group companies).

Summary financial data in Australian dollars, Sterling and US dollars

30 June 2020 A\$m	30 June 2019 A\$m	30 June 2020 £m	30 June 2019 £m		30 June 2020 US\$m	30 June 2019 US\$m
30,894	30,880	16,121	16,854	Gross sales revenue	20,333	21,809
29,418	29,341	15,351	16,014	Consolidated sales revenue	19,362	20,722
8,021	7,343	4,185	4,008	Profit before tax from continuing operations	5,279	5,186
5,243	4,150	2,736	2,265	Profit for the period from continuing operations	3,451	2,931
5,038	5,848	2,629	3,192	Net earnings attributable to Rio Tinto shareholders	3,316	4,130
14,647	14,514	7,643	7,921	Underlying EBITDA	9,640	10,250
7,217	6,983	3,766	3,811	Underlying earnings ^(a)	4,750	4,932
311.5	357.5	162.6	195.1	Basic earnings per ordinary share ^(b)	205.0	252.5
446.2	427.0	232.9	233.0	Basic underlying earnings per ordinary share ^{(a) (b)}	293.7	301.5
				Dividends per share to Rio Tinto shareholders ^(c)		
349.74c	250.89c	177.47p	135.96p	- paid ordinary dividend	231.00c	180.00c
—	338.70c	—	183.55p	- paid special dividend	—	243.00c
216.47c	219.08c	119.74p	123.32p	- proposed interim ordinary dividend	155.00c	151.00c
—	88.50c	—	49.82p	- proposed interim special dividend	—	61.00c
4,092	5,684	2,135	3,102	Cash flow before financing activities	2,693	4,014
30 June 2020 A\$m	31 December 2019 A\$m	30 June 2020 £m	31 December 2019 £m		30 June 2020 US\$m	31 December 2019 US\$m
(7,042)	(5,216)	(3,929)	(2,787)	Net debt	(4,826)	(3,651)
57,235	57,903	31,936	30,940	Equity attributable to Rio Tinto shareholders	39,224	40,532

(a) A reconciliation of underlying earnings to net earnings can be found on page 63.

(b) Basic earnings per ordinary share and basic underlying earnings per ordinary share do not recognise the dilution resulting from share options on issue.

(c) The Australian dollar and Sterling amounts are based on the US dollar amounts, retranslated at average or closing rates as appropriate, except for the dividends which are the actual amounts paid or payable.

Metal prices and exchange rates

	Six months to 30 June 2020	Six months to 30 June 2019	Increase/ (Decrease) HY 2020 Vs. HY 2019	Year to 31 December 2019
Metal prices - average for the period				
Copper - US cents/lb	249c	280c	(11)%	273c
Aluminium - US\$/tonne	\$1,595	\$1,826	(13)%	\$1,791
Gold - US\$/troy oz	\$1,645	\$1,307	26 %	\$1,393
Average exchange rates against the US dollar				
Sterling	1.26	1.29	(3)%	1.28
Australian dollar	0.66	0.71	(7)%	0.70
Canadian dollar	0.73	0.75	(2)%	0.75
Euro	1.10	1.13	(2)%	1.12
South African rand	0.061	0.070	(14)%	0.069
Period end exchange rates against the US dollar				
Sterling	1.23	1.27	(3)%	1.31
Australian dollar	0.69	0.70	(2)%	0.70
Canadian dollar	0.73	0.76	(4)%	0.77
Euro	1.12	1.14	(1)%	1.12
South African rand	0.058	0.071	(18)%	0.071

Availability of this report

This report is available on the Rio Tinto website (www.riotinto.com).

Forward-looking statements

This announcement includes "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical facts included in this announcement, including, without limitation, those regarding Rio Tinto's financial position, business strategy, plans and objectives of management for future operations (including development plans and objectives relating to Rio Tinto's products, production forecasts and reserve and resource positions and any statements related to the ongoing impact of the COVID-19 pandemic), are forward-looking statements. The words "intend", "aim", "project", "anticipate", "estimate", "plan", "believes", "expects", "may", "would", "should", "could", "will", "target", "set to", "seek", "risk" or similar expressions, commonly identify such forward-looking statements.

Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Rio Tinto, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such forward-looking statements are based on numerous assumptions regarding Rio Tinto's present and future business strategies and the environment in which Rio Tinto will operate in the future. Among the important factors that could cause Rio Tinto's actual results, performance or achievements to differ materially from those in the forward-looking statements are levels of actual production during any period, levels of demand and market prices, the ability to produce and transport products profitably, the impact of foreign currency exchange rates on market prices and operating costs, operational problems, political uncertainty and economic conditions in relevant areas of the world, the actions of competitors, activities by governmental authorities such as changes in taxation or regulation, the risks and uncertainties associated with the ongoing impacts of COVID-19 or other pandemic and such other risk factors identified in Rio Tinto's most recent Annual report and accounts in Australia and the United Kingdom and the most recent Annual report on Form 20-F filed with the United States Securities and Exchange Commission (the "SEC") or Form 6-Ks furnished to, or filed with, the SEC. The above list is not exhaustive. Forward-looking statements should, therefore, be construed in light of such risk factors and undue reliance should not be placed on forward-looking statements, particularly in light of the current economic climate and the significant volatility, uncertainty and disruption caused by the outbreak of COVID-19. These forward-looking statements speak only as of the date of this announcement. Rio Tinto expressly disclaims any obligation or undertaking (except as required by applicable law, the UK Listing Rules, the Disclosure Guidance and Transparency Rules of the Financial Conduct Authority and the Listing Rules of the Australian Securities Exchange) to release publicly any updates or revisions to any forward-looking statement contained herein to reflect any change in Rio Tinto's expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

Nothing in this announcement should be interpreted to mean that future earnings per share of Rio Tinto plc or Rio Tinto Limited will necessarily match or exceed its historical published earnings per share.

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