GLENCORE

NEWS RELEASE
Baar, 16 February 2021

Preliminary Results 2020

Highlights

Glencore's Chief Executive Officer, Ivan Glasenberg, commented:

"The Covid-19 pandemic is an extraordinary challenge that continues to impact many aspects of day-to-day life. Against this backdrop, the strength of our 2020 underlying performance is a credit to our highly skilled and dedicated employees, and also reflects our unique business model and ability to quickly adapt to changing market conditions and customer needs.

"Navigating from recessionary conditions in the first half to a strong price recovery for most commodities in the second, Adjusted EBITDA finished the year flat at $11.6 billion. An outstanding Marketing performance lifted EBIT by 41% to $3.3 billion, while Industrial Adjusted EBITDA fell 13% to $7.8 billion, primarily reflecting weaker coal prices. A notable improvement was seen at our Katanga operation in the DRC, where its successful ramp-up lifted Africa copper EBITDA to $712 million from a loss of $349 million in 2019. Strong second half cash flows repositioned Net debt of $15.8 billion within our target range, allowing for the resumption of distributions. We are recommending to shareholders a distribution of $0.12 per share.

"As the world focuses on the pathway to recovery from Covid-19, it is clear that meeting the goals of the Paris Agreement has taken on even greater urgency. While innovation and technological advances have transformed how we live and work, the commodities needed to enable this have not. Our commodities are essential in developing all facets of infrastructure needed to deliver the goals of energy and mobility transition.

"We are focused on playing our part in supporting the Paris goals and have set out a clear strategy to address our total emissions footprint – being Scope 1, 2 and 3 emissions.

"Glencore has been transforming the global commodities industry for nearly half a century, growing from a trader of ferrous and non-ferrous metals, minerals and crude oil, into one of the world's largest natural resource companies. Today, the business and its portfolio of commodities is uniquely positioned for the needs of the future. It is ready to support the transition to a low-carbon economy and realise its ambition of net-zero by 2050. We remain focussed on creating sustainable long-term value for all stakeholders while operating in a responsible manner across all aspects of our business"

US$ million	**2020**	2019	Change %
Key statement of income and cash flows highlights[1]:			
Revenue	142,338	215,111	(34)
Adjusted EBITDA◊	11,560	11,601	–
Adjusted EBIT◊	4,416	4,151	6
Net loss attributable to equity holders	(1,903)	(404)	(371)
Loss per share (Basic) (US$)	(0.14)	(0.03)	(380)
Funds from operations (FFO)[2◊]	8,325	7,865	6
Cash generated by operating activities before working capital changes	8,568	10,346	(17)
Net purchase and sale of property, plant and equipment[2◊]	3,921	4,966	(21)

US$ million	**31.12.2020**	31.12.2019	Change %
Key financial position highlights:			
Total assets	118,000	124,076	(5)
Net funding[2,3◊]	35,428	34,366	3
Net debt[2,3◊]	15,844	17,556	(10)
Ratios:			
FFO to Net debt[2◊]	52.5%	44.8%	17
Net debt to Adjusted EBITDA◊	1.37	1.51	(9)

1 Refer to basis of presentation on page 7.
2 Refer to page 11, also noting that 2019 FFO was materially impacted by the lag of income taxes paid in 2019, in respect of 2018 profitability.
3 Includes $652 million (2019: $607 million) of Marketing related lease liabilities.
◊ Adjusted measures referred to as Alternative performance measures (APMs) which are not defined or specified under the requirements of International Financial Reporting Standards; refer to APMs section on page 110 for definitions and reconciliations and to note 2 of the financial statements for reconciliation of Adjusted EBIT/EBITDA.

HEALTHY RESULTS

- $11.6bn Adjusted EBITDA, flat year over year (y/y), with stronger Marketing and Industrial metals offset by weaker coal prices
- Net income pre-significant items: $2.5bn, in line with 2019
- Significant items are mainly non-cash impairment charges amounting to $5.9bn (2019: $2.4bn), primarily in respect of Mopani, Colombian coal and the African oil portfolio. Resulting statutory loss of $1.9bn
- Net purchase and sale of PP&E: $3.9bn, down 21%
- Proposed $0.12/share ($1.6bn) 2021 distribution

RESILIENT INDUSTRIAL ASSET PERFORMANCE

- Industrial Assets Adjusted EBITDA $7.8bn, down 13%. Strong metals performance outweighed by weaker coal prices
- Metals $7.3bn (+31%), Energy $1.0bn (-73%); balance is Corporate and other
- Early Covid-19 impacts followed by multi-year highs for base metals. Energy complex also recovered into year-end
- Cost/margin performance: Cu 94¢/lb (-15¢/lb y/y); Zn -7¢/lb (-35¢/lb y/y); Ni 376¢/lb (-22¢/lb y/y); coal $45.90/t ($11/t margin)

OUTSTANDING MARKETING RESULTS

- Marketing Adjusted EBIT $3.3bn, c. +$1bn y/y (+41%)
- Energy $1.8bn (+33%) driven by exceptional price movements/dislocations and logistics/storage demand
- Metals $1.7bn (+53%) reflects supportive market conditions and absence of cobalt market challenges experienced in 2019
- Viterra agricultural business contributed $211m (2019: $58m) share of net earnings
- Unchanged longer-term guidance range of $2.2-3.2bn Adjusted EBIT

STRONG BALANCE SHEET

- Net debt $15.8bn, successfully repositioned in our $10-16bn target range; targeting below the middle of the range by end 2021
- Net debt / Adjusted EBITDA down to 1.37x
- RMI $19.6bn, near the top end of our $15-20bn target range, reflecting higher metal prices and carry-trade opportunities
- Available committed liquidity of $10.3bn; bond maturities capped at c.$3bn in any given year
- Spot illustrative free cash flow generation of c.$7.2bn from Adjusted EBITDA of $16bn, using end of January 2021 prices

SECTOR-LEADING CLIMATE STRATEGY

- Medium-term Paris aligned total CO_2e emissions reduction targets and 2050 net zero ambition for Scope 1+2+3
- Responsible stewardship of declining coal business over time as industry decarbonises
- Climate strategy to be put to shareholders for an advisory vote at our AGM in April

PORTFOLIO OPTIMISATION CONTINUING

- Finalised agreement for sale of Mopani, with completion expected in Q2 2021
- Informed the Colombian government of our intention to relinquish Prodeco's mining licences
- Contributed our share of Alumbrera into the larger MARA joint venture

For further information please contact:

Investors

Martin Fewings	t: +41 41 709 2880	m: +41 79 737 5642	martin.fewings@glencore.com

Media

Charles Watenphul	t: +41 41 709 2462	m: +41 79 904 3320	charles.watenphul@glencore.com

www.glencore.com

Glencore LEI: 2138002658CPO9NBH955

Notes for Editors

Glencore is one of the world's largest global diversified natural resource companies and a major producer and marketer of more than 60 responsibly-sourced commodities that advance everyday life. The Group's operations comprise around 150 mining and metallurgical sites and oil production assets.

With a strong footprint in over 35 countries in both established and emerging regions for natural resources, Glencore's industrial activities are supported by a global network of more than 30 marketing offices. Glencore's customers are industrial consumers, such as those in the automotive, steel, power generation, battery manufacturing and oil sectors. We also provide financing, logistics and other services to producers and consumers of commodities. Glencore's companies employ around 145,000 people, including contractors.

Glencore is proud to be a member of the Voluntary Principles on Security and Human Rights and the International Council on Mining and Metals. We are an active participant in the Extractive Industries Transparency Initiative. Our ambition is to be a net zero total emissions company by 2050.

CHIEF EXECUTIVE OFFICER'S REVIEW

A CHALLENGING TIME FOR THE WORLD

The Covid-19 pandemic is an extraordinary challenge, impacting colleagues, our families, local communities and society at large. As a responsible operator, our top priority is to protect the safety and health of our people and the communities that host our businesses.

Although some of our industrial assets were required to temporarily suspend operations during the year in line with national and regional guidance, or where our risk assessment determined it was appropriate to do so, the majority of our assets continued to operate relatively normally after implementation of appropriate precautionary measures. Across our industry, the impacts were most notable in Peru, South Africa and Colombia, while Australia and Canada were relatively unaffected. The cumulative impacts of mine supply disruption helped to offset the initial demand shock from rapid lockdowns and the corresponding slowdown in global economic activity.

While demand remained challenging in many key global economies, China's rapid recovery, combined with material global central bank and governmental fiscal support, improved supply/demand fundamentals and started to generate favourable sector sentiment and price momentum.

Average price performances for our key metals commodities' benchmarks was largely flat to slightly lower year-on-year, although this outcome reflects two very different halves, from recessionary pricing conditions in March/April to multi-year highs towards the end of the year. Coal pricing benchmarks underperformed, finishing 2020 c.10-30% below 2019 averages, under pressure from reduced economic activity and trade tensions, although prices also materially improved into year-end.

PATHWAY TO NET ZERO

A clear emerging force, particularly over the last twelve to eighteen months, is the growing global momentum and increasing consensus around achieving the goals of the Paris agreement and targeting net zero global carbon emissions. Europe and more than 110 countries have announced ambitions to achieve carbon neutrality by 2050, supported more recently by China's plans to target net zero emissions by 2060.

We recognise our responsibility in contributing to the global effort to achieve the goals of the Paris Agreement through decarbonisation of our own operational emissions footprint. However, we believe our contribution should take a holistic approach and consider our commitments and ambition through the lens of our total emissions footprint.

In line with the 1.5-degree Celsius (°C) more ambitious scenarios set out by the IPCC, we target a 40% reduction of our total (Scope 1, 2 and 3) emissions by 2035 on 2019 levels. Post 2035, our ambition is to achieve, with a supportive policy environment, net zero total emissions by 2050.

Meeting everyday needs for affordable and reliable energy while decarbonising the economy is a key global challenge. Our industry will need to significantly increase the supply of various raw materials required to meet the projected acceleration in demand for such transition commodities in order to electrify and / or decarbonise existing fossil-fuel based energy demand.

Our modelling indicates that annual average mine supply growth in several key metals will need to double (in units of supply growth) over the coming decades under a Rapid Transition pathway scenario.

The majority of our earnings comes from the metals and minerals that enable the transition to a low-carbon economy. We are one of the largest global producers of copper, nickel, zinc, vanadium and cobalt and will continue to prioritise investment into these commodities. In addition, our recycling centres and metallurgical assets play a fundamental role in the circular economy by reducing new metal consumption and waste generation.

MEETING SOCIETY'S ENERGY NEEDS AS IT PROGRESSES THROUGH THE TRANSITION

The world currently depends on fossil fuels (coal, natural gas and oil) for around 80% of its primary energy demand. Coal currently accounts for about 25% of global energy use, and while this will decline over time, it continues to make some contribution in all plausible climate change scenarios to 2050.

For many countries, an affordable, secure energy source is key to their socio-economic and industrial development, being the primary pathway for populations to develop key infrastructure and achieve economic growth and higher standards of living.

Our thermal coal business represents less than 5% of our revenues and is envisaged to be in the region of 10-15% of our EBITDA in the medium term (was 8% in 2020) and decline towards zero over the longer term. Future demand for coal through the transition underway will be a key determinant in the continued operation of our mines.

Selling our coal mines does not remove their associated emissions. While there is demand for coal, and it is economic to do so, we will continue to operate our mines until they reach the end of their lives. Through responsible stewardship of these assets and a commitment to a managed decline of our coal portfolio, including maintaining a focus on our high-quality coal assets in Australia, we will deliver on our ambition to reduce our total emissions in line with the goals of the Paris Agreement. An example of our actions is the recent announcement to commence the process to relinquish Prodeco's mining licenses in Colombia.

Glencore's CO2e emissions reduction commitments make us unique amongst our peers with a medium-term Paris aligned total CO2e emissions reduction target of 40% and a 2050 net zero ambition for Scope 1+2+3. All decarbonisation scenarios that we have modelled are net positive for Glencore and our climate commitments confirm our intention to be part of the solution.

2020 FINANCIAL SCORECARD

Our adaptable and resilient business model, containing many countercyclical elements, allowed the Group to quickly adjust to the challenges of Covid-19. Measures to protect cash flows, from capex cuts to cost efficiencies, helped offset a material portion of the

impact of lower prices in the first half and positioned the business well for the second half commodity price recovery, such that Adjusted EBITDA of $11.6 billion was flat year-on-year. Net income, before significant items, increased 2% to $2.5 billion, while significant items resulted in a Net loss attributable to equity holders of $1.9 billion, mainly due to impairment charges related to Mopani copper in Zambia and our Colombian coal and African oil portfolio.

In our Marketing business, supportive market conditions produced an outstanding Adjusted EBIT result of $3.3 billion, reflecting particularly strong results from oil, in conjunction with a vastly improved metals and see-through Viterra agriculture performance. We maintain our long-term Marketing Adjusted EBIT guidance range of $2.2 to $3.2 billion.

Industrial Adjusted EBITDA of $7.8 billion was 13% lower compared to 2019, primarily reflecting weaker coal and oil prices and to a lesser extent, lower year-on-year production volumes, mainly Covid driven, relating to periods of stopped or reduced work in many countries and various market-related coal supply reductions. A notable improvement in 2020 was seen at our Katanga copper/cobalt asset in the DRC, where operational improvements and higher volumes generated a material turnaround in earnings, with African Copper Adjusted EBITDA of $712 million compared to a loss of $349 million in 2019. We expect further throughput and optimisation of mining and processing to provide even higher margins in 2021. We also finalised an agreement in January this year to sell our controlling interest in Mopani to Zambia's ZCCM, with completion expected in the second quarter of 2021, subject to various approvals

Aided by the strong second half performance, Net debt reduced during the year by $1.7 billion to $15.8 billion. Excluding IFRS 16 related marketing leases, Net debt finished the year at $15.2 billion, back inside our $10 to $16 billion target range. Net funding, however, increased modestly by 3% to $35.4 billion due to higher carried inventories, on account of the generally materially higher base metal prices at 31 December 2020 compared to the start of the year. We enter 2021 with strong earnings momentum, noting c. $7.2 billion of illustrative annualised free cash flow generation at end of January 2021 spot prices, from c.$16.0 billion of Adjusted EBITDA.

We continue to target a strong BBB/Baa credit rating and plan to reduce Net debt below the middle of our target range this year, with a medium-term target to the lower end of the range, along with Net debt/Adjusted EBITDA closer to c.1x.

CORPORATE GOVERNANCE AND SUSTAINABILITY

At Glencore, we are committed to operating in a responsible manner across all aspects of our business. Last year we concluded an extensive process to revisit and refine the values that define us.

The values of Safety, Integrity, Openness, Responsibility, Simplicity and Entrepreneurialism reflect our Purpose, our priorities and the beliefs by which we conduct ourselves. They define what it means to work at Glencore, regardless of location or role and they are at the heart of our culture and the way we do business.

We also uphold the dignity, fundamental freedoms and human rights of our employees, contractors and the communities in which we live and work, as well as others affected by our activities. We are committed to working in line with the United Nations Universal Declaration on Human Rights and the UN Guiding Principles on Business and Human Rights. In 2020, we joined the Fair Cobalt Alliance, to help positively transform artisanal mining in the DRC and work towards eliminating child and forced labour, as well as other dangerous practices.

The safety and security of our workforce and the communities living around our assets are a priority recognised across our operational activities. While we have taken far-reaching actions to address the underlying issues that led to the tragic loss of eight lives at Glencore's managed operations in 2020, this performance remains unacceptable and we are implementing an enhanced fatality reduction programme with the relaunch of "SafeWork" in 2021 to help drive the necessary step-change in performance. We remain determined to be a fatality-free business.

The government investigations are ongoing and the Group is continuing to cooperate fully with the various authorities. The timing and outcome of the various investigations remain uncertain.

We are very pleased to have appointed Cynthia Carroll to the Board as an independent Non-Executive Director on 2 February 2021. Cynthia has over 30 years of experience in the resource sector and her experience and insights will be of great benefit to us. Cynthia has been appointed to the HSEC board committee.

SHAREHOLDER RETURNS

Owing to the uncertainty resulting from the Covid pandemic and to support the Group's overall financial position during 2020, the Board elected not to pay any distributions in 2020.

Having now reduced Net debt to $15.2 billion, excluding Marketing leases at period end (within our $10 to $16 billion target range), the Board is pleased to propose to shareholders a 2021 base distribution of $0.12 per share (c.$1.6 billion), comprising the $1 billion base attributable to marketing plus 25% of 2020 Industrial asset attributable free cash flow, payable in two equal instalments in 2021.

As noted above, we have a 2021 priority to ensure additional deleveraging below the middle of the c.$10–16 billion guidance range (excluding Marketing lease liabilities) and targeting the lower end of the range in the medium term, including seeing the Net debt/Adjusted EBITDA ratio moving closer to 1x. Given Glencore's current strong levels of operating cash flow (evidenced by the c. $7.2 billion of illustrative annualised free cash flow generation at end of January 2021 spot prices), these targets are well on track to be met. Reflecting these objectives, the next six months' performance and prevailing market conditions and outlook at the time, the Board would consider special 2021 "top-up" shareholder distributions, alongside its interim results in August.

Subject to an internal assessment of appropriate equity trading ranges for Glencore, cash distributions will generally be preferred over buybacks given the inherent cyclical nature and volatility of commodity prices.

LOOKING AHEAD

After almost 40 years in the business and 20 years as CEO, the time has come for me to retire and hand over to my successor, Gary Nagle. This transition will occur through the first half of 2021. I have worked closely with Gary over the last 20 years and the Board and I have every confidence that he will continue to drive our business forward with the enduring principles of dedication and commitment that have contributed to its success to date.

Gary's appointment largely concludes completion of a seamless senior management transition to Glencore's next generation of leadership. All senior management positions have been promoted from within the business, demonstrating the strength in depth across the Group.

Glencore has been a feature of the global commodities industry for nearly half a century, growing from a physical trader of metals, minerals and oil, into one of the world's largest and most integrated natural resource companies. Today, the business, with its portfolio of commodities and activities, is uniquely positioned for the expected resource needs of the future. In remaining focussed on creating sustainable long-term value for all stakeholders while operating in a responsible manner, we are ready to support the transition to a low-carbon economy and realise our ambition of achieving net-zero by 2050.

Ivan Glasenberg

Chief Executive Officer

FINANCIAL AND OPERATIONAL REVIEW

BASIS OF PRESENTATION

The financial information in the Financial and Operational Review is on a segmental measurement basis, including all references to revenue (see note 2) and has been prepared on the basis as outlined in note 1 of the financial statements, with the exception of the accounting treatment applied to relevant material associates and joint ventures for which Glencore's attributable share of revenues and expenses are presented. In addition, the Peruvian listed Volcan, while a subsidiary of the Group, is accounted for under the equity method for internal reporting and analysis due to the relatively low economic interest (23%) held by the Group.

The Group's results are presented on an "adjusted" basis, using alternative performance measures (APMs) which are not defined or specified under the requirements of IFRS, but are derived from the financial statements, prepared in accordance with IFRS, reflecting how Glencore's management assess the performance of the Group. The APMs are provided in addition to IFRS measures to aid in the comparability of information between reporting periods and segments and to aid in the understanding of the activities taking place across the Group by adjusting for Significant items and by aggregating or disaggregating (notably in the case of relevant material associates and joint ventures accounted for on an equity basis) certain IFRS measures. APMs are also used to approximate the underlying operating cash flow generation of the operations (Adjusted EBITDA). Significant items (see reconciliation below) are items of income and expense, which, due to their nature and variable financial impact or the expected infrequency of the events giving rise to them, are separated for internal reporting and analysis of Glencore's results, to aid in providing an understanding and comparative basis of the underlying financial performance.

Alternative performance measures are denoted by the symbol ◊ and are further defined and reconciled to the underlying IFRS measures in the APMs section on page 110.

MARKET VARIABLES

Select commodity prices

	Spot 31 Dec 2020	Spot 31 Dec 2019	**Average 2020**	Average 2019	Change in average %
S&P GSCI Industrial Metals Index	382	324	318	326	(2)
S&P GSCI Energy Index	164	207	138	199	(31)
LME (cash) copper price ($/t)	7,749	6,149	6,186	6,005	3
LME (cash) zinc price ($/t)	2,729	2,280	2,269	2,548	(11)
LME (cash) lead price ($/t)	1,976	1,914	1,826	1,999	(9)
LME (cash) nickel price ($/t)	16,554	13,950	13,803	13,944	(1)
Gold price ($/oz)	1,898	1,517	1,771	1,393	27
Silver price ($/oz)	26	18	21	16	31
Metal Bulletin cobalt standard grade, in-warehouse Rotterdam ($/lb)	15	15	15	16	(6)
Ferro-chrome 50% Cr import, CIF main Chinese ports, contained Cr (¢/lb)	73	70	70	77	(9)
Iron ore (Platts 62% CFR North China) price ($/DMT)	154	86	105	90	17
Coal API4 ($/t)	93	79	64	72	(11)
Coal Newcastle (6,000) ($/t)	82	68	61	78	(22)
Oil price – Brent ($/bbl)	52	66	43	64	(33)

Currency table

	Spot 31 Dec 2020	Spot 31 Dec 2019	**Average 2020**	Average 2019	Change in average %
AUD : USD	0.77	0.70	0.69	0.69	–
USD : CAD	1.27	1.30	1.34	1.33	1
EUR : USD	1.22	1.12	1.14	1.12	2
GBP : USD	1.37	1.33	1.28	1.28	–
USD : CHF	0.89	0.97	0.94	0.99	(5)
USD : KZT	421	383	414	383	8
USD : ZAR	14.69	14.00	16.46	14.45	14

FINANCIAL RESULTS

Loss attributable to equity holders moved from a loss of $404 million in 2019 to a loss of $1,903 million in 2020 and EPS reduced from negative $0.03 per share to negative $0.14 per share. In a year of rapidly changing global economic conditions, our healthy overall underlying results reflects a year of two halves. The H1 2020 reported results were heavily impacted by the low commodity prices and challenging early pandemic environment, against which backdrop, various impairment charges were booked across our portfolio. H2 2020 delivered a net profit of $697 million as economies began to recover from the earlier severe Covid related lockdowns and uncertainty and commodity prices rebounded. The average LME copper price in H2 was 24% higher than in H1, while own sourced H2 copper production was up 15% over H1 levels.

Notwithstanding 2020 seeing two very different halves as noted above, average prices for many of our key commodities were broadly comparable to 2019, the main exceptions being gold, up 27% over 2019 and coal prices, which were materially down (GC Newc 22%, API2 19% and API4 12%) compared to 2019. During a year of uncertainty and volatility, the strength and flexibility of our business model (combining large-scale marketing and industrial activities), with broad geographic, commodity and activity diversification, enabled us to weather and mitigate the worst impacts of the pandemic.

Adjusted EBITDA was $11,560 million and Adjusted EBIT was $4,416 million in 2020, compared to $11,601 million and $4,151 million in 2019. This broadly consistent headline result masks differing performances and timing across the Marketing and Industrial segments. The Marketing activities segment increased its contribution to Group Adjusted EBITDA to 32 % (2019: 23 %) with an Adjusted EBITDA of $3,732 million, an increase of 42 % over 2019, continuing to build on its record first half contribution, benefitting from market volatility, dislocation and supportive pricing curve structures. Adjusted EBITDA from our Industrial activities segment was $7,828 million, 13 % lower than 2019, however, H2 2020 was up 17% over the comparable period and was double the H1 2020 contribution as its weighting to industrial metals was rewarded in H2 against a backdrop of recovering economies and higher prices, clearly aided by necessary accommodative monetary conditions and governmental fiscal support.

Reflecting such business mix, Adjusted EBITDA mining margins improved to 36% (2019: 28%) in our metal operations, but reduced to 17% (2019: 37%) in our energy operations. See page 20.

Adjusted EBITDA/EBIT◊

Adjusted EBITDA by business segment is as follows:

US$ million	2020 Marketing activities	2020 Industrial activities	2020 Adjusted EBITDA	2019 Marketing activities	2019 Industrial activities	2019 Adjusted EBITDA	Change %
Metals and minerals	1,768	7,285	9,053	1,169	5,555	6,724	35
Energy products	2,053	1,039	3,092	1,515	3,854	5,369	(42)
Corporate and other[1]	(89)	(496)	(585)	(47)	(445)	(492)	19
Total	**3,732**	**7,828**	**11,560**	**2,637**	**8,964**	**11,601**	**(0)**
Segment change - %	42	(13)					

Adjusted EBIT by business segment is as follows:

US$ million	2020 Marketing activities	2020 Industrial activities	2020 Adjusted EBIT	2019 Marketing activities	2019 Industrial activities	2019 Adjusted EBIT	Change %
Metals and minerals	1,667	3,054	4,721	1,089	1,016	2,105	124
Energy products	1,761	(1,365)	396	1,324	1,274	2,598	(85)
Corporate and other[1]	(89)	(612)	(701)	(47)	(505)	(552)	27
Total	**3,339**	**1,077**	**4,416**	**2,366**	**1,785**	**4,151**	**6**
Segment change - %	41	(40)					

1 Corporate and other Marketing activities includes $211 million pre-significant items (2019: $58 million) of Glencore's equity accounted share of Viterra.

Marketing activities

Marketing Adjusted EBITDA and EBIT increased by 42% to $3,732 million and by 41% to $3,339 million, respectively. As noted above, the scale and number of macro forces in H1 2020 (primarily Covid linked, but also OPEC+'s supply response deliberations), and in H2 a rebound in demand for commodities coupled with supply constraints, led to extreme levels of market volatility, amid rapidly and materially changing underlying supply and demand scenarios. This backdrop provided overall supportive physical commodity marketing conditions. Metals and minerals Adjusted EBIT was up 53%, or a more comparable 16%, adjusting for the $350 million of largely non-cash cobalt accounting losses recognised in the base period. Energy products Adjusted EBIT was up 33% over 2019, as exceptional price movements and dislocations across crude oil and refined products, combined with soaring demand for and prices of storage and logistics, enabled our oil department to deliver a record yearly performance. Our 50% share of earnings from the Viterra (formerly Glencore Agri) agricultural business (captured within Corporate and Other) was $211 million (post-interest and tax) compared to $58 million in 2019, also reflecting good business opportunities captured during the year and strong procurement margins on the back of generally healthy crop sizes.

Industrial activities

Industrial Adjusted EBITDA decreased by 13% to $7,828 million (Adjusted EBIT was $1,077 million, compared to $1,785 million in 2019). The decrease was primarily driven by overall weaker average year-over-year commodity prices (coal being the main driver) and the impacts of the pandemic on our coal and oil operations, in the form of periods of stopped or reduced work, notably in Colombia, South Africa and Chad, followed by market-related supply reductions in Australia through H2.

Earnings

A summary of the differences between reported Adjusted EBIT and income attributable to equity holders, including significant items, is set out in the following table:

US$ million	**2020**	2019
Adjusted EBIT◊	4,416	4,151
Net finance and income tax expense in relevant material associates and joint ventures[1]	(580)	(337)
Proportionate adjustment Volcan[1]	(46)	(106)
Net finance costs	(1,453)	(1,713)
Income tax expense[2]	(306)	(369)
Non-controlling interests	454	816
Income attributable to equity holders of the Parent pre-significant items◊	**2,485**	**2,442**
Earnings per share (Basic) pre-significant items (US$)[3◊]	0.19	0.18
Significant items◊		
Share of Associates' significant items[4]	(92)	(292)
Movement in unrealised inter-segment profit elimination[5]	(760)	468
Net loss on disposals of non-current assets[6]	(36)	(43)
Other expense – net[7]	(173)	(173)
Impairments[8]	(6,392)	(2,843)
Income tax credit/(expense)[2]	1,476	(249)
Non-controlling interests' share of significant items[9]	1,589	286
Total significant items	**(4,388)**	**(2,846)**
Loss attributable to equity holders of the Parent	**(1,903)**	**(404)**
Loss per share (Basic) (US$)[3]	(0.14)	(0.03)

1 Refer to note 2 of the financial statements and to APMs section for reconciliations.
2 Refer to other reconciliations section for the allocation of the total income tax expense between pre-significant and significant items.
3 Based on weighted average number of shares, refer to note 17 of the financial statements.
4 Recognised within share of income from associates and joint ventures, see note 2 of the financial statements.
5 Recognised within cost of goods sold, see note 2 of the financial statements.
6 Refer to note 4 of the financial statements and to APMs section for reconciliations.
7 Recognised within other income/(expense) – net, see note 5 of the financial statements and to APMs section for reconciliations.
8 Refer to note 6 and 10 of the financial statements and to APMs section for reconciliations.
9 Recognised within non-controlling interests, refer to APMs section.

Significant items

Significant items are items of income and expense, which, due to their nature and variable financial impact or the expected infrequency of the events giving rise to them, are separated for internal reporting, and analysis of Glencore's results, to aid in providing an understanding and comparative basis of the underlying financial performance.

In 2020, Glencore recognised a net expense of $4,388 million (2019: $2,846 million) in significant items comprised primarily of:

- Expenses of $92 million (2019: $292 million) relating to Glencore's share of significant expenses recognised directly by our associates. 2020 had no individually material items. In 2019, the expense primarily related to impairments and other items in Viterra (net $73 million), Trevali ($65 million) and Oil vessels' entities ($62 million).
- Net loss on disposals of non-current assets of $36 million (2019: $43 million) see note 4.
- Income tax credit of $1,476 million (2019: expense of $249 million) – see income taxes below.
- Other income/(expense) – net expenses of $173 million (2019: $173 million) see note 5. Balance primarily comprises:
  - $438 million (2019: $47 million) of mark-to-market gains on equity investments / derivative positions accounted for as held for trading, including the commodity price linked deferred consideration related to the sale of Mototolo in 2018.
  - $192 million net loss (2019: $70 million) on foreign exchange movements.
  - $113 million (2019: $159 million) relating to certain legal matters and the ongoing investigations (legal, expert and compliance) related costs (see note 30).
  - $214million (2019: $173 million) of closure and severance costs, primarily relating to suspension of operations at Prodeco coal in Colombia and the closure of the Aguilar zinc mine in Argentina. 2019 related to transition of the Mutanda operation to temporary care and maintenance, ongoing mine optimisation review at Katanga and closure of the Brunswick lead smelter.
  - $Nil (2019: gain of $325 million). The 2019 gain related to the settlement of an outstanding claim (reversing a prior period provision of the same amount), through the effective sale of previously recognised liabilities that the Group assumed in 2018, following termination of a 50:50 consortium with Qatar Investment Authority and its associated investment in OSJC Rosneft.
- Impairments of $6,392 million (2019: $2,843 million), see notes 6 and 10. The 2020 charge primarily relates to the:
  - Chad oil operations ($673 million), due to lower oil price assumptions and operational impacts from Covid-19 restrictions to international mobility.
  - Astron oil refinery ($480 million), primarily due to lower projected oil refining margins, following the global macro-economic impact of Covid-19 on refined petroleum product demand and resulting global refinery overcapacity.
  - Prodeco coal operations ($835 million) owing to continued pressure on the API 2 European coal market and seeking to place the operations on extended care and maintenance, which application was rejected by the government.
  - In addition, a $445 million impairment was recognised within share of income from associates relating to our investment in Cerrejón, our 33.3% interest in a Colombian coal operation (see note 11).
  - Mopani copper operations ($1,041 million), owing to persistent operational challenges, results from further technical analysis, delays in key development projects and cost increases, resulting in the decision to transition mining operations to care and maintenance, and ultimately culminating in an agreed sale to ZCCM expected to close in H1 2021.
  - Volcan zinc operations ($2,347 million), resulting in a Glencore attributable amount of $380 million (after tax and non-controlling interest), reflecting revised confidence levels in deploying capital to longer-term greenfield projects / resources.
  - Lydenburg ferrochrome smelter ($116 million), owing to the challenging operating, cost and market environment across the South African ferrochrome industry, necessitating Glencore to make production and cost reductions.

  The 2019 impairments related primarily to the Prodeco coal operations ($514 million), the Chad oil operations ($538 million), the Mutanda copper operations in the DRC ($300 million), Oxidos and Cerro de Pasco operations ($378 million) and VAT impairments in respect of long overdue claims, predominantly in Zambia ($162 million).

Net finance costs

Net finance costs were $1,453 million during 2020, a 15% decrease compared to $1,713 million in the comparable reporting period, primarily due to lower average base rates (mainly US$ Libor). Interest expense for 2020 was $1,573 million, down 19% over 2019 and interest income was $120 million compared to $227 million in the prior year.

Income taxes

An income tax credit of $1,170 million was recognised during 2020, compared to an expense of $618 million in 2019. Adjusting for $1,476 million (2019: net expense of $249 million) of net income tax credit related to significant items (primarily impairments and tax losses recognised/not recognised), the 2020 pre-significant items income tax expense was $306 million (2019: $369 million). The 2020 effective tax rate, pre-significant items, was 29.7%, consistent with the 30.5% in 2019.

STATEMENT OF FINANCIAL POSITION

Current and non-current assets

Total assets were $118,000 million as at 31 December 2020, compared to $124,076 million as at 31 December 2019. Current assets increased from $41,410 million to $43,212 million, primarily due to an increase in marketing inventories on account of higher metals commodity prices (copper, zinc and aluminium up 26%, 20% and 11% respectively) and higher carried oil volumes at year-end relative to 2019. Non-current assets decreased from $82,666 million to $74,788 million, primarily due to impairments to property, plant and equipment of $5,250 million, transfer of Mopani to 'assets held for sale', lower capital expenditure over the period (below depreciation and amortisation expense) and mark-to-market adjustments (loss of $630 million) with respect to our investments carried at fair value through other comprehensive income (see note 10).

Current and non-current liabilities

Total liabilities were $83,598 million as at 31 December 2020, compared to $84,840 million as at 31 December 2019. Current liabilities were broadly consistent with the prior year at $39,441 million. Non-current liabilities decreased from $45,832 million to $44,157 million, primarily due to a decrease in deferred tax liabilities of $1,373 million resulting from the tax-effect of impairments noted above.

Movements relating to current and non-current borrowings are set out below in the net funding and net debt movement reconciliation.

Equity

Total equity was $34,402 million as at 31 December 2020, compared to $39,236 million as at 31 December 2019, the movement primarily reflecting the loss for the year of $3,946 million, including non-controlling interests, and the movements in other comprehensive income/(loss) noted below.

Other comprehensive income/(loss)

A loss of $885 million was recognised during 2020, compared to a gain of $285 million in 2019 primarily relating to mark-to-market losses of $630 million, mainly with respect to our investment in Russneft (see note 10) and exchange losses on translation of foreign operations of $189 million, primarily relating to our South African ZAR-denominated subsidiaries.

Cash flow and net funding/debt

Net funding

US$ million	**31.12.2020**	31.12.2019
Total borrowings as per financial statements	37,479	37,043
Proportionate adjustment – net funding[1]	(553)	(778)
Cash and cash equivalents	(1,498)	(1,899)
Net funding◊	**35,428**	**34,366**

1 Refer to APMs section for definition and reconciliations.

Cash and non-cash movements in net funding

US$ million	**2020**	2019
Cash generated by operating activities before working capital changes	8,568	10,346
Proportionate adjustment – Adjusted EBITDA[1]	1,930	1,522
Non-cash adjustments included within EBITDA	15	13
Net interest paid[1]	(1,042)	(1,368)
Tax paid[1]	(1,189)	(2,814)
Dividends received from associates[1]	43	166
Funds from operations◊	**8,325**	**7,865**
Net working capital changes[2]	(4,318)	2,175
Acquisition and disposal of subsidiaries – net[2]	(222)	(117)
Purchase and sale of investments – net[2]	13	(6)
Purchase and sale of property, plant and equipment – net[2]	(3,921)	(4,966)
Net margin receipts in respect of financing related hedging activities	1,040	529
Acquisition of non-controlling interests in subsidiaries	(56)	(24)
Distributions paid and transactions of own shares – net	(127)	(5,327)
Cash movement in net funding	**734**	**129**
Net funding acquired in business combinations	–	(225)
Impact of adoption of IFRS 16	–	(865)
Change in lease obligations	(457)	(582)
Foreign currency revaluation of borrowings and other non-cash items	(1,339)	(685)
Total movement in net funding	**(1,062)**	**(2,228)**
Net funding◊, beginning of the year	(34,366)	(32,138)
Net funding◊, end of year	**(35,428)**	**(34,366)**
Less: Readily marketable inventories[2]	19,584	16,810
Net debt◊, end of year	**(15,844)**	**(17,556)**

1 Refer to APMs section for definition and reconciliations.

2 Refer to Other reconciliations section.

The reconciliation in the table above is the method by which management reviews movements in net funding and net debt and comprises key movements in cash and any significant non-cash movements in net funding items.

Net funding as at 31 December 2020 increased by $1,062 million to $35,428 million and net debt (net funding less readily marketable inventories) decreased by $1,712 million over the period to $15,844 million. Funds from operations were up 6% compared to 2019, more than covering the full increase in working capital of $4,318 million (including inventories) and the $3,921 million of net capital expenditure.

Business and investment acquisitions and disposals

Net outflows from acquisitions and investments were $265 million (2019: $147 million) over the year, comprising primarily cash derecognised upon disposal of Minera Alumbrera Limited, the finalisation of acquiring a 30% interest in PT CITA Mineral Investindo Tbk and the acquisition of the remaining 0.5% minority interest held in Katanga Mining Limited. The net outflow in 2019 was primarily the minority buy-outs within existing operations (additional 10% in Ulan and 2.7% in Hail Creek).

Liquidity and funding activities

In 2020, the following significant financing activities took place:

- In March 2020 (effective May 2020), Glencore refinanced and extended its committed revolving credit facilities on the same commercial terms as 2019.

  As at 31 December 2020, the facilities comprise:

  - a $9,975 million 12-month revolving credit facility with a 12-month term-out option at Glencore's discretion, and a 12-month extension option; and
  - a $4,650 million 5-year revolving credit facility with a 12-month extension option.
- In September 2020, issued:
  - 7.5 year EUR 850 million, 1.125% coupon bonds
  - 5.5 year CHF 225 million, 1.000% coupon bonds
  - 5 year $1,000 million, 1.625% coupon bonds
  - 10 year $1,000 million, 2.500% coupon bonds
- In December 2020, issued 7.5 year EUR 100 million, 1.125% coupon bonds

As at 31 December 2020, Glencore had available committed liquidity amounting to $10.3 billion.

CREDIT RATINGS

In light of the Group's extensive funding activities, maintaining investment grade credit rating status is a financial priority. The Group's credit ratings are currently Baa1 (negative outlook) from Moody's and BBB+ (stable) from Standard & Poor's. Glencore's publicly stated objective, as part of its overall financial policy package, is to seek and maintain strong Baa/BBB credit ratings from Moody's and Standard & Poor's respectively. In support thereof, Glencore targets a maximum 2x Net debt/Adjusted EBITDA ratio through the cycle, augmented by an upper Net debt cap of c.$16 billion, excluding Marketing related lease liabilities ($0.7 billion as at 31 December 2020, representing primarily chartered vessels and various storage facilities, where the majority of such commitments expire within 2 years).

VALUE AT RISK

One of the tools used by Glencore to monitor and limit its primary market risk exposure, namely commodity price risk related to its physical marketing activities, is the use of a value at risk (VaR) computation. VaR is a risk measurement technique, which estimates the potential loss that could occur on risk positions as a result of movements in risk factors over a specified time horizon, given a specific level of confidence. The VaR methodology is a statistically defined, probability based approach that takes into account market volatilities, as well as risk diversification by recognising offsetting positions and correlations between commodities and markets. In this way, risks can be measured consistently across all markets and commodities and risk measures can be aggregated to derive a single risk value. Glencore has historically had a consolidated VaR limit (1 day 95%) of $100 million, representing some 0.2% of equity. Given H1 2020's extreme implied market volatility, together with statistically elevated commodity correlations and increased Glencore Carry Trade transactions, the Board approved a temporary increase of the VaR limit to $120 million in May 2020. With markets having stabilised through June/July, the original $100 million limit was restored. There were no limit breaches during the year. Glencore uses a one-day VaR approach based on a Monte Carlo simulation with a weighted data history computed at a 95% confidence level.

Average market risk VaR (1 day 95%) during 2020 was $39 million, representing less than 0.1% of equity. Average equivalent VaR during 2019 was $27 million.

DISTRIBUTIONS

The Directors have recommended a 2020 financial year cash distribution of $0.12 per share amounting to $1.6 billion, accounting for own shares held as at 31 December 2020. Payment will be effected as a $0.06 per share distribution in May 2021 and a $0.06 per share distribution in September 2021 (in accordance with the Company's announcement of the 2021 Distribution timetable made on 16 February 2021).

The distribution is to be effected as a reduction of the capital contribution reserves of the Company. As such, this distribution would be exempt from Swiss withholding tax. As at 31 December 2020, Glencore plc had CHF 27 billion of such capital contribution reserves in its statutory accounts. The distribution is subject to shareholders' approval at Glencore's AGM on 29 April 2021.

The distribution is ordinarily paid in US dollars. Shareholders on the Jersey register may elect to receive the distribution in sterling, euros or Swiss francs, the exchange rates of which will be determined by reference to the rates applicable to the US dollar around this time. Shareholders on the Johannesburg register will receive their distribution in South African rand. Further details on distribution payments, together with currency election and distribution mandate forms, are available from the Group's website (www.glencore.com) or from the Company's Registrars.

BOARD CHANGES

On 2 February 2021, Cynthia Carroll was appointed as Independent Non-Executive Director of the Company, following the retirement of Leonhard Fischer as Independent Non-Executive Director on 31 December 2020.

MARKETING ACTIVITIES

HIGHLIGHTS

Marketing delivered an outstanding performance. Adjusted EBIT of $3,339 million, was up 41% on 2019, building on the record first half contribution, which particularly benefitted from heightened market volatility, dislocation and supportive pricing curve structures. Financial and commodity markets were extremely volatile in the face of Covid uncertainty, where risk assets were initially heavily sold in March/April, later being met by enormous liquidity injections and economic stimulus worldwide and selective industrial demand recovery, particularly in China. Our diverse suite of commodities responded at different times through this period:

- base metals initially plunged to multi-year lows on demand-side fears, but many have since reached multi-year highs. The market's confidence in demand has returned, also recognising that supply growth has been weak, having itself been disrupted by the pandemic;
- energy prices were depressed through most of 2020, but ended the year on an upward trajectory as economic activity, particularly in China, picked up and supply reductions began to take hold;
- average prices for precious metals were markedly higher due to their often countercyclical characteristics.

Our major commodity trading units performed well during this difficult year. Year-over-year EBIT increased by approximately $1 billion, of which $578 million was attributable to the Metals business, partly reflecting the reversal of the challenging cobalt market conditions from 2019 which led to significant marketing inventory writedowns in the base period. Energy Products EBIT increased by $437 million as exceptional price movements and dislocations across crude oil and refined products, combined with soaring demand for and prices of storage and logistics, enabled our oil department to deliver a record yearly performance.

Our 50% share of earnings from the Viterra agricultural business (captured within Corporate and Other) was $211 million (post-interest and tax) compared to $58 million in 2019.

US$ million	**Metals and minerals**	**Energy products**	**Corporate and other[1]**	**2020**	Metals and minerals	Energy products	Corporate and other[1]	2019
Revenue◊	54,847	69,290	–	124,137	73,561	120,627	–	194,188
Adjusted EBITDA◊	1,768	2,053	(89)	3,732	1,169	1,515	(47)	2,637
Adjusted EBIT◊	1,667	1,761	(89)	3,339	1,089	1,324	(47)	2,366
Adjusted EBITDA margin	3.2%	3.0%	n.m.	3.0%	1.6%	1.3%	n.m.	1.4%

1 Corporate and other Marketing activities includes $211 million (2019: $58 million) of Glencore's equity accounted share of Viterra (formerly Glencore Agri).

Selected marketing volumes sold

	Units	**2020**	2019	Change %
Copper metal and concentrates[1]	mt	3.4	4.1	(17)
Zinc metal and concentrates[1]	mt	2.8	3.1	(10)
Lead metal and concentrates[1]	mt	1.0	1.1	(9)
Gold	moz	2.0	2.1	(5)
Silver	moz	64.9	68.3	(5)
Nickel	kt	149	181	(18)
Ferroalloys (incl. agency)	mt	8.5	9.5	(11)
Alumina/aluminium	mt	7.2	11.0	(35)
Iron ore	mt	57.6	65.5	(12)
Thermal coal[2]	mt	67.1	86.7	(23)
Metallurgical coal[2]	mt	1.3	6.5	(80)
Crude oil	mbbl	791	973	(19)
Oil products	mbbl	738	779	(5)

1 Estimated metal unit contained.
2 Includes agency volumes.

COPPER

Having started the year above $6,000/t, the spread of Covid-19 and the associated deteriorating demand outlook resulted in copper prices reaching a low of $4,372/t in March. Up to this point, the impacts to mine and scrap supply were limited. The low price environment was temporary, as supply disruptions from containment measures extended globally, particularly mine supply from South and Central America, while consumption in China began to improve, supported by significant monetary and fiscal stimulus. Refined copper inventories subsequently reached multi-year lows, signaling a tight physical market. Net imports of refined copper to China increased to record monthly levels from mid-2020. Cathode premiums consequently improved to their highest levels in five years and strong competition for concentrates saw treatment and refining charges moving to levels last seen in 2012.

The improving global demand conditions during the second half of the year and continued financial stimulus measures, resulted in a strong recovery in copper prices, supported by ongoing strong demand from China, declining visible inventories and more recently, improved demand growth expectations with regards to the longer term energy transition. Mine supply and logistics disruptions persisted into the second half, although to a lesser extent. Net-speculative positioning continued to move long in the

run-up to year end and the copper price moved above $8,000/t in December, an increase of more than 80% from the low-point in March, and reaching the highest level since early 2013.

Looking forward, mine supply is expected to continue to be impacted by measures taken to contain the spread of Covid-19, with projects under construction likely to experience further delays. Supply growth is also constrained by ageing assets, declining ore grades and a diminished project pipeline. For 2021, annual treatment and refining charges settled at their lowest levels in 10 years and benchmark annual cathode premiums rolled over at 2020 levels, reflecting the positive demand outlook for copper consumption and anticipated restocking through supply chains. In the near term, we expect demand to continue to recover ex-China and to remain strong in China, supported by economic stimulus measures, Covid vaccine rollouts and a return to steady growth rates longer term, driven by population growth and rising living standards in emerging economies. In addition, climate change policies will be a key driver for copper growth sectors going forward, from renewable power generation and distribution, to energy storage and electric vehicles.

COBALT

Late 2019 brought stability in the cobalt price at c.$15/lb, with lower stock levels across the cobalt supply chain and expectations of improved demand conditions into 2020. This materialised with an initial 13% price rally to a 2020 high of $17.00/lb, before the pandemic-related retracement to reach a 2020 low of $13.75/lb in July. The average price for the year was $15.40/lb, 4% lower than 2019. Metal demand sectors, notably aerospace, suffered a more pronounced impact than battery and other sectors.

Cobalt hydroxide payability was relatively resilient over the first half of the year, maintaining a range of 60-70% with the support of logistics disruptions, emerging European EV sector demand and solid consumer goods battery demand. African logistics disruptions associated with Covid-19 reduced availability of hydroxide from the DRC, which is responsible for c.70% of global supply and almost all cobalt in the form of hydroxide. Although bottlenecks eased during H2, given stronger European EV demand and Chinese EV demand showing solid signs of recovery, payability pushed above 80% in the last quarter.

2021 has started strongly from a demand and pricing perspective, most notably as Chinese and European EV demand builds momentum. A level of stockpiling of key strategic materials, particularly in China, has also supported demand. EV model releases by global automakers, coupled with strong consumer demand and government support, should underpin EV sales growth in key markets, pointing to a constructive cobalt market. Vaccination roll-out is expected to bolster a wider economic recovery, benefiting non-battery sector demand including aerospace.

ZINC

Covid-related disruptions on the supply side resulted in an unanticipated zinc concentrates deficit in 2020 and, in turn, lower metal production than initially expected. However, global metal demand fell faster than supply, resulting in higher visible metal stocks, although still only representing seven days relative to global demand. Average metal prices reduced by 11% to $2,269 in 2020, but by year end, demand had recovered, with prices rising to $2,631 on average in Q4 2021.

The demand recovery in H2 2020 was stronger in China than in the rest of the world, as evidenced by SHFE stocks at similar levels in both December 2019 and 2020, while other exchange stocks increased. Meanwhile, Chinese mine production slightly decreased in 2020 per NBS (-1.8% YoY), metal imports were curtailed by Covid disruption elsewhere and Chinese smelters continued to process at full capacity, driving concentrates imports up 20.1%, which absorbed excess concentrates stocks ex-China. Spot TCs reduced from c.$300/dmt in Q1 2020 to $85/dmt in December 2020, as smelters competed for concentrates.

Towards the end of the year, market publications revised their zinc metal surplus estimates for 2020 to below 0.5mt, compared to earlier forecasts of a 1mt surplus in the midst of the crisis in Q2 2020. The recovery in the zinc price throughout H2 reflects renewed optimism for metal demand in 2021, while pricing in potential additional disruptions in mine supply and a weaker US dollar.

We expect ex-China mine supply to recover in 2021 (although with risk as Covid measures remain) and be absorbed by post-Covid increases in ex-China smelter production and some global smelter restocking. Indications for demand recovery are encouraging, underpinned by economic stimulus.

In lead markets, Covid disruptions drove TCs down from $180/dmt in January to $100/dmt by December. Refined metal production was not severely affected by the mine disruptions (-2.4% YoY) and metal consumption fell by 4% YoY, in which context, the average price for the year reduced by 9% to $1,826.

NICKEL

In 2020, primary nickel consumption declined year on year, whilst supply growth was driven by Indonesia. The resulting surplus was larger in H1 2020 as the outbreak of Covid-19 had a greater impact on demand than on mine supply, however it then narrowed in H2 2020 on increased nickel consumption from Chinese stainless steel producers.

Global stainless steel production was down on the prior year due to the pandemic. Notable exceptions were China and Indonesia, whose production, particularly for the high-nickel containing 300-series, experienced a strong rebound from Q2 with total 2020 melt exceeding levels seen in 2019.

Outside the stainless steel segment, nickel demand from alloys and special steels was negatively affected by the pandemic's impact on key end-use sectors such as aerospace, oil and gas and automotive. The consequences of travel restrictions and stay-at-home orders for the aerospace industry have been dramatic and the effects on downstream demand are likely to be long lasting. Automotive production significantly declined in the second quarter, prompting year on year double-digit sales declines in almost all markets, except China, where the drop was more modest. Conversely, after a weak first quarter, the electric and hybrid vehicle markets exceeded even the most optimistic forecasts, albeit from a lower base than traditional automotive. In Europe, the strong

policy response prompted by Covid-19 pushed sales above 1 million units, turning it into the world's largest EV market. In China, from August, New Energy Vehicles sales were back to growth mode. We expect the recent positive trend to support a strong rebound in 2021 nickel demand, as major economies and automakers have committed to aggressively support the transformation to EVs.

Meanwhile on the supply side, pandemic-related production losses from traditional nickel suppliers were not as large as initially feared and these were more than offset by continued growth in production of nickel pig iron ("NPI") in Indonesia, which for the first time, surpassed China as the world largest producer of NPI.

Despite the positive demand outlook, we expect the market to remain in surplus in 2021, driven by increasing nickel supply from Indonesia.

FERROALLOYS

Global ferrochrome production decreased by 11% in 2020, with South Africa declining 25% year on year due to rising cost pressures and Covid lockdown restrictions. South African chrome ore exports reduced by 10% (basis YTD November)

Chrome demand recovered during H2, mainly supported by growth in stainless steel production in China and Indonesia, with all other major regions decreasing production in 2020.

Vanadium consumption from carbon steel production decreased considerably during H1 2020 due to Covid-19 related impacts. Demand from the aerospace industry was particularly weak. H2 demand improved, largely due to the carbon steel industry in China.

ALUMINIUM

The aluminium and alumina markets experienced a turbulent 2020 due to the pandemic.

The LME 3M contract reached a 4-year low of $1,462 towards the end of H1, as Covid-19 impaired ex-China demand, causing a large supply surplus. In China, a strong demand rebound lead to higher domestic prices, opening the import arbitrage window which supported ex-China prices and attracted 10-year record primary aluminium imports. With this dynamic in place and an improved global macro sentiment, the LME 3M closing price reached a yearly high of $2,055 before ending the year at $1,974.

In the U.S., with demand weakening, the delivered Midwest premium declined in H1 from 14.5c/lb to 9c/lb, before staging a recovery in H2 to end the year at 14.65c/lb, on the back of demand recovery and re-introduction of quotas on Canadian imports. The CIF Main Japanese Port premium finished the year at $127/t, up from $78/t at the beginning of the year, as customers sought to draw aluminium shipments away from China.

China alumina imports throughout the year also offered a floor to ex-China alumina prices. Price levels were beneficial to smelters during H2 as LME prices outperformed alumina prices.

IRON ORE

Chinese steel production reached record levels in 2020, led by strong infrastructure spending, which in turn led to the iron ore market being in deficit for most of year. Iron ore prices rose to levels not seen over the last five years. In H2 2020, ex-China demand also returned, with prices responding. Despite iron ore prices at multi-year highs, steel mill margins have generally been positive, having been able to pass on the higher raw material costs to their customers. Prospects for a significant increase in iron ore supply are limited in the near term, with prices thereby supported, subject always to the demand side of the equation.

COAL

Seaborne coal trade was dramatically impacted during 2020 by the economic fallout from Covid-19 and the necessary reshuffling of trade flows as China restricted Australian coal purchases. The rapid drop in global energy demand created oversupply, which drove prices to unsustainable lows, comparable with the 2016 downturn. By September, producers had realigned thermal coal production in line with prevailing demand. Further economic recovery in Q4 and a cold northern hemisphere winter led prices higher, particularly domestically in China. At year end, coking coal markets remained temporarily subdued due to the overhang of market players needing to resell excess inventory of Australian coal destined for China.

Global seaborne thermal coal demand in 2020 declined by in excess of 100Mt or 10%, however important pockets of growth could be seen in Vietnam, Malaysia, Indonesia, Pakistan and Bangladesh. In Asia overall, demand fell by some 60Mt, mainly into China, South Korea (preferential use of LNG) and India, due its extended Covid-19 shutdown. Atlantic market demand declined by 40Mt against a backdrop of Covid-19 demand declines, record low LNG import prices, higher carbon prices and growth in renewables power.

Overall, seaborne thermal markets ended 2020 in a balanced position due to lower supply, mainly from the USA, Colombia, Indonesia and Australia, in each case, as producers responded to the lower demand and price environment.

Despite markets starting the year in good shape, noting the above, prices were weak from late February until mid-September, as markets reached a balance, sparking a price recovery from unsustainably low levels. For the year to September, the Newcastle, API4 and API2 indices fell 26%, 42% and 27% from their opening levels to their lows, at which point nearly 60% of the global seaborne supply was selling at cash negative margins. Towards year end, prices improved substantially with Newcastle, API4 and API2 closing the year 32%, 26% and 34% above their year opening price levels. Overall for 2020, the average index prices for Newcastle, API4 and API2 were 22%, 11% and 18% respectively lower than during 2019.

Global pig iron production was down slightly YoY, however metallurgical coal import countries ex-China reported a 14% reduction in production. The resulting reduction in global seaborne coking coal demand caused spot HCC prices to fall from above $160/t during February to below $110/t at the end of August. Recovery of global steel production ex-China in H2 2020 provided brief support for prices during September / October before the Chinese restrictions on Australian coal imports pushed prices to $100/t levels by year

end, leaving some 40% of seaborne suppliers facing negative cash margins. Improving demand, and destocking of coking coal and coke, has since supported a price recovery in early 2021.

OIL

2020 marked one of the most dramatic periods in the history of oil markets, the implications of which are far-reaching and structural across many industries. The start of 2020 saw oil prices at their highs for the year, with Brent over $69 per barrel. By the end of January, the fear of Covid spreading and its anticipated impact on oil demand caused market panic, starting a rout in oil prices.

The collapse of the OPEC+ production cut agreement in early March, temporarily increasing supply, exacerbated the sell-off. Volatility surged to historical highs, with near dated Brent implied volatility topping 100%. Due to the global pandemic, most countries entered some form of lockdown at different stages. With transportation severely curtailed, in particular air travel, near term global oil demand destruction was expected to reach unprecedented levels, even as actual supply was increasing. With oil prices in free fall, OPEC+ finally came to an agreement for production cuts on a massive scale of close to 10 million barrels per day.

As governments extended lockdowns, global oil storage edged towards capacity. Tanker freight rates surged and the oil price curve structure moved into deep contango, as the market forced more oil into storage. Brent dropped below $20 per barrel, its lowest level in more than 20 years. Oil in some parts of the world, in particular the US, was even pricing at negative levels for a short period.

In May, oil prices started to recover as more countries lifted restrictions. Oil inventories looked to have peaked, demand showed signs of recovery and OPEC+ extended production cuts. The optimism was short lived as Covid-19 second waves hit a number of countries in Q3, resulting in renewed restrictions, which kept a lid on oil prices and the curve dropped back into a deep contango. It was only midway through Q4, when reports emerged of possible high-efficacy vaccines, that the oil price strength resumed, closing around $52 per barrel by the end of the year. At the same time, the price curve moved from contango into a strong backwardation, signaling expectations for a tightening in future market conditions.

The oil market has been working to find price equilibrium in an extraordinarily disruptive period, creating material market imbalances and volatility. Physical oil traders, like ourselves, saw the usage of storage and logistics soar and unprecedented price dislocations in markets for crude oil, refined products and freight, generating material trading opportunities.

INDUSTRIAL ACTIVITIES

HIGHLIGHTS

The direct and indirect impacts of Covid-19 played out differently in various parts of the business. On the Metals side, asset suspensions were relatively short-term, while the market's assessment of supply and demand generated sustained commodity price increases in H2 2020. Meanwhile energy prices remained especially low through most of the year.

As a result, while overall Industrial Adjusted EBITDA of $7,828 million was down 13% on 2019, the Metals component was up 31% and Energy was down 73%.

There were notable successes during 2020, a year in which our sites responded to the challenges of adjusting working practices to be sustainable and safe in the pandemic era. Katanga delivered on its ramp-up plans, lifting the African copper portfolio to Adjusted EBITDA of $712 million, a $1 billion improvement on 2019 levels, which was the key factor in lifting the Metals Adjusted EBITDA mining margin from 28% to 36%. On the other hand, the equivalent Energy EBITDA margin declined from 37% to 17%, reflecting the significant reductions in international coal and oil price benchmarks, and to a lesser extent, lower production volumes on account of various extended suspensions in Colombia and Chad and market-related supply reductions in Australia.

Capex of $4,082 million (2019: $5,349 million), was 24% lower year over year reflecting a mix of targeted reductions/deferrals, and "involuntary" reductions as planned work was delayed by pandemic-related restrictions.

US$ million	**Metals and minerals**	**Energy products**	**Corporate and other**	**2020**	Metals and minerals	Energy products	Corporate and other	2019
Revenue◊	30,303	11,145	5	41,453	27,672	15,067	4	42,743
Adjusted EBITDA◊	7,285	1,039	(496)	7,828	5,555	3,854	(445)	8,964
Adjusted EBIT◊	3,054	(1,365)	(612)	1,077	1,016	1,274	(505)	1,785
Adjusted EBITDA mining margin	36%	17%			28%	37%		

Production from own sources – Total[1]

		2020	2019	Change %
Copper	kt	1,258.1	1,371.2	(8)
Cobalt	kt	27.4	46.3	(41)
Zinc	kt	1,170.4	1,077.5	9
Lead	kt	259.4	280.0	(7)
Nickel	kt	110.2	120.6	(9)
Gold	koz	916	886	3
Silver	koz	32,766	32,018	2
Ferrochrome	kt	1,029	1,438	(28)
Coal - coking	*mt*	*7.6*	*9.2*	*(17)*
Coal - semi-soft	*mt*	*4.6*	*6.4*	*(28)*
Coal - thermal	*mt*	*94.0*	*123.9*	*(24)*
Coal	mt	106.2	139.5	(24)
Oil (entitlement interest basis)	kbbl	3,944	5,518	(29)

1 Controlled industrial assets and joint ventures only. Production is on a 100% basis, except for joint ventures, where the Group's attributable share of production is included.

FINANCIAL INFORMATION

US$ million	2020	2019	Change %
Revenue◊			
Copper assets			
Africa (Katanga, Mutanda, Mopani)	3,105	2,829	10
Collahuasi[1]	1,732	1,385	25
Antamina[1]	1,055	1,025	3
Other South America (Antapaccay, Lomas Bayas)	2,025	1,709	18
Australia (Mount Isa, Ernest Henry, Townsville, Cobar)	1,988	1,836	8
Custom metallurgical (Altonorte, Pasar, Horne, CCR)	7,842	7,107	10
Intergroup revenue elimination	(308)	(212)	n.m.
Copper	**17,439**	**15,679**	**11**
Zinc assets			
Kazzinc	3,031	2,906	4
Australia (Mount Isa, McArthur River)	1,219	1,292	(6)
European custom metallurgical (Portovesme, San Juan de Nieva, Nordenham, Northfleet)	2,883	922	213
North America (Matagami, Kidd, CEZ Refinery)	1,746	2,226	(22)
Other Zinc (Argentina, Bolivia, Peru)	317	400	(21)
Zinc	**9,196**	**7,746**	**19**
Nickel assets			
Integrated Nickel Operations (Sudbury, Raglan, Nikkelverk)	1,461	1,551	(6)
Australia (Murrin Murrin)	646	664	(3)
Koniambo	239	315	(24)
Nickel	**2,346**	**2,530**	**(7)**
Ferroalloys	**1,321**	**1,716**	**(23)**
Aluminium/Alumina	**1**	**1**	**–**
Metals and minerals revenue	**30,303**	**27,672**	**10**
Coking Australia	971	1,544	(37)
Thermal Australia	4,031	5,951	(32)
Thermal South Africa	969	1,279	(24)
Prodeco	357	793	(55)
Cerrejón[1]	209	494	(58)
Coal revenue (own production)	**6,537**	**10,061**	**(35)**
Coal other revenue (buy-in coal)	**399**	**768**	**(48)**
Oil E&P assets	111	350	(68)
Oil refining assets[2]	4,098	3,888	5
Energy products revenue◊	**11,145**	**15,067**	**(26)**
Corporate and other revenue	**5**	**4**	**25**
Total Industrial Activities revenue◊	**41,453**	**42,743**	**(3)**

1 Represents the Group's share of these JVs.
2 Controlling interest acquired in April 2019, see note 25.

US$ million	Adjusted EBITDA◊ 2020	2019	Change %	Adjusted EBIT◊ 2020	2019	Change %
Copper assets						
Africa	712	(349)	n.m.	148	(1,279)	n.m.
Collahuasi[1]	1,301	885	47	1,011	603	68
Antamina[1]	755	737	2	472	462	2
Other South America	1,042	859	21	518	264	96
Australia	385	449	(14)	79	121	(35)
Polymet	(20)	(7)	n.m.	(20)	(7)	n.m.
Custom metallurgical	336	377	(11)	162	227	(29)
Copper	**4,511**	**2,951**	**53**	**2,370**	**391**	**506**
Adjusted EBITDA mining margin[2◊]	*42%*	*29%*				
Zinc assets						
Kazzinc	1,228	1,097	12	824	641	29
Australia	384	406	(5)	(63)	6	n.m.
European custom metallurgical	327	166	97	181	50	262
North America	240	155	55	74	(59)	n.m.
Volcan	(33)	(44)	n.m.	(33)	(44)	n.m.
Other Zinc	(21)	(5)	n.m.	(292)	(109)	n.m.
Zinc	**2,125**	**1,775**	**20**	**691**	**485**	**42**
Adjusted EBITDA mining margin[2◊]	*35%*	*33%*				
Nickel assets						
Integrated Nickel Operations	670	657	2	235	235	–
Australia	117	105	11	92	81	14
Koniambo	(196)	(136)	n.m	(298)	(249)	n.m
Nickel	**591**	**626**	**(6)**	**29**	**67**	**(57)**
Adjusted EBITDA mining margin◊	*25%*	*25%*				
Adjusted EBITDA mining margin excl. Koniambo◊	*37%*	*34%*				
Ferroalloys	**133**	**246**	**(46)**	**39**	**116**	**(66)**
Aluminium/Alumina	**(73)**	**(40)**	**n.m.**	**(73)**	**(40)**	**n.m.**
Iron ore	**(2)**	**(3)**	**n.m.**	**(2)**	**(3)**	**n.m.**
Metals and minerals Adjusted EBITDA/EBIT◊	**7,285**	**5,555**	**31**	**3,054**	**1,016**	**201**
Adjusted EBITDA mining margin[2◊]	*36%*	*28%*				
Coking Australia	244	793	(69)	(1)	546	n.m.
Thermal Australia	799	2,332	(66)	(528)	1,018	n.m.
Thermal South Africa	183	324	(44)	(164)	23	n.m.
Prodeco	(72)	43	n.m.	(133)	(180)	n.m.
Cerrejón[1]	5	132	(96)	(105)	(56)	n.m.
Coal	**1,159**	**3,624**	**(68)**	**(931)**	**1,351**	**(169)**
Adjusted EBITDA margin[3◊]	*18%*	*36%*				
Oil E&P assets	(15)	215	n.m.	(187)	–	n.m.
Oil refining assets	(105)	15	n.m.	(247)	(77)	n.m.
Energy products Adjusted EBITDA/EBIT◊	**1,039**	**3,854**	**(73)**	**(1,365)**	**1,274**	**n.m.**
Adjusted EBITDA margin[3◊]	*17%*	*37%*				
Corporate and other	**(496)**	**(445)**	**n.m.**	**(612)**	**(505)**	**n.m.**
Industrial activities Adjusted EBITDA/EBIT◊	**7,828**	**8,964**	**(13)**	**1,077**	**1,785**	**(40)**

1 Represents the Group's share of these JVs.

2 Adjusted EBITDA mining margin for Metals and Minerals is Adjusted EBITDA excluding non-mining assets as described below ($6,488 million (2019: $4,941 million)) divided by Revenue excluding non-mining assets and intergroup revenue elimination ($ 18,139 million (2019: $17,628 million) i.e. the weighted average EBITDA margin of the mining assets. Non-mining assets are the Copper custom metallurgical assets, Zinc European custom metallurgical assets, Zinc North America (principally smelting/ processing), the Aluminium/Alumina group and Volcan (equity accounted with no relevant revenue) as noted in the table above.

3 Energy products EBITDA margin is Adjusted EBITDA for coal and Oil E&P (but excluding Oil refining) ($1,144 million (2019: $3,839 million)), divided by the sum of coal revenue from own production and Oil E&P revenue ($6,647 million (2019: $10,411 million)).

US$ million	2020 Sustaining	2020 Expansion	2020 Total	2019 Sustaining	2019 Expansion	2019 Total
Capital expenditure◊						
Copper assets						
Africa	220	196	416	381	477	858
Collahuasi[1]	287	44	331	298	25	323
Antamina[1]	180	10	190	228	5	233
Other South America	309	12	321	403	21	424
Australia	208	–	208	203	–	203
Polymet	8	–	8	–	9	9
Custom metallurgical	144	–	144	234	–	234
Copper	**1,356**	**262**	**1,618**	**1,747**	**537**	**2,284**
Zinc assets						
Kazzinc	201	193	394	209	236	445
Australia	173	–	173	293	–	293
European custom metallurgical	80	25	105	106	–	106
North America	52	–	52	68	6	74
Other Zinc	47	–	47	104	–	104
Zinc	**553**	**218**	**771**	**780**	**242**	**1,022**
Nickel assets						
Integrated Nickel Operations	142	306	448	164	289	453
Australia	33	–	33	16	–	16
Koniambo	38	–	38	39	–	39
Nickel	**213**	**306**	**519**	**219**	**289**	**508**
Ferroalloys	**87**	**28**	**115**	**141**	**8**	**149**
Aluminium/Alumina	**–**	**–**	**–**	**–**	**–**	**–**
Metals and minerals capital expenditure◊	**2,209**	**814**	**3,023**	**2,887**	**1,076**	**3,963**
Australia (thermal and coking)	394	152	546	358	121	479
Thermal South Africa	147	28	175	200	29	229
Prodeco	44	–	44	229	–	229
Cerrejón[1]	22	–	22	53	–	53
Total Coal	**607**	**180**	**787**	**840**	**150**	**990**
Oil E&P assets	119	–	119	201	–	201
Oil refining assets	125	–	125	121	–	121
Energy products capital expenditure◊	**851**	**180**	**1,031**	**1,162**	**150**	**1,312**
Corporate and other	**–**	**28**	**28**	**–**	**74**	**74**
Industrial activities capital expenditure◊	**3,060**	**1,022**	**4,082**	**4,049**	**1,300**	**5,349**

1 Represents the Group's share of these JVs.

PRODUCTION DATA

Production from own sources – Copper assets[1]

		2020	2019	Change %
African Copper (Katanga, Mutanda, Mopani)				
Copper metal	kt	301.0	359.3	(16)
Copper in concentrates	kt	–	10.6	(100)
Cobalt[2]	kt	23.9	42.2	(43)
Collahuasi[3]				
Copper in concentrates	kt	276.8	248.8	11
Silver in concentrates	koz	3,961	2,878	38
Gold in concentrates[4]	koz	53	38	39
Antamina[5]				
Copper in concentrates	kt	127.7	151.4	(16)
Zinc in concentrates	kt	142.4	102.4	39
Silver in concentrates	koz	5,535	5,051	10
Other South America (Antapaccay, Lomas Bayas)				
Copper metal	kt	74.1	78.9	(6)
Copper in concentrates	kt	185.6	197.6	(6)
Gold in concentrates and in doré	koz	90	85	6
Silver in concentrates and in doré	koz	1,298	1,576	(18)
Australia (Mount Isa, Ernest Henry, Townsville, Cobar)				
Copper metal	kt	138.8	151.1	(8)
Copper in concentrates	kt	46.2	43.5	6
Gold	koz	93	100	(7)
Silver	koz	1,271	1,615	(21)
Total Copper department				
Copper	**kt**	**1,150.2**	**1,241.2**	**(7)**
Cobalt	**kt**	**23.9**	**42.2**	**(43)**
Zinc	**kt**	**142.4**	**102.4**	**39**
Gold	**koz**	**236**	**223**	**6**
Silver	**koz**	**12,065**	**11,120**	**8**

Production from own sources – Zinc assets[1]

		2020	2019	Change %
Kazzinc				
Zinc metal	kt	167.5	172.5	(3)
Lead metal	kt	25.6	31.6	(19)
Lead in concentrates	kt	–	2.8	(100)
Copper metal[6]	kt	37.0	44.0	(16)
Gold	koz	659	634	4
Silver	koz	4,712	4,546	4
Silver in concentrates	koz	–	92	(100)
Australia (Mount Isa, McArthur River)				
Zinc in concentrates	kt	633.5	597.6	6
Lead in concentrates	kt	216.8	213.3	2
Silver in concentrates	koz	7,404	7,193	3
North America (Matagami, Kidd)				
Zinc in concentrates	kt	114.7	111.4	3
Copper in concentrates	kt	40.7	39.1	4
Silver in concentrates	koz	2,125	1,654	28
Other Zinc: South America (Argentina, Bolivia, Peru) [7]				
Zinc in concentrates	kt	112.3	93.6	20
Lead in concentrates	kt	17.0	32.3	(47)
Copper in concentrates	kt	1.6	2.7	(41)
Silver in concentrates	koz	6,121	6,906	(11)
Total Zinc department				
Zinc	**kt**	**1,028.0**	**975.1**	**5**
Lead	**kt**	**259.4**	**280.0**	**(7)**
Copper	**kt**	**79.3**	**85.8**	**(8)**
Gold	**koz**	**659**	**634**	**4**
Silver	**koz**	**20,362**	**20,391**	**–**

Production from own sources – Nickel assets[1]

		2020	2019	Change %
Integrated Nickel Operations (INO) (Sudbury, Raglan, Nikkelverk)				
Nickel metal	kt	56.5	59.8	(6)
Nickel in concentrates	kt	0.4	0.5	(20)
Copper metal	kt	13.5	15.8	(15)
Copper in concentrates	kt	15.1	28.4	(47)
Cobalt metal	kt	0.6	0.7	(14)
Gold	koz	21	29	(28)
Silver	koz	339	507	(33)
Platinum	koz	40	51	(22)
Palladium	koz	101	112	(10)
Rhodium	koz	4	4	–
Murrin Murrin				
Nickel metal	kt	36.4	36.6	(1)
Cobalt metal	kt	2.9	3.4	(15)
Koniambo				
Nickel in ferronickel	kt	16.9	23.7	(29)
Total Nickel department				
Nickel	**kt**	**110.2**	**120.6**	**(9)**
Copper	**kt**	**28.6**	**44.2**	**(35)**
Cobalt	**kt**	**3.5**	**4.1**	**(15)**
Gold	**koz**	**21**	**29**	**(28)**
Silver	**koz**	**339**	**507**	**(33)**
Platinum	**koz**	**40**	**51**	**(22)**
Palladium	**koz**	**101**	**112**	**(10)**
Rhodium	**koz**	**4**	**4**	**–**

Production from own sources – Ferroalloys assets[1]

		2020	2019	Change %
Ferrochrome[8]	kt	1,029	1,438	(28)
Vanadium Pentoxide	mlb	19.5	20.2	(3)

Total production – Custom metallurgical assets[1]

		2020	2019	Change %
Copper (Altonorte, Pasar, Horne, CCR)				
Copper metal	kt	482.6	432.9	11
Copper anode	kt	490.1	510.7	(4)
Zinc (Portovesme, San Juan de Nieva, Nordenham, Northfleet)				
Zinc metal	kt	787.2	805.7	(2)
Lead metal	kt	198.0	190.5	4

Coal assets[1]

		2020	2019	Change %
Australian coking coal	mt	7.6	9.2	(17)
Australian semi-soft coal	mt	4.6	6.4	(28)
Australian thermal coal (export)	mt	55.7	64.2	(13)
Australian thermal coal (domestic)	mt	6.4	8.6	(26)
South African thermal coal (export)	mt	14.8	13.0	14
South African thermal coal (domestic)	mt	9.2	13.9	(34)
Prodeco	mt	3.8	15.6	(76)
Cerrejón[9]	mt	4.1	8.6	(52)
Total Coal department	**mt**	**106.2**	**139.5**	**(24)**

Oil assets

		2020	2019	Change %
Glencore entitlement interest basis				
Equatorial Guinea	kbbl	1,960	1,895	3
Chad	kbbl	1,112	3,371	(67)
Cameroon	kbbl	872	252	246
Total Oil department	**kbbl**	**3,944**	**5,518**	**(29)**

1 Controlled industrial assets and joint ventures only. Production is on a 100% basis, except for joint ventures, where the Group's attributable share of production is included.
2 Cobalt contained in concentrates and hydroxides.
3 The Group's pro-rata share of Collahuasi production (44%).
4 Reported from Q4 2020 given higher gold price and production, with resulting increased materiality. Comparatives updated accordingly.
5 The Group's pro-rata share of Antamina production (33.75%).
6 Copper metal includes copper contained in copper concentrates and blister.
7 South American production excludes Volcan Compania Minera.
8 The Group's attributable 79.5% share of the Glencore-Merafe Chrome Venture.
9 The Group's pro-rata share of Cerrejón production (33.3%).

OPERATING HIGHLIGHTS

Copper assets

Own sourced copper production of 1,258,100 tonnes was 113,100 tonnes (8%) lower than 2019, mainly reflecting Mutanda being on care and maintenance in 2020 (partly offset by Katanga's successful ramp-up), with Covid-19 related suspensions being a much smaller factor.

Own sourced cobalt production of 27,400 tonnes was 18,900 tonnes (41%) lower than 2019, mainly reflecting Mutanda on care and maintenance. On a standalone basis, Katanga's cobalt production was up 6,800 tonnes (40%).

African Copper

Own sourced copper production of 301,000 tonnes was 68,900 tonnes (19%) lower than 2019, and cobalt production of 23,900 tonnes was 18,300 tonnes (43%) lower, in each case reflecting Mutanda's care and maintenance status during 2020, partly offset by Katanga's ramp-up.

In January 2021, Glencore agreed terms for the sale of its interest in Mopani to ZCCM, with completion expected in H1 2021.

Collahuasi

Attributable copper production of 276,800 tonnes was 28,000 tonnes (11%) higher than 2019, reflecting higher milled throughput following an investment programme in the plant over recent years. The lower production in Q4 of 59,200 tonnes (down 18% on Q4 2019) related to expected lower ore head grades during the period, with a sequential increase expected in Q1 2021.

Antamina

Mining operations were suspended from mid-April to late May as part of Peru's overall Covid-19 response.

Accordingly, attributable copper production of 127,700 tonnes was 23,700 tonnes (16%) lower than 2019. Zinc production of 142,400 tonnes was up 40,000 tonnes (39%), as expected higher zinc grades in the current phase of the mine plan more than offset the impact of the Covid suspension.

Other South America

Own sourced copper production of 259,700 tonnes was 16,800 tonnes (6%) lower than 2019, mainly reflecting expected lower grades at Antapaccay.

In December 2020, Glencore contributed its share of the Alumbrera mine, plant and infrastructure (on care and maintenance) into a 25% interest in a newly established and larger resourced MARA joint venture.

Australia

Own sourced copper production of 185,000 tonnes was 9,600 tonnes (5%) lower than 2019, mainly reflecting temporary access restrictions to parts of the Mount Isa underground mine in Q4 2020, and a higher number of required smelter shutdown days to maintain air quality and emissions standards.

Custom metallurgical assets

Copper cathode production of 482,600 tonnes was 49,700 tonnes (11%) higher than 2019, reflecting increased output from Pasar and CCR.

Copper anode production of 490,100 tonnes was 20,600 tonnes (4%) lower than 2019, mainly reflecting planned maintenance at Altonorte and Horne.

Zinc assets

Own sourced zinc production of 1,170,400 tonnes was 92,900 tonnes (9%) higher than 2019, mainly reflecting: (i) higher zinc content from Antamina noted above (40,000 tonnes); (ii) improved output from the Mount Isa operations (27,800 tonnes); and (iii) the net positive effect of 18,700 tonnes from Other South America, owing to restarting the short-life Iscaycruz mine in Peru, offset by Covid-related suspensions and shutdowns.

Kazzinc

Own sourced zinc production of 167,500 tonnes was 5,000 tonnes (3%) lower than 2019.

Own sourced lead production of 25,600 tonnes was 8,800 tonnes (26%) lower than 2019, reflecting maintenance on the lead smelter and mining from the Ushkatyn mine in the base period, which has now ceased.

Own sourced copper production of 37,000 tonnes was 7,000 tonnes (16%) lower than 2019 due to expected lower grades at Maleevsky mine, and maintenance at the Ridder-Sokolny concentrator.

Own sourced gold production of 659,000 ounces was 25,000 ounces (4%) higher than 2019, mainly reflecting higher grades and recoveries at Vasilkovsky.

Australia

Zinc production of 633,500 tonnes was 35,900 tonnes (6%) higher than 2019 due to drawing down accumulated ore stock at Mount Isa, now at normal levels, while lead production of 216,800 tonnes was in line with last year.

North America

Zinc production of 114,700 tonnes and copper production of 40,700 tonnes were modestly up on 2019 levels.

South America

Zinc production of 112,300 tonnes was 18,700 tonnes (20%) higher than 2019, mainly reflecting the restart of the short-life Iscaycruz mine in Peru in Q3 2019, which more than offset the effect of Covid-related mine suspensions and shutdowns in 2020.

European custom metallurgical assets

Zinc production of 787,200 tonnes was modestly lower than 2019, while lead production of 198,000 tonnes was in line with 2019.

Nickel assets

Own sourced nickel production of 110,200 tonnes was 10,400 tonnes (9%) lower than 2019, reflecting Koniambo operating as a single-line operation for the majority of 2020, with Covid-related mobility restrictions affecting its maintenance schedule. The expected decline in grades at the existing Sudbury mines (INO) also contributed.

Integrated Nickel Operations (INO)

Own sourced nickel production of 56,900 tonnes was 3,400 tonnes (6%) lower than 2019, mainly reflecting the expected decline in existing Sudbury mines' head grades. Refinery production including third party material was in line with 2019.

Own sourced copper production of 28,600 tonnes was 15,600 tonnes (35%) lower than 2019, mainly reflecting the expected decline in copper from the existing Sudbury mines.

Murrin Murrin

Own sourced nickel production of 36,400 tonnes was in line with 2019.

Koniambo

Nickel production of 16,900 tonnes was 6,800 tonnes (29%) lower than 2019, with the operation having effectively been run on one furnace (rather than two) for the majority of 2020. One of the furnaces was undergoing scheduled maintenance when Covid-19 restrictions were introduced in March, delaying its restart until October.

The second furnace was taken down for its own maintenance in January 2021, with a restart expected in April.

Ferroalloys assets

Attributable ferrochrome production of 1,029,000 tonnes was 409,000 tonnes (28%) lower than 2019, reflecting the South African lockdown and resulting suspension of smelting operations in Q2, with a phased restart thereafter. Lydenburg smelter has been placed on extended care and maintenance. The remaining four smelters were fully operational from Q4, resulting in materially higher quarter on quarter production.

Coal assets

Coal production of 106.2 million tonnes was 33.3 million tonnes (24%) lower than in 2019, reflecting the impacts of the pandemic via stopped or reduced work periods in Colombia and South Africa, extended care and maintenance at Prodeco, plus market-related supply reductions in Australia in H2 2020.

Australian coking

Production of 7.6 million tonnes was 1.6 million tonnes (17%) down on 2019, reflecting downtime at Oaky Creek with an additional longwall move in the current period, timing of coking coal processing at Newlands and planned wash plant maintenance at Hail Creek.

Australian thermal and semi-soft

Production of 66.7 million tonnes was 12.5 million tonnes (16%) down on 2019, mainly reflecting targeted volume reductions in H2 2020, in response to the weak coal price environment.

South African thermal
Production of 24.0 million tonnes was 2.9 million tonnes (11%) down on 2019, reflecting various Covid-19 impacts, including self-isolation requirements for staff and contractors.

Prodeco
Prodeco has been on temporary care and maintenance since March 2020. An application for longer-term care and maintenance was refused in December 2020. On 4 February 2021, Glencore announced that Prodeco would commence the process of handing its mining contracts back to the Republic of Colombia through the National Mining Agency and that the mines would remain on care and maintenance until the formal process of relinquishing the contracts was complete.

Cerrejón
Cerrejón production was interrupted initially by a mandated shutdown from Q2-Q3, and subsequently by strike action in Q3-Q4. Production restarted in December 2020, later than initially expected.

Oil assets

Exploration and production
Entitlement interest oil production of 3.9 million barrels was 1.6 million barrels (29%) lower than 2019. Operated fields in Chad were placed on care and maintenance in March/April 2020 and are yet to be restarted, given continued pandemic-related challenges in international mobility (2.3 million barrels decrease). The balance reflects year over year production increases in Equatorial Guinea and Cameroon since new wells were drilled.

Quarter on quarter, production in Equatorial Guinea reduced as a result of a scheduled temporary shut-in to tie in gas pipeline-related infrastructure. The Alen field is moving into a natural gas production phase with first gas expected in Q1 2021.

CONSOLIDATED STATEMENT OF INCOME

FOR THE YEAR ENDED 31 DECEMBER 2020

US$ million	Notes	**2020**	2019
Revenue	3	142,338	215,111
Cost of goods sold		(138,640)	(210,434)
Selling and administrative expenses		(1,681)	(1,391)
Share of income from associates and joint ventures	10	444	114
Loss on disposals of non-current assets	4	(36)	(43)
Other income	5	438	372
Other expense	5	(611)	(545)
Impairments of non-current assets	6	(5,715)	(2,322)
Impairments of financial assets	6	(232)	(86)
Dividend income	10	32	49
Interest income		120	227
Interest expense		(1,573)	(1,940)
Loss before income taxes		**(5,116)**	**(888)**
Income tax credit/(expense)	7	1,170	(618)
Loss for the year		**(3,946)**	**(1,506)**
Attributable to:			
Non-controlling interests		(2,043)	(1,102)
Equity holders of the Parent		(1,903)	(404)
Loss per share:			
Basic (US$)	17	(0.14)	(0.03)
Diluted (US$)	17	(0.14)	(0.03)

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

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2020

US$ million	Notes	**2020**	2019
Loss for the year		(3,946)	(1,506)
Other comprehensive (loss)/income			
Items not to be reclassified to the statement of income in subsequent periods:			
Defined benefit plan remeasurements, net of tax of $3 million (2019: $19 million)	23	(17)	(80)
(Loss)/gain on equity investments accounted for at fair value through other comprehensive income, net of tax of $1 million (2019: $11 million)	10	(630)	337
Gain/(loss) due to changes in credit risk on financial liabilities accounted for at fair value through profit and loss		19	(1)
Net items not to be reclassified to the statement of income in subsequent periods		**(628)**	**256**
Items that have been or may be reclassified to the statement of income in subsequent periods:			
Exchange (loss)/gain on translation of foreign operations		(189)	117
Losses on cash flow hedges, net of tax of $4 million (2019: $4 million)		(42)	(51)
Cash flow hedges reclassifed to the statement of income		(12)	–
Share of other comprehensive loss from associates and joint ventures	10	(14)	(37)
Net items that have been or may be reclassified to the statement of income in subsequent periods		**(257)**	**29**
Other comprehensive (loss)/income		**(885)**	**285**
Total comprehensive loss		**(4,831)**	**(1,221)**
Attributable to:			
Non-controlling interests		(2,067)	(1,103)
Equity holders of the Parent		(2,764)	(118)

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

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2020

US$ million	Notes	**2020**	2019 (Restated)[1]
Assets			
Non-current assets			
Property, plant and equipment	8	47,110	55,357
Intangible assets	9	6,467	7,006
Investments in associates and joint ventures	10	12,400	12,984
Other investments	10	1,733	2,387
Advances and loans	11	3,042	2,427
Other financial assets	27	1,106	453
Inventories	12	678	575
Deferred tax assets	7	2,252	1,477
		74,788	**82,666**
Current assets			
Inventories	12	22,852	19,936
Accounts receivable	13	15,154	16,671
Other financial assets	27	1,998	1,953
Income tax receivable	7	444	350
Prepaid expenses		220	315
Cash and cash equivalents	14	1,498	1,899
		42,166	**41,124**
Assets held for sale	15	1,046	286
		43,212	**41,410**
Total assets		**118,000**	**124,076**
Equity and liabilities			
Capital and reserves – attributable to equity holders			
Share capital	16	146	146
Reserves and retained earnings		37,491	40,128
		37,637	**40,274**
Non-controlling interests	33	(3,235)	(1,038)
Total equity		**34,402**	**39,236**
Non-current liabilities			
Borrowings	20	29,227	29,067
Deferred income	21	2,590	2,670
Deferred tax liabilities	7	4,721	6,094
Other financial liabilities	27	688	1,229
Provisions including post-retirement benefits	22	6,931	6,772
		44,157	**45,832**
Current liabilities			
Borrowings	20	8,252	7,976
Accounts payable	24	24,038	26,193
Deferred income	21	1,070	558
Provisions	22	693	489
Other financial liabilities	27	4,276	2,872
Income tax payable	7	927	764
		39,256	**38,852**
Liabilities held for sale	15	185	156
		39,441	**39,008**
Total equity and liabilities		**118,000**	**124,076**

1 Certain balances have been represented to conform with current year presentation (see notes 22 and 27).

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

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2020

US$ million	Notes	**2020**	2019
Operating activities			
Loss before income taxes		(5,116)	(888)
Adjustments for:			
Depreciation and amortisation		6,671	7,160
Share of income from associates and joint ventures	10	(444)	(114)
Streaming revenue and other non-current provisions		(205)	(296)
Loss on disposals of non-current assets	4	36	43
Unrealised mark-to-market movements on other investments	5	(59)	(47)
Impairments	6	5,947	2,408
Other non-cash items – net[1]		285	367
Interest expense – net		1,453	1,713
Cash generated by operating activities before working capital changes		**8,568**	**10,346**
Working capital changes			
(Increase)/decrease in accounts receivable[2]		(385)	1,211
(Increase)/decrease in inventories		(3,189)	678
(Decrease)/increase in accounts payable[3]		(436)	199
Total working capital changes		**(4,010)**	**2,088**
Income taxes paid		(820)	(2,301)
Interest received		100	200
Interest paid		(1,174)	(1,604)
Net cash generated by operating activities		**2,664**	**8,729**
Investing activities			
Net cash used in acquisition of subsidiaries	25	–	(123)
Net cash (used in)/received from disposal of subsidiaries	25	(222)	5
Purchase of investments		(122)	(125)
Proceeds from sale of investments		135	119
Purchase of property, plant and equipment		(3,569)	(4,712)
Proceeds from sale of property, plant and equipment		52	178
Dividends received from associates and joint ventures	10	1,015	942
Net cash used by investing activities		**(2,711)**	**(3,716)**

1 Includes certain non-cash items as disclosed in note 5, share based remuneration of $184 million (2019: $190 million) and inventory net realisable value adjustment of negative $37 million (2019: $184 million).

2 Includes movements in other financial assets, prepaid expenses and long-term advances and loans.

3 Includes movements in other financial liabilities, provisions and deferred income.

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

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2020

US$ million	Notes	**2020**	2019
Financing activities[1]			
Proceeds from issuance of capital market notes[2]		3,362	3,866
Repayment of capital market notes		(4,017)	(3,167)
Repurchase of capital market notes		(72)	–
Repayment of revolving credit facility		(870)	(29)
Proceeds from other non-current borrowings		392	291
Repayment of other non-current borrowings		(44)	(325)
Repayment of lease liabilities		(560)	(358)
Margin receipts in respect of financing related hedging activities		1,040	529
Proceeds from/(repayment of) current borrowings		217	(682)
Proceeds from U.S. commercial papers		415	79
Acquisition of non-controlling interests in subsidiaries		(56)	(24)
Return of capital/distributions to non-controlling interests		(127)	(305)
Purchase of own shares	16	–	(2,318)
Disposal of own shares		–	6
Distributions paid to equity holders of the Parent	18	–	(2,710)
Net cash used by financing activities		**(320)**	**(5,147)**
Decrease in cash and cash equivalents		(367)	(134)
Effect of foreign exchange rate changes		(36)	(11)
Cash and cash equivalents, beginning of year		1,901	2,046
Cash and cash equivalents, end of year		**1,498**	**1,901**
Cash and cash equivalents reported in the statement of financial position		1,498	**1,899**
Cash and cash equivalents attributable to assets held for sale		–	**2**

1 Refer to note 20 for reconciliation of movement in borrowings.

2 Net of issuance costs relating to capital market notes of $20 million (2019: $25 million).

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

CONSOLIDATED STATEMENT OF CHANGES OF EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2020

	Retained earnings	Share premium	Other reserves (Note 16)	Own shares (Note 16)	Total reserves and retained earnings	Share capital	Total equity attributable to equity holders	Non-controlling interests (Note 32)	Total equity
1 January 2019	**5,343**	**48,504**	**(4,937)**	**(3,318)**	**45,592**	**146**	**45,738**	**(355)**	**45,383**
Loss for the year	(404)	–	–	–	(404)	–	(404)	(1,102)	(1,506)
Other comprehensive (loss)/income	(118)	–	404	–	286	–	286	(1)	285
Total comprehensive loss	**(522)**	**–**	**404**	**–**	**(118)**	**–**	**(118)**	**(1,103)**	**(1,221)**
Own share disposal[1]	(115)	–	–	199	84	–	84	–	84
Own share purchases[1]	–	–	–	(2,318)	(2,318)	–	(2,318)	–	(2,318)
Equity-settled share-based expenses[2]	12	–	–	–	12	–	12	–	12
Change in ownership interest in subsidiaries[3]	–	–	(418)	–	(418)	–	(418)	358	(60)
Acquisition/disposal of business[4]	–	–	–	–	–	–	–	371	371
Reclassifications	24	–	(20)	–	4	–	4	(4)	–
Distributions paid[5]	–	(2,710)	–	–	(2,710)	–	(2,710)	(305)	(3,015)
31 December 2019	**4,742**	**45,794**	**(4,971)**	**(5,437)**	**40,128**	**146**	**40,274**	**(1,038)**	**39,236**

	Retained earnings	Share premium	Other reserves (Note 16)	Own shares (Note 16)	Total reserves and retained earnings	Share capital	Total equity attributable to equity holders	Non-controlling interests (Note 32)	Total equity
1 January 2020	**4,742**	**45,794**	**(4,971)**	**(5,437)**	**40,128**	**146**	**40,274**	**(1,038)**	**39,236**
Loss for the year	(1,903)	–	–	–	(1,903)	–	(1,903)	(2,043)	(3,946)
Other comprehensive loss	(32)	–	(829)	–	(861)	–	(861)	(24)	(885)
Total comprehensive loss	**(1,935)**	**–**	**(829)**	**–**	**(2,764)**	**–**	**(2,764)**	**(2,067)**	**(4,831)**
Own share disposal[1]	(32)	–	–	133	101	–	101	–	101
Equity-settled share-based expenses[2]	57	–	–	–	57	–	57	–	57
Change in ownership interest in subsidiaries[3]	–	–	(31)	–	(31)	–	(31)	(3)	(34)
Reclassifications	17	–	(17)	–	–	–	–	–	–
Distributions paid[5]	–	–	–	–	–	–	–	(127)	(127)
31 December 2020	**2,849**	**45,794**	**(5,848)**	**(5,304)**	**37,491**	**146**	**37,637**	**(3,235)**	**34,402**

1 See note 16.
2 See note 19.
3 See note 32.
4 See note 25.
5 See note 18.

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

NOTES TO THE FINANCIAL STATEMENTS

1. Accounting policies

CORPORATE INFORMATION

Glencore plc (the “Company”, “Parent”, the “Group” or “Glencore”), is a leading integrated producer and marketer of natural resources, with worldwide activities in the production, refinement, processing, storage, transport and marketing of metals and minerals and energy products. Glencore operates on a global scale, marketing and distributing physical commodities sourced from third party producers and own production to industrial consumers, such as those in the battery, electronic, construction, automotive, steel, energy and oil industries. Glencore also provides financing, logistics and other services to producers and consumers of commodities. In this regard, Glencore seeks to capture value throughout the commodity supply chain. Glencore’s long experience as a commodity producer and merchant has allowed it to develop and build upon its expertise in the commodities which it markets and cultivate long-term relationships with a broad supplier and customer base across diverse industries and in multiple geographic regions.

This preliminary announcement was authorised for issue in accordance with a Directors’ resolution on 15 February 2021.

The unaudited financial information for the year ended 31 December 2020 and audited financial information for the year ended 31 December 2019 contained in this document do not constitute statutory accounts as defined in Article 105 of Companies (Jersey) Law 1991. The financial information for the year ended 31 December 2020 has been extracted from the financial statements of Glencore which will be delivered to the Registrar in due course. The audit report for 31 December 2020 is yet to be signed by the auditors.

STATEMENT OF COMPLIANCE

The financial information included in this preliminary announcement has been prepared in accordance with the recognition and measurement criteria of:

- International Financial Reporting Standards (IFRS) adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union, and
- IFRS as issued by the International Accounting Standards Board (IASB).

This announcement does not itself contain sufficient information to comply with those standards. The Company expects to publish full financial statements that comply with IFRS Standards in March 2021.

CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

The preparation of the consolidated financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of assets and liabilities as well as the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable and relevant under the circumstances, independent estimates, quoted market prices and common, industry standard modelling techniques. Actual outcomes could result in a material adjustment to the carrying amount of assets or liabilities affected in future periods.

Glencore has identified the following areas as being critical to understanding Glencore’s financial position as they require management to make complex and/or subjective judgements, estimates and assumptions about matters that are inherently uncertain:

CRITICAL ACCOUNTING JUDGEMENTS

In the process of applying Glencore’s accounting policies, management has made the following judgements based on the relevant facts and circumstances including macro-economic circumstances and, where applicable, interpretation of underlying agreements, which have the most significant effect on the amounts recognised in the consolidated financial statements.

(i) Determination of control of subsidiaries and joint arrangements

Judgement is required to determine when Glencore has control of subsidiaries or joint control of joint or other unincorporated arrangements. This requires an assessment of the relevant activities (those relating to the operating and capital decisions of the arrangement, such as: the approval of the capital expenditure programme for each year, and appointing, remunerating and terminating the key management personnel or service providers of the operations) and when the decisions in relation to those activities are under the control of Glencore or require unanimous consent. See note 25 for a summary of the acquisitions of subsidiaries completed during 2020 and 2019 and the key judgements made in determining control thereof.

1. Accounting policies continued

Judgement is also required in determining the classification of a joint arrangement between a joint venture or a joint operation through an evaluation of the rights and obligations arising from the arrangement and in particular, if the joint arrangement has been structured through a separate vehicle, further consideration is required of whether:

(1) the legal form of the separate vehicle gives the parties rights to the assets and obligations for the liabilities;

(2) the contractual terms and conditions give the parties rights to the assets and obligations for the liabilities; and

(3) other facts and circumstances give the parties rights to the assets and obligations for the liabilities.

Joint arrangements in which the primary activity is the provision of output to the shareholders, typically convey substantially all the economic benefits of the assets to the parties and judgement is required in assessing whether the terms of the offtake agreements and any other obligations for liabilities of the arrangement result in the parties being substantially the only source of cash flows contributing to the continuity of the operations of the arrangement.

Certain joint arrangements that are structured through separate vehicles including Collahuasi and Viterra (formerly Glencore Agri) are accounted for as joint ventures. The Collahuasi arrangement is primarily designed for the provision of output to the shareholders sharing joint control, the offtake terms of which are at prevailing market prices and the parties are not obligated to cover any potential funding shortfalls. In management's judgement, Glencore is not the only possible source of funding and does not have a direct or indirect obligation to the liabilities of the arrangement, but rather shares in its net assets and, therefore, such arrangements have been accounted for as joint ventures.

Differing conclusions around these judgements, may materially impact how these businesses are presented in the consolidated financial statements – under the full consolidation method, equity method or recognition of Glencore's share of assets, liabilities, revenue and expenses, including any assets or liabilities held jointly. See note 10 for a summary of these joint arrangements and the key judgements made in determining the applicable accounting treatment for any material joint arrangements entered during the year.

(ii) Classification of transactions which contain a financing element (notes 20, 21 and 24)

Transactions for the purchase of commodities may contain a financing element such as extended payment terms. Under such an arrangement, a financial institution may issue a letter of credit on behalf of Glencore and act as the paying party upon delivery of product by the supplier and Glencore will subsequently settle the liability directly with the financial institution, generally from 30 up to 120 days after physical supply. Judgement is required to determine the most appropriate classification and presentation of these transactions within the statements of cash flows and financial position. In determining the appropriate classification, management considers the underlying economic substance of the transaction and the significance of the financing element to the transaction. Typically, the economic substance of the transaction is determined to be operating in nature as the financing element is insignificant and the time frame in which the original arrangement is extended by, is consistent and within supply terms commonly provided in the market. As a result, the entire cash flow is presented as operating in the statement of cash flow with a corresponding trade payable in the statement of financial position. As at 31 December 2020, trade payables include $7,178 million (2019: $5,687 million) of such liabilities arising from supplier financing arrangements, the weighted average of which have extended the settlement of the original payable to 91 days (2019: 86 days) after physical supply and are due for settlement 46 days (2019: 38 days) after year end. There was no significant exposure to any individual financial institution under these arrangements. These payables are not included within net funding and net debt as defined in the APMs section.

(iii) Critical judgement related to investigations by regulatory and enforcement authorities (note 30)

1. Accounting policies continued

KEY SOURCES OF ESTIMATION UNCERTAINTY

In the process of applying Glencore's accounting policies, management has made key estimates and assumptions concerning the future and other key sources of estimation uncertainty. The key assumptions and estimates at the reporting date that have a significant risk of resulting in a material adjustment to the carrying amount of assets and liabilities within the next financial year, are described below. Actual results may differ from these estimates under different assumptions and conditions and may materially affect financial results or the financial position reported in future periods.

(i) Recognition of deferred tax assets and uncertain tax positions (note 7)

Deferred tax assets are recognised only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those deferred tax assets are likely to reverse, and a judgement as to whether there will be sufficient taxable income available to offset the tax assets when they do reverse. These judgements and estimates are subject to risk and uncertainty and therefore, to the extent assumptions regarding future profitability change, there can be a material increase or decrease in the amounts recognised in the consolidated statement of income in the period in which the change occurs, notably the deferred tax asset and uncertain tax position of the Group's DRC operations as outlined in note 7. The recoverability of the Group's deferred tax assets and the completeness and accuracy of its uncertain tax positions, including the estimates and assumptions contained therein are reviewed regularly by management.

(ii) Impairments and impairment reversals (notes 6 and 10)

Investments in associates and joint ventures, advances and loans, property, plant and equipment and intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of an individual asset or a cash-generating unit (CGU) may not be fully recoverable, or at least annually for CGUs to which goodwill and other indefinite life intangible assets have been allocated. Indicators of impairment may include changes in the Group's operating and economic assumptions, including those arising from changes in reserves or mine planning, updates to the Group's commodity supply, demand and price forecasts, or the possible impacts from emerging risks such as those related to climate change and the transition to a lower carbon economy. If an asset or CGU's recoverable amount is less than its carrying amount, an impairment loss is recognised in the consolidated statement of income. For those assets or CGUs which were impaired in prior periods, if their recoverable amount exceeds their carrying amount, an impairment reversal is recorded in the consolidated statement of income. Future cash flow estimates which are used to calculate the asset's or CGU's recoverable amount are discounted using asset or CGU specific discount rates and are based on expectations about future operations, primarily comprising estimates about production and sales volumes, commodity prices (considering current and future prices and price trends including factors such as the current global trajectory of climate change), reserves and resources, operating costs and capital expenditures. Estimates are reviewed regularly by management. Changes in such estimates and in particular, deterioration in the commodity pricing outlook, could impact the recoverable amounts of these assets or CGUs, whereby some or all of the carrying amount may be impaired or the impairment charge reversed (if pricing outlook improves significantly) with the impact recorded in the statement of income.

As noted above and further described below in the 'impairment or impairment reversals' accounting policy, the Group carries out, at least annually, an impairment assessment. Following this review, indicators of impairment were identified for various CGUs, primarily due to a deterioration in the underlying commodity price environment most influencing the respective operation. Accordingly, the Group assessed the recoverable amounts of these CGUs and as at 31 December 2020, except for those CGUs disclosed in notes 6 and 10, the estimated recoverable amounts exceeded the carrying values. However, for certain CGUs where no impairment was recognised, should there be a significant deterioration in the key assumptions, a material impairment could result within the next financial year. The CGUs identified are:

- Thermal coal CGUs' non-current capital employed is carried at approximately $11.7 billion, and is exposed to long-term changes in demand for fossil fuels. An adverse change in long-term price or other assumptions within the next financial year, for example due to policy changes in relevant jurisdictions, could result in an impairment. Long-term coal price assumption for Newcastle 6,000 NAR: $80/t (FOB basis, real terms);
- Koniambo's non-current capital employed is carried at approximately $1.5 billion, has previously been impaired, and has a business plan requiring a significant increase in annual production. A favourable or adverse change in the quantum and/or timing of Koniambo's ramp-up could result in an impairment or reversal of impairment. Long-term nickel price assumption: $15,322/t (real terms).

(iii) Restoration, rehabilitation and decommissioning costs (note 22)

A provision for future restoration, rehabilitation and decommissioning costs requires estimates and assumptions to be made around the relevant regulatory framework, the magnitude of the possible disturbance and the timing, extent and costs of the required closure and rehabilitation activities. Most of these rehabilitation and decommissioning events are expected to take place many years in the future and the currently estimated requirements and costs that will have to be met when the restoration event occurs are inherently uncertain and could materially change over time.

In calculating the appropriate provision for the expected restoration, rehabilitation or decommissioning obligations, cost estimates of the future potential cash outflows based on current studies of the expected rehabilitation activities and timing thereof, are prepared. These forecasts are then discounted to their present value using a risk-free rate specific to the liability and the currency in which they are denominated.

1. Accounting policies continued

Any changes in the expected future costs or risk-free rate are initially reflected in both the provision and the asset and subsequently in the consolidated statement of income over the remaining economic life of the asset. As the actual future costs can differ from the estimates due to changes in laws, regulations, technology, costs and timing, the provisions including the estimates and assumptions contained therein are reviewed regularly by management. A material change in the provision within the next 12 months could arise from changes in risk-free rates. The aggregate effect of changes within 12 months as a result of revisions to cost and timing assumptions is not expected to be material.

(iv) Fair value measurements (notes 11, 13, 25, 27 and 28)

In addition to recognising derivative instruments at fair value, as discussed below and for the purpose of measuring impairments as described above, an assessment of the fair value of assets and liabilities is also required in accounting for other transactions, most notably, business combinations and marketing inventories and disclosures related to fair values of financial assets and liabilities. In such instances, fair value measurements are estimated based on the amounts for which the assets and liabilities could be exchanged at the relevant transaction date or reporting period end, and are therefore not necessarily reflective of the cash flow upon actual settlements. Where fair value measurements cannot be derived from publicly available information, they are estimated using models and other valuation methods. To the extent possible, the assumptions and inputs used take into account externally verifiable inputs. However, such information is by nature subject to uncertainty, particularly where comparable market-based transactions often do not exist.

Financial instruments are carried at fair value for which Glencore evaluates the quality and reliability of the assumptions and data used to measure fair value in the three hierarchy levels, Level 1, 2 and 3, as prescribed by IFRS 13 Fair Value Measurement. Fair values are determined in the following ways: externally verified via comparison to quoted market prices in active markets (Level 1); by using models with externally verifiable inputs (Level 2); or by using alternative procedures such as comparison to comparable instruments and/or using models with unobservable market inputs requiring Glencore to make market-based assumptions (Level 3). Level 3 inputs therefore include the highest level of estimation uncertainty.

(v) Retirement benefits (note 23)

The present value and costs of providing pensions and other post-employement benefits are determined on the basis of a number of assumptions which include future earnings and pension increases, discount rates, long-term expected rates of return on plan assets, inflation rate and mortality assumptions. Any changes in these assumptions will impact the carrying amount of the pension and other post-employement benefits and may have a material impact on future results. Key assumptions and sensitivities are disclosed within note 23.

ADOPTION OF NEW AND REVISED STANDARDS

In the current year, Glencore has adopted all new and revised IFRS standards that became effective as of 1 January 2020, the material changes being:

(i) Amendments to IFRS 3 – Definition of business

The amendments assist the determination of whether a transaction should be accounted for as a business combination or as an asset acquisition. To be considered a business, an acquired set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs. IFRS 3 continues to adopt a market participant's perspective to determine whether an acquired set of activities and assets is a business, but clarifies the minimum requirements to be a business and removes the assessment of a market participant's ability to replace missing elements.

The amendments also introduce an optional concentration test that permits a simplified assessment of whether an acquired set of activities and assets is not a business - it is not a business if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets.

The amended definitions shall be applicable for any acquisition within the scope of IFRS 3.

(ii) Amendments to IAS 1 and IAS 8 – Definition of material

The amendments clarify the definition of material and how it should be applied by including in the definition guidance that until now has been featured elsewhere in IFRS Standards, and ensures that the definition of material is consistent across all IFRS Standards. Information is considered material if omitting, misstating or obscuring it could reasonably be expected to influence the decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity.

These amendments did not have a material impact on the Group.

1. Accounting policies continued

REVISED STANDARDS NOT YET EFFECTIVE

At the date of the authorisation of this preliminary announcement, the following revised IFRS standards, which are applicable to Glencore, were issued but not yet effective:

(i) Interest Rate Benchmark Reform – Phase 2 (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16) – effective for year ends beginning on or after 1 January 2021

The amendments introduce a practical expedient for modifications required by the reform, provide an exception that hedge accounting is not discontinued solely because of the IBOR reform, and introduces disclosures that allow users to understand the nature and extent of risks arising from the IBOR reform to which the entity is exposed to and how the entity manges those risks as well as the entity's progress in transitioning from IBOR's to alternative benchmark rates, and how the entity is managing this transition. The Group intends to adopt these amendments in future to ensure continuity of existing hedge relationships.

BASIS OF PREPARATION

The financial statements are prepared under the historical cost convention except for certain financial assets, liabilities, marketing inventories and pension obligations that are measured at revalued amounts or fair values at the end of each reporting period as explained in the accounting policies below. Historical cost is defined as the amount of cash or cash equivalents paid or the fair value of the consideration given to acquire them at the time of their acquisition. The principal accounting policies adopted are set out below.

The Directors have assessed that they have, at the time of approving this preliminary announcement, a reasonable expectation that the Group has adequate resources to continue in operational existence for the 12 months from the expected date of approval of the 2020 Annual Report and Accounts. Therefore, they continue to adopt the going concern basis of accounting in preparing these financial statements. Further information on Glencore's objectives, policies and processes for managing its capital and financial risks are detailed in note 26.

All amounts are expressed in millions of United States Dollars, the presentation currency of the Group, unless otherwise stated.

PRINCIPLES OF CONSOLIDATION

The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company and its subsidiaries.

Control is achieved when Glencore is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, Glencore controls an investee if, and only if, Glencore has all of the following:

- Power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee)
- Exposure, or rights, to variable returns from its involvement with the investee, and
- The ability to use its power over the investee to affect its returns

When Glencore has less than a majority of the voting rights of an investee or similar rights of an investee, it considers all relevant facts and circumstances in assessing whether it has power over the investee including:

- The size of Glencore's holding of voting rights relative to the size and dispersion of holdings of the other vote holders
- Potential voting rights held by Glencore, other vote holders or other parties
- Rights arising from other contractual arrangements, and
- Any additional facts and circumstances that indicate that Glencore has, or does not have, the current ability to direct the relevant activities at the time that decisions need to be made, including voting patterns at previous shareholders' meetings

The Company reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above. Consolidation of a subsidiary begins when Glencore obtains control over the subsidiary and ceases when Glencore loses control of the subsidiary. Specifically, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of income and other comprehensive income from the date Glencore gains control until the date when Glencore ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies. All intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Changes in Glencore's interests in subsidiaries that do not result in a loss of control are accounted for as equity transactions with any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received being recognised directly in equity and attributed to equity holders of Glencore.

1. Accounting policies continued

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

INVESTMENTS IN ASSOCIATES AND JOINT VENTURES

Associates and joint ventures (together "Associates") in which Glencore exercises significant influence or joint control are accounted for using the equity method. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies. Significant influence is presumed if Glencore holds between 20% and 50% of the voting rights, unless evidence exists to the contrary. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control over an arrangement, which exists only when decisions about relevant strategic and/or key operating decisions require unanimous consent of the parties sharing control.

Equity accounting involves Glencore recording its share of the Associate's net income and equity. Glencore's interest in an Associate is initially recorded at cost and is subsequently adjusted for Glencore's share of changes in net assets of the Associate, less any impairment in the value of individual investments. Where Glencore transacts with an Associate, unrealised profits and losses are eliminated to the extent of Glencore's interest in that Associate.

Changes in Glencore's interests in Associates are accounted for as a gain or loss on disposal with any difference between the amount by which the carrying value of the Associate is adjusted and the fair value of the consideration received being recognised directly in the consolidated statement of income.

JOINT OPERATIONS

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement.

When Glencore undertakes its activities under joint operations, Glencore recognises in relation to its interest in a joint operation:

- Its assets, including its share of any assets held jointly
- Its liabilities, including its share of any liabilities incurred jointly
- Its revenue from the sale of its share of the output arising from the joint operation
- Its share of the revenue from the sale of the output by the joint operation, and
- Its expenses, including its share of any expenses incurred jointly

The Group accounts for the assets, liabilities, revenues and expenses relating to its interest in a joint operation in accordance with the IFRSs applicable to the particular assets, liabilities, revenues and expenses.

Where Glencore transacts with a joint operation, unrealised profits and losses are eliminated to the extent of Glencore's interest in that joint operation.

OTHER UNINCORPORATED ARRANGEMENTS

In some cases, Glencore participates in unincorporated arrangements where it has the rights to its share of the assets and obligations for its share of the liabilities of the arrangement, rather than a right to the net returns of the arrangement, but does not share joint control. In such cases, Glencore accounts for its share of the assets, liabilities, revenues and expenses in accordance with the IFRSs applicable to the particular assets, liabilities, revenues and expenses and obligations for the liabilities relating to the arrangement, similar to a joint operation noted above.

BUSINESS COMBINATIONS AND GOODWILL

Acquisitions of subsidiaries and businesses are accounted for using the acquisition method of accounting. The cost of the acquisition is measured at fair value, which is calculated as the sum of the acquisition date fair values of the assets transferred, liabilities incurred to the former owners of the acquiree and the equity interests issued in exchange for control of the acquiree. The identifiable assets, liabilities and contingent liabilities ("identifiable net assets") are recognised at their fair value at the date of acquisition. Acquisition related costs are recognised in the consolidated statement of income as incurred.

Where a business combination is achieved in stages, Glencore's previously held interests in the acquired entity are remeasured to fair value at the acquisition date (i.e. the date Glencore attains control) and the resulting gain or loss, if any, is recognised in the consolidated statement of income.

1. Accounting policies continued

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to the CGUs that are expected to benefit from the synergies of the combination. CGUs to which goodwill has been allocated are tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the CGU is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro-rata based on the carrying amount of each asset in the unit.

Any impairment loss is recognised directly in profit or loss. An impairment loss recognised for goodwill is not able to be reversed in subsequent periods.

On disposal of the relevant CGU, the attributable amount of goodwill is included in the determination of the profit or loss on disposal.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, Glencore reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted for additional information obtained during the "measurement period" (which cannot exceed one year from the acquisition date) about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognised at that date.

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation may be initially measured either at fair value or at the non-controlling interests' proportionate share of the recognised amounts of the acquiree's identifiable net assets. The choice of measurement basis is made on a transaction-by-transaction basis. Other types of non-controlling interests are measured at fair value or, when applicable, on the basis specified in another IFRS.

Similar procedures are applied in accounting for the purchases of interests in Associates and joint operations. Any goodwill arising from such purchases is included within the carrying amount of the investment in Associates, but not amortised thereafter. Any excess of Glencore's share of the net fair value of the Associate's identifiable net assets over the cost of the investment is included in the consolidated statement of income in the period of the purchase.

NON-CURRENT ASSETS HELD FOR SALE AND DISPOSAL GROUPS

Non-current assets, liabilities and those included in disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use, they are available for immediate disposal and the sale is highly probable. Non-current assets, liabilities and those included in disposal groups held for sale are measured at the lower of their carrying amount or fair value less costs to sell.

REVENUE RECOGNITION

Revenue is derived principally from the sale of goods (sale of commodities) and in some instances the goods are sold on Cost and Freight (CFR) or Cost, Insurance and Freight (CIF) Incoterms. When goods are sold on a CFR or CIF basis, the Group is responsible for providing these services (shipping and insurance) to the customer, sometimes after the date at which Glencore has lost control of the goods. Revenue is recognised when the performance obligations have been satisfied, which is once control of the goods and/or services has transferred from Glencore to the buyer. Revenue is measured based on consideration specified in the contract with a customer and excludes amounts collected on behalf of third parties. The same recognition and presentation principles apply to revenues arising from physical settlement of forward sale contracts that do not meet the own use exemption.

Revenue related to the sale of goods is recognised when the product is delivered to the destination specified by the customer, which is typically the vessel on which it is shipped, the destination port or the customer's premises and the buyer has gained control through their ability to direct the use of and obtain substantially all the benefits from the asset. Where the sale of goods is connected with an agreement to repurchase goods at a later date, revenue is recognised when the repurchase terms are at prevailing market prices, the goods repurchased are readily available in the market, and the buyer gained control of the goods originally sold to them. As at 31 December 2020, the outstanding repurchase commitments under such agreements were approximately $0.3 billion (2019: $1.4 billion). Should it be determined that control has not transferred or the buyer does not have the ability to benefit substantially from ownership of the asset, revenue is not recognised and any proceeds received are accounted for as a financing arrangement. For certain commodities, the sales price is determined on a provisional basis at the date of sale as the final selling price is subject to movements in market prices up to the date of final pricing, normally ranging from 30 to 90 days after initial booking (provisionally priced sales). Revenue on provisionally priced sales is recognised based on the estimated fair value of the total consideration receivable. The revenue adjustment mechanism embedded within provisionally priced sales arrangements has the character of a commodity derivative.

Accordingly, the fair value of the final sales price adjustment is re-estimated continuously and changes in fair value are recognised as an adjustment to revenue. In all cases, fair value is estimated by reference to forward market prices.

1. Accounting policies continued

Revenue from the sale of material by-products are included within revenue. Where a by-product is not regarded as significant, revenue may be credited against cost of goods sold.

Revenue related to the provision of shipping and insurance related activities is recognised over time as the service is rendered.

Payments received for future metal (primarily gold and silver) deliveries (prepayments) are accounted for as executory contracts whereby the prepayment is initially recorded as deferred revenue in the consolidated statement of financial position. The initial deferred revenue amount is unwound and revenue is recognised in the consolidated statement of income as and when Glencore physically delivers the metal and loses control of it. Where these prepayments are in excess of one year and contain a significant financing component, the amount of the deferred revenue is adjusted for the effects of the time value of money. Glencore applies the practical expedient to not adjust the promised amount of consideration for the effects of time value of money if the period between delivery and the respective payment is one year or less.

Royalty, interest and dividend income is recognised when the right to receive payment has been established, it is probable that the economic benefits will flow to Glencore and the amount of income can be measured reliably. Royalty revenue is recognised on an accruals basis in accordance with the substance of the relevant agreement. Interest income is accrued on a time basis, by reference to the principal outstanding and the applicable effective interest rate.

FOREIGN CURRENCY TRANSLATION

Glencore's reporting currency and the functional currency of the majority of its operations is the U.S. dollar as this is assessed to be the principal currency of the economic environment in which it operates.

(i) Foreign currency transactions

Transactions in foreign currencies are converted into the functional currency of each entity using the exchange rate prevailing at the transaction date. Monetary assets and liabilities outstanding at year end are converted at year-end rates. The resulting exchange differences are recorded in the consolidated statement of income.

(ii) Translation of financial statements

For the purposes of consolidation, assets and liabilities of group companies whose functional currency is in a currency other than the U.S. dollar are translated into U.S. dollars using year-end exchange rates, while their statements of income are translated using average rates of exchange for the year. Translation adjustments are included as a separate component of shareholders' equity and have no consolidated statement of income impact to the extent that no disposal of the foreign operation has occurred. Where an intragroup balance is, in substance, part of the Group's net investment in an entity, exchange gains and losses on that balance are taken to the currency translation reserve. Cumulative translation differences are recycled from equity and recognised as income or expense on disposal of the operation to which they relate.

Goodwill and fair value adjustments arising from the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and are translated at the closing rate.

BORROWING COSTS

Borrowing costs are expensed as incurred except where they relate to the financing of construction or development of qualifying assets in which case they are capitalised up to the date when the qualifying asset is ready for its intended use.

RETIREMENT BENEFITS

Glencore operates various pension schemes in accordance with local requirements and practices of the respective countries. The annual costs for defined contribution plans that are funded by payments to separate trustee administered funds or insurance companies equal the contributions that are required under the plans and accounted for as an expense.

For defined benefit retirement plans, the cost of providing benefits is determined using the Projected Unit Credit Method, with actuarial valuations being carried out at the end of each annual reporting period. Remeasurements comprising actuarial gains and losses, the effect of the asset ceiling (if applicable) and the return on plan assets (excluding interest) are recognised immediately in the statement of financial position with a charge or credit to other comprehensive income in the period in which they occur. Remeasurements recognised in other comprehensive income are not reclassified. Past service cost is recognised in profit or loss when the plan amendment or curtailment occurs, or when the Group recognises related restructuring costs or termination benefits, if earlier. Gains or losses on settlement of a defined benefit plan are recognised when the settlement occurs. Net interest is calculated by applying a discount rate to the net defined benefit liability or asset. Defined benefit costs are split into three categories:

- service costs, which includes current service cost, past service cost and gains and losses on curtailments and settlements;
- net interest expense or income; and
- remeasurements.

The Group recognises service costs within the consolidated statement of income.

Net interest expense or income is recognised within interest expense or income within the consolidated statement of income.

1. Accounting policies continued

Any past service cost (or the gain or loss on settlement) is calculated by measuring the defined benefit liability (asset) using updated assumptions and comparing benefits offered and plan assets before and after the plan amendment (or curtailment or settlement) but ignoring the effect of the asset ceiling (that may arise when the defined benefit plan is in a suplus position). The Group uses the updated assumptions from this remeasurement to determine current service cost and net interest for the remainder of the reporting period after the change to the plan. In the case of the net interest for the period post-plan amendment, the net interest is calculated by multiplying the net defined benefit liability (asset) as remeasured with the discount rate used in the remeasurement (also taking into account the effect of contributions and benefit payments on the net defined benefit liability (asset)).

The retirement benefit obligation recognised in the consolidated statement of financial position represents the deficit or surplus in the Group's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

Glencore also provides post-retirement healthcare benefits to certain employees in Canada, South Africa and the United States. These are accounted for in a similar manner to the defined benefit pension plans, however are unfunded.

SHARE-BASED PAYMENTS

(i) Equity-settled share-based payments

Equity-settled share-based payments are measured at the fair value of the awards based on the market value of the shares at the grant date. Fair value excludes the effect of non-market-based vesting conditions. The fair value is charged to the consolidated statement of income and credited to retained earnings on a straight-line basis over the period the estimated awards are expected to vest.

At each balance sheet date, the Company revises its estimate of the number of equity instruments expected to vest as a result of the effect of non-market-based vesting conditions. The impact of the revision of the original estimates, if any, is recognised in the consolidated statement of income such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to retained earnings.

(ii) Cash-settled share-based payments

For cash-settled share-based payments, a liability is initially recognised at fair value based on the estimated number of awards that are expected to vest, adjusting for market and non-market-based performance conditions. Subsequently, at each reporting period until the liability is settled, it is remeasured to fair value with any changes in fair value recognised in the consolidated statement of income.

INCOME TAXES

Income taxes consist of current and deferred income taxes. Current taxes represent income taxes expected to be payable based on enacted or substantively enacted tax rates at the period end on expected current taxable income, and any adjustment to tax payable in respect of previous years. Deferred taxes are recognised for temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable income, using enacted or substantively enacted income tax rates which are expected to be effective at the time of reversal of the underlying temporary difference. Deferred tax assets and unused tax losses are only recognised to the extent that their recoverability is probable. Deferred tax assets are reviewed at reporting period end and amended to the extent that it is no longer probable that the related benefit will be realised. To the extent that a deferred tax asset not previously recognised subsequently fulfils the criteria for recognition, an asset is then recognised.

Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same authority and Glencore has both the right and the intention to settle its current tax assets and liabilities on a net or simultaneous basis. The tax effect of certain temporary differences is not recognised principally with respect to the initial recognition of an asset or liability (other than those arising in a business combination or in a manner that initially impacted accounting or taxable profit) and temporary differences relating to investments in subsidiaries and Associates to the extent that Glencore can control the timing of the reversal of the temporary difference and it is probable the temporary difference will not reverse in the foreseeable future. Deferred tax is provided in respect of fair value adjustments on acquisitions. These adjustments may relate to assets such as extraction rights that, in general, are not eligible for income tax allowances.

Current and deferred tax are recognised as an expense or income in the consolidated statement of income, except when they relate to items that are recognised outside the consolidated statement of income (whether in other comprehensive income or directly in equity) or where they arise from the initial accounting for a business combination.

Royalties, extraction taxes and other levies/taxes are treated as taxation arrangements when they have the characteristics of an income tax, including being imposed and determined in accordance with regulations established by the respective government's taxation authority and the amount payable is based on taxable income – rather than physical quantities produced or as a percentage of revenues – after adjustment for temporary differences. For such arrangements, current and deferred tax is provided on the same basis as described above for other forms of taxation. Obligations arising from royalty arrangements that do not satisfy these criteria are recognised as current provisions and included in cost of goods sold.

1. Accounting policies continued

Glencore assesses its liabilities and contingencies for all tax years open to audit based upon the latest information available. Inherent uncertainties exist in estimates of tax contingencies due to complexities of interpretation and changes in tax laws. For those matters where it is probable that an adjustment will be made, the Group records its best estimate of these tax liabilities, including related interest charges, taking into account the range of possible outcomes.

PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are stated at cost, being the fair value of the consideration given to acquire or construct the asset, including directly attributable costs required to bring the asset to the location or to a condition necessary for operation and the direct cost of dismantling and removing the asset, less accumulated depreciation and any accumulated impairment losses.

Property, plant and equipment are depreciated to their estimated residual value over the estimated useful life of the specific asset concerned, or the estimated remaining life of the associated mine (LOM), field or lease.

Depreciation commences when the asset is available for use. The major categories of property, plant and equipment are depreciated/amortised on a units of production (UOP) and/or straight-line basis as follows:

Buildings	10 – 45 years
Freehold land	not depreciated
Plant and equipment	3 – 30 years/UOP
Right-of-use assets	2 – 30 years
Mineral and petroleum rights	UOP
Deferred mining costs	UOP

(i) Mineral and petroleum rights

Mineral and petroleum reserves, resources and rights (together "Mineral and petroleum rights") which can be reasonably valued, are recognised in the assessment of fair values on acquisition. Mineral and petroleum rights for which values cannot be reasonably determined are not recognised. Exploitable Mineral and petroleum rights are amortised using the UOP basis over the commercially recoverable reserves and, in certain circumstances, other mineral resources. Mineral resources are included in amortisation calculations where there is a high degree of confidence that they will be extracted in an economic manner.

(ii) Exploration and evaluation expenditure

Exploration and evaluation expenditure relates to costs incurred in the exploration and evaluation of potential mineral and petroleum resources and includes costs such as exploration and production licences, researching and analysing historical exploration data, exploratory drilling, trenching, sampling and the costs of pre-feasibility studies. Exploration and evaluation expenditure for each area of interest, other than that acquired from another entity, is charged to the consolidated statement of income as incurred except when the expenditure is expected to be recouped from future exploitation or sale of the area of interest and it is planned to continue with active and significant operations in relation to the area, or at the reporting period end, the activity has not reached a stage which permits a reasonable assessment of the existence of commercially recoverable reserves, in which case the expenditure is capitalised. As the intangible component (i.e. licences) represents an insignificant and indistinguishable portion of the overall expected tangible amount to be incurred and recouped from future exploitation, these costs along with other capitalised exploration and evaluation expenditure are recorded as a component of property, plant and equipment. Purchased exploration and evaluation assets are recognised at their fair value at acquisition.

As the capitalised exploration and evaluation expenditure asset is not available for use, it is not depreciated. All capitalised exploration and evaluation expenditure is monitored for indications of impairment. Where a potential impairment is indicated, an assessment is performed for each area of interest or at the CGU level. To the extent that capitalised expenditure is not expected to be recovered it is charged to the consolidated statement of income.

Administration costs that are not directly attributable to a specific exploration area are charged to the consolidated statement of income. Licence costs paid in connection with a right to explore in an existing exploration area are capitalised and amortised over the term of the permit.

DEVELOPMENT EXPENDITURE

When commercially recoverable reserves are determined and such proposed development receives the appropriate approvals, capitalised exploration and evaluation expenditure is transferred to construction in progress, a component within the plant and equipment asset sub-category. All subsequent development expenditure is similarly capitalised, provided commercial viability conditions continue to be satisfied. Proceeds from the sale of product extracted during the development phase are netted against development expenditure. Upon completion of development and commencement of production, capitalised development costs are further transferred, as required, to the appropriate plant and equipment asset category and depreciated using the unit of production method (UOP) or straight-line basis.

1. Accounting policies continued

Deferred mining costs
Mainly comprises certain capitalised costs related to underground mining as well as pre-production and in-production stripping activities as outlined below. Deferred mining costs are amortised using the UOP basis over the life of the ore body to which those costs relate.

DEFERRED STRIPPING COSTS
Stripping costs incurred in the development of a mine (or pit) before production commences are capitalised as part of the cost of constructing the mine (or pit) and subsequently amortised over the life of the mine (or pit) on a UOP basis.

In-production stripping costs related to accessing an identifiable component of the ore body to realise benefits in the form of improved access to ore to be mined in the future (stripping activity asset), are capitalised within deferred mining costs provided all the following conditions are met:

(a) it is probable that the future economic benefit associated with the stripping activity will be realised;

(b) the component of the ore body for which access has been improved can be identified; and

(c) the costs relating to the stripping activity associated with the improved access can be reliably measured.

If all of the criteria are not met, the production stripping costs are charged to the consolidated statement of income as they are incurred.

The stripping activity asset is subsequently depreciated on a UOP basis over the life of the identified component of the ore body that became more accessible as a result of the stripping activity and is then stated at cost less accumulated depreciation and any accumulated impairment losses.

LEASES
As lessee, the Group assesses whether a contract contains a lease at inception of the contract. The Group recognises a right-of-use asset and corresponding lease liability in the statement of financial position for all lease arrangements where it is the lessee, except for short-term leases with a term of twelve months or less and leases of low value assets. For these leases, the Group recognises the lease payments as an operating expense on a straight-line basis over the term of the lease.

The lease liability is initially measured at the present value of the future lease payments from the commencement date of the lease. The lease payments are discounted using the interest rate implicit in the lease or, if not readily determinable, the asset and company specific incremental borrowing rates. Lease liabilities are recognised within borrowings on the statement of financial position. The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made. The Group remeasures the lease liability, with a corresponding adjustment to the related right-of-use assets, whenever:

- The lease term changes or there is a significant event or change in circumstances resulting in a change in the assessment of exercise of a purchase option, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate;
- The lease payments change due to the changes in an index or rate or a change in expected payment under a guaranteed residual value, in which case the lease liability is remeasured by discounting the revised lease payments using an unchanged discount rate;
- A lease contract is modified and the lease modification is not accounted for as a separate lease, in which case the lease liability is remeasured based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of modification.

The right-of-use assets are initially recognised on the balance sheet at cost, which comprises the amount of the initial measurement of the corresponding lease liability, adjusted for any lease payments made at or prior to the commencement date of the lease, any lease incentive received and any initial direct costs incurred, and expected costs for obligations to dismantle and remove right-of-use assets when they are no longer used. Right-of-use assets are recognised within property, plant and equipment on the statement of financial position. Right-of-use assets are depreciated on a straight-line basis from the commencement date of the lease over the shorter of the useful life of the right-of-use asset or the end of the lease term.

The Group enters into lease arrangements as a lessor with respect to some of its time charter vessels. Leases for which the Group is an intermediate lessor are classified as finance or operating leases by reference to the right-of-use asset arising from the head lease. Income from operating leases is recognised on a straight-line basis over the term of the relevant lease. Amounts due from lessees under finance leases are recognised as receivables at the amount of the Group's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the Group's net investment outstanding in respect of these leases.

1. Accounting policies continued

RESTORATION, REHABILITATION AND DECOMMISSIONING

Restoration, rehabilitation and decommissioning costs arising from the installation of plant and other site preparation work, discounted using a risk-free rate specific to the liability and the currency in which they are denominated to their net present value, are provided for and capitalised at the time such an obligation arises. The costs are charged to the consolidated statement of income over the life of the operation through depreciation of the asset and the unwinding of the discount on the provision.

Costs for restoration of subsequent site disturbance, which is created on an ongoing basis during production, are provided for at their net present values and charged to the consolidated statement of income as extraction progresses.

Changes in the estimated timing of the rehabilitation or changes to the estimated future costs are accounted for prospectively by recognising an adjustment to the rehabilitation liability and a corresponding adjustment to the asset to which it relates, provided a reduction, if any, in the provision is not greater than the depreciated capitalised cost of the related asset, in which case the capitalised cost is reduced to Nil and the remaining adjustment recognised in the consolidated statement of income. In the case of closed sites, changes to estimated costs are recognised immediately in the consolidated statement of income.

INTANGIBLE ASSETS

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation (calculated on a straight-line basis over their useful lives) and accumulated impairment losses, if any.

Internally generated intangibles are not capitalised. Instead, the related expenditure is recognised in the consolidated statement of income in the period in which the expenditure is incurred.

Identifiable intangible assets with a finite life are amortised on a straight-line basis over their expected useful life. The amortisation method and period are reviewed annually and impairment testing is undertaken when circumstances indicate the carrying amount may not be recoverable. Other than goodwill which is not amortised, Glencore has no identifiable intangible assets with an indefinite life.

The major categories of intangibles are amortised on a straight-line basis as follows:

Port allocation rights	15 years
Licences, trademarks and software	3 – 20 years
Customer relationships	5 – 9 years

Goodwill impairment testing

For the purpose of impairment testing, goodwill has been allocated to the CGUs, or groups of CGUs, that are expected to benefit from the synergies of the business combination and which represent the level at which management monitors and manages the goodwill. In assessing whether an impairment is required, the carrying value of the CGU is compared with its recoverable amount. The recoverable amount is the higher of its fair value less costs of disposal (FVLCD) and its value in use (VIU). If the recoverable amount of the CGU is less than the carrying amount of the unit, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit on a pro-rata basis of the carrying amount of each asset in the unit. Any impairment loss for goodwill is recognised directly in the consolidated statement of income. An impairment loss recognised for goodwill can not be reversed in subsequent periods.

OTHER INVESTMENTS

Equity investments, other than investments in Associates, are recorded at fair value. Glencore designated investments that are not held for trading as at fair value through other comprehensive income. As a result, changes in fair value are recorded in the consolidated statement of other comprehensive income. Dividends from these investments are recognised in the consolidated statement of income, unless the dividend represents a recovery of part of the cost of the equity investment. Investments that are held for trading are subsequently measured at fair value through profit or loss.

IMPAIRMENT OR IMPAIRMENT REVERSALS

Glencore conducts, at least annually, an internal review of asset values which is used as a source of information to assess for any indications of impairment or impairment reversal. Formal impairment tests are carried out, at least annually, for cash-generating units containing goodwill and for all other non-current assets, when events or changes in circumstances indicate the carrying value may not be recoverable.

A formal impairment or reversal test involves determining whether the carrying amounts are in excess (or below, as the case may be) of their recoverable amounts. An asset's recoverable amount is determined as the higher of its FVLCD and its VIU. Such reviews are undertaken on an asset-by-asset basis, except where assets do not generate cash flows independent of other assets, in which case the review is undertaken at the CGU level.

If the carrying amount of an asset exceeds its recoverable amount, an impairment loss is recorded in the consolidated statement of income to reflect the asset at the lower amount.

1. Accounting policies continued

For those assets which were impaired in prior periods, if their recoverable amount exceeds their carrying amount, an impairment reversal is recorded in the consolidated statement of income to reflect the asset at the higher amount to the extent the increased carrying amount does not exceed the carrying value of the asset that would have been determined had no impairment previously been recognised. Goodwill impairments cannot be subsequently reversed.

PROVISIONS

Provisions are recognised when Glencore has a present obligation (legal or constructive), as a result of past events, and it is probable that an outflow of resources embodying economic benefits that can be reliably estimated will be required to settle the liability.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation, including interpretation of specific laws and likelihood of settlement. Where a provision is measured using the cash flow estimated to settle the present obligation, its carrying amount is the present value of those cash flows (when the effect of the time value of money is material).

ONEROUS CONTRACTS

An onerous contract is considered to exist where Glencore has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract. Present obligations arising under onerous contracts are recognised and measured as provisions.

UNFAVOURABLE CONTRACTS

An unfavourable contract is considered to exist when Glencore, in a business combination, acquires a contract under which the terms of the contract require Glencore to sell or purchase products or services on terms which are economically unfavourable compared to current market terms at the time of the business combination. Unfavourable contracts are recognised at the present value of the economic loss and amortised into the statement of income over the term of the contract.

INVENTORIES

The vast majority of inventories attributable to the marketing activities ("marketing inventories") are valued at fair value less costs of disposal with the remainder valued at the lower of cost or net realisable value, with costs allocated using the first-in-first-out (FIFO) method. Unrealised gains and losses from changes in fair value are reported in cost of goods sold.

Inventories held by the industrial activities ("production inventories") are valued at the lower of cost or net realisable value. Cost is determined using FIFO or the weighted average method and comprises material costs, labour costs and allocated production related overhead costs. Typically raw materials and consumables are measured using the FIFO method and work in progress inventories using the weighted average method. Where the production process results in more than one product being produced (joint products), cost is allocated between the various products according to the ratio of contribution of these metals to gross sales revenue. Financing and storage costs related to inventory are expensed as incurred.

Non-current inventories primarily relate to stockpiles which are not expected to be utlised within the normal operating cycle.

NON-FINANCIAL INSTRUMENTS (PHYSICAL ADVANCES OR PREPAYMENTS)

The Group enters into physical advances and prepayment agreements with certain suppliers and customers. When such advances and prepayments are primarily settled in cash or another financial asset, they are classified as financial instruments (see below). When settlement is satisfied primarily through physical delivery or receipt of an underlying product they are classified as non-financial instruments.

FINANCIAL INSTRUMENTS

Financial assets and financial liabilities are recognised in the Group's consolidated statement of financial position when the Group becomes a party to the contractual provisions of the instrument.

Financial assets are classified as either financial assets at amortised cost, at fair value through other comprehensive income (FVTOCI) or at fair value through profit or loss (FVTPL) depending upon the business model for managing the financial assets and the nature of the contractual cash flow characteristics of the financial asset. Financial assets are initially recognised at fair value on the trade date, including, in the case of instruments not subsequently measured at fair value through profit or loss, directly attributable transaction costs. Trade receivables with no provisional price features and where there is no significant financing component, are initially recognised at their transaction price. Subsequently, other investments, provisionally priced trade receivables and derivatives are carried at fair value and trade receivables that do not contain provisional price features, loans and other receivables are carried at amortised cost.

Financial liabilities, other than derivatives and those containing provisional price features, are initially recognised at fair value of consideration received net of transaction costs as appropriate and subsequently carried at amortised cost. Financial liabilities that contain provisional pricing features (accounted for as embedded derivatives) and derivatives are carried at FVTPL.

1. Accounting policies continued

(i) Impairment of financial assets

A loss allowance for expected credit losses is determined for all financial assets (as well as for issued loan commitments and financial guarantee contracts), other than those at FVTPL and investments in equity instruments measured at FVTOCI, at the end of each reporting period. The expected credit loss recognised represents a probability-weighted estimate of credit losses over the expected life of the financial instrument.

The Group applies the simplified approach to measure the loss allowance for trade receivables classified at amortised cost, using the lifetime expected loss provision. The expected credit losses on these financial assets is estimated using a provision matrix by reference to past default experience and an equivalent credit rating, adjusted as appropriate for current observable data and forward-looking information.

For all other financial assets at amortised cost, the Group recognises lifetime expected credit losses when there has been a significant increase in credit risk since initial recognition, which is determined by:

- A review of overdue amounts,
- Comparing the risk of default at the reporting date and at the date of initial recognition, and
- An assessment of relevant historical and forward-looking quantitative and qualitative information.

For those balances that are beyond 30 days overdue it is presumed to be an indicator of a significant increase in credit risk.

If the credit risk on the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-months expected credit loss, which comprises the expected lifetime loss from the instrument were a default to occur within 12 months of the reporting date.

The Group considers an event of default has materialised and the financial asset is credit impaired when information developed internally or obtained from external sources indicates that the debtor is unlikely to pay the Group without taking into account any collateral held by the Group or if the financial asset is more than 90 days past due, unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate. The Group writes off a financial asset when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery.

(ii) Derecognition of financial assets and financial liabilities

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

The Group derecognises financial liabilities when the Group's obligations are discharged, cancelled or have expired.

On derecognition of a financial asset/financial liability in its entirety, the difference between the carrying amount of the financial asset/financial liability and the sum of the consideration received and receivable/paid and payable is recognised in profit and loss. On derecognition of equity investments designated and measured at FVTOCI, the cumulative gain or loss recognised in other comprehensive income is reclassified directly to retained earnings.

OWN SHARES

The cost of purchases of own shares is deducted from equity. Where they are purchased, issued to employees or sold, no gain or loss is recognised in the consolidated statement of income. Such gains and losses are recognised directly in equity. Any proceeds received on disposal of the shares or transfers to employees are recognised in equity.

DERIVATIVES AND HEDGING ACTIVITIES

Derivative instruments, which include physical contracts to sell or purchase commodities that do not meet the own use exemption, are initially recognised at fair value when Glencore becomes a party to the contractual provisions of the instrument and are subsequently remeasured to fair value at the end of each reporting period. Fair values are determined using quoted market prices, dealer price quotations or using models and other valuation techniques, the key inputs for which include current market and contractual prices for the underlying instrument, time to expiry, yield curves, volatility of the underlying instrument and counterparty risk.

Gains and losses on derivative instruments for which hedge accounting is not applied, other than the revenue adjustment mechanism embedded within provisionally priced sales and mark-to-market movements on physical forward sales contracts, are recognised in cost of goods sold.

Those derivatives qualifying and designated as hedges are either (i) a Fair Value Hedge of the change in fair value of a recognised asset or liability or an unrecognised firm commitment, or (ii) a Cash Flow Hedge of the change in cash flows to be received or paid relating to a recognised asset or liability or a highly probable transaction.

1. Accounting policies continued

At the inception of the hedge and on an ongoing basis, Glencore documents whether the hedging instrument is effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk, which is when the hedging relationship meets the qualifying hedge effectiveness requirements.

Glencore discontinues hedge accounting when the qualifying criteria for the hedged relationship is no longer met.

A change in the fair value of derivatives designated as a Fair Value Hedge is reflected together with the change in the fair value of the hedged item in the consolidated statement of income.

A change in the fair value of derivatives designated as a Cash Flow Hedge is initially recognised in the consolidated statement of comprehensive income and accumulated in the cash flow hedge reserve in shareholders' equity. The deferred amount is then released to the consolidated statement of income in the same periods during which the hedged transaction affects the consolidated statement of income. Hedge ineffectiveness is recorded in the consolidated statement of income when it occurs.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in shareholders' equity and is recognised in the consolidated statement of income when the committed or forecast transaction is ultimately recognised in the consolidated statement of income. However, if a forecast or committed transaction is no longer expected to occur, the cumulative gain or loss that was recognised in equity is immediately transferred to the consolidated statement of income.

A derivative may be embedded in a non-derivative "host contract" such as provisionally priced sales and purchases. Such combinations are known as hybrid instruments. If a hybrid contract contains a host that is a financial asset within the scope of IFRS 9, then the relevant classification and measurement requirements are applied to the entire contract at the date of initial recognition. Should the host contract not be a financial asset within the scope of IFRS 9, the embedded derivative is separated from the host contract, if it is not closely related to the host contract, and accounted for as a standalone derivative. Where the embedded derivative is separated, the host contract is accounted for in accordance with its relevant accounting policy, unless the entire instrument is designated at FVTPL in accordance with IFRS 9.

2. Segment information

Glencore is organised and operates on a worldwide basis in two core business segments – Marketing activities and Industrial activities, reflecting the reporting lines and structure used by Glencore's Management to allocate resources and assess the performance of Glencore.

The business segments' contributions to the Group are primarily derived from a) the net margin or premium earned from physical Marketing activities (net sale and purchase of physical commodities) and the provision of marketing and related value-add services and b) the net margin earned from Industrial asset activities (resulting from the sale of physical commodities over the cost of production and/or cost of sales). Segment related financial disclosures (Revenue, Adjusted EBITDA/EBIT and capital expenditures) of the operating segments which carry-out commodity specific activities and comprise the reportable segments (Marketing activities or Industrial activities) are outlined on pages 14 - 17 and pages 18 – 27. The marketing related operating segments have been aggregated under the Marketing reportable segment as their economic characteristics (historic and expected long-term Adjusted EBITDA margins and the nature of the marketing services provided) are similar. The industrial related operating segments have been aggregated under the Industrial reportable segment as the core activities (extracting raw material and / or processing it further into saleable product, as required, and then selling it at prevailing market prices), the exposure to long-term economic risks (price movements, technology, sovereign and production substitution) and the longer-term average Adjusted EBITDA margins are similar. The economic and operational characteristics of our coal operating and commercial units are not expected to change in the foreseeable future and continues to be included within the industrial assets and marketing reporting segments respectively.

Corporate and other: consolidated statement of income amount represents Group related income and expenses (including share of Viterra (formerly Glencore Agri) earnings and certain variable bonus charges). Statement of financial position amounts represent Group related balances.

The financial performance of the operating segments is principally evaluated by management with reference to Adjusted EBIT/EBITDA. Adjusted EBIT is the net result of segmental revenue (revenue including Proportionate adjustments as defined in the Alternative performance measure section) less cost of goods sold and selling and administrative expenses plus share of income from associates and joint ventures, dividend income and the attributable share of Adjusted EBIT of relevant material associates and joint ventures, which are accounted for internally by means of proportionate consolidation, excluding significant items. Adjusted EBITDA consists of Adjusted EBIT plus depreciation and amortisation, including the related Proportionate adjustments. In addition, Volcan, while a subsidiary of the Group, is accounted for under the equity method for internal reporting and analysis due to the relatively low economic ownership held by the Group.

The accounting policies of the operating segments are the same as those described in note 1 with the exception of relevant material associates, the Collahuasi joint venture and Volcan. Under IAS 28 and IFRS 11, Glencore's investments in the Antamina copper/zinc mine (34% owned) and the Cerrejón coal mine (33% owned) are considered to be associates as they are not subject to joint control and the Collahuasi copper mine (44% owned) is considered to be a joint venture. Associates and joint ventures are required to be accounted for in Glencore's financial statements under the equity method. For internal reporting and analysis, Glencore evaluates the performance of these investments under the proportionate consolidation method, reflecting Glencore's proportionate share of the revenues, expenses, assets and liabilities of the investments. For internal reporting and analysis, management evaluates the performance of Volcan under the equity method, reflecting the Group's relatively low 23.3% economic ownership in this fully ring-fenced listed entity, with its stand-alone, independent and separate capital structure. The balances as presented for internal reporting purposes are reconciled to Glencore's statutory disclosures in the following tables and/or in the Alternative performance measures section.

2. Segment information continued

Glencore accounts for intra-segment sales and transfers where applicable as if the sales or transfers were to third parties, i.e. at arm's length commercial terms.

2020 US$ million	Marketing activities	Industrial activities	Inter-segment eliminations	**Total**
Revenue				
Metals and minerals	54,847	30,303	(18,859)	66,291
Energy products	69,290	11,145	(1,944)	78,491
Corporate and other	–	5	–	5
Revenue - segmental	**124,137**	**41,453**	**(20,803)**	**144,787**
Proportionate adjustment – revenue[1]	–	(2,449)	–	(2,449)
Revenue – reported measure	**124,137**	**39,004**	**(20,803)**	**142,338**
Metals and minerals				
Adjusted EBITDA	1,768	7,285	–	9,053
Depreciation and amortisation	(101)	(3,868)	–	(3,969)
Proportionate adjustment – depreciation[1]	–	(363)	–	(363)
Adjusted EBIT	**1,667**	**3,054**	**–**	**4,721**
Energy products				
Adjusted EBITDA	2,053	1,039	–	3,092
Depreciation and amortisation	(292)	(2,294)	–	(2,586)
Proportionate adjustment – depreciation[1]	–	(110)	–	(110)
Adjusted EBIT	**1,761**	**(1,365)**	**–**	**396**
Corporate and other				
Adjusted EBITDA[2]	(89)	(496)	–	(585)
Depreciation and amortisation	–	(116)	–	(116)
Adjusted EBIT	**(89)**	**(612)**	**–**	**(701)**
Total Adjusted EBITDA	**3,732**	**7,828**	**–**	**11,560**
Total depreciation and amortisation	(393)	(6,278)	–	(6,671)
Total depreciation proportionate adjustment	–	(473)	–	(473)
Total Adjusted EBIT	**3,339**	**1,077**	**–**	**4,416**
Share of associates' significant items[1,3]				(92)
Share of significant items - Volcan				–
Movement in unrealised inter-segment profit elimination adjustments[4]				(760)
Loss on disposals of non-current assets				(36)
Other income/(expense) – net				(173)
Impairments				(5,947)
Interest expense – net				(1,453)
Income tax credit				1,170
Proportionate adjustment – net finance, impairment and income tax expense[1]				(1,071)
Loss for the year				**(3,946)**

1 Refer to APMs section for definition.
2 Marketing activities include $211 million of Glencore's equity accounted share of Viterra.
3 Share of associates' significant items comprise Glencore's share of significant charges relating to impairments and other items booked directly by various associates, notably Trevali ($36 million) and HG Storage ($20 million).
4 Represents the required adjustment to eliminate unrealised profit or losses arising on inter-segment transactions, i.e. before ultimate sale to a third party. For Glencore, such adjustments arise on the sale of product, in the ordinary course of business, from its Industrial to Marketing operations. Management assesses segment performance prior to any such adjustments, as if the sales were to third parties.

2. Segment information continued

2019 US$ million	Marketing activities	Industrial activities	Inter-segment eliminations	Total
Revenue				
Metals and minerals	73,561	27,672	(16,751)	84,482
Energy products	120,627	15,067	(2,921)	132,773
Corporate and other	–	4	–	4
Revenue - segmental	**194,188**	**42,743**	**(19,672)**	**217,259**
Proportionate adjustment – revenue[1]	–	(2,148)	–	(2,148)
Revenue – reported measure	**194,188**	**40,595**	**(19,672)**	**215,111**
Metals and minerals				
Adjusted EBITDA	1,169	5,555	–	6,724
Depreciation and amortisation	(80)	(4,438)	–	(4,518)
Proportionate adjustment – depreciation[1]	–	(101)	–	(101)
Adjusted EBIT	**1,089**	**1,016**	**–**	**2,105**
Energy products				
Adjusted EBITDA	1,515	3,854	–	5,369
Depreciation and amortisation	(191)	(2,392)	–	(2,583)
Proportionate adjustment – depreciation[1]	–	(188)	–	(188)
Adjusted EBIT	**1,324**	**1,274**	**–**	**2,598**
Corporate and other				
Adjusted EBITDA[2]	(47)	(445)	–	(492)
Depreciation and amortisation	–	(60)	–	(60)
Adjusted EBIT	**(47)**	**(505)**	**–**	**(552)**
Total Adjusted EBITDA	**2,637**	**8,964**	**–**	**11,601**
Total depreciation and amortisation	(271)	(6,890)	–	(7,161)
Total depreciation proportionate adjustment	–	(289)	–	(289)
Total Adjusted EBIT	**2,366**	**1,785**	**–**	**4,151**
Share of associates' significant items[1,3]				(219)
Share of significant items – Volcan				(73)
Movement in unrealised inter-segment profit elimination adjustments[4]				468
Loss on disposals of non-current assets				(43)
Other income/(expense) – net				(173)
Impairments				(2,408)
Interest expense – net				(1,713)
Income tax expense				(618)
Proportionate adjustment – net finance, impairment and income tax expense[1]				(878)
Loss for the year				**(1,506)**

1 Refer to APMs section for definition.

2 Marketing activities include $58 million of Glencore's equity accounted share of Viterra.

3 Share of associates' significant items comprise Glencore's share of significant charges relating to impairments and other items booked directly by various associates, notably Viterra ($73 million), Trevali ($65 million) and Oil vessels' entities ($62 million).

4 Represents the required adjustment to eliminate unrealised profit or losses arising on inter-segment transactions, i.e. before ultimate sale to a third party. For Glencore, such adjustments arise on the sale of product, in the ordinary course of business, from its Industrial to Marketing operations. Management assesses segment performance prior to any such adjustments, as if the sales were to third parties.

2. Segment information continued

2020 US$ million	Marketing activities	Industrial activities	Corporate and other	Total
Current assets	27,273	13,395	–	40,668
Current liabilities	(23,906)	(7,098)	–	(31,004)
Allocatable current capital employed	**3,367**	**6,297**	**–**	**9,664**
Property, plant and equipment	978	46,132	–	47,110
Intangible assets	5,188	1,279	–	6,467
Investments in associates and other investments	5,708	8,425	–	14,133
Non-current advances and loans	1,733	1,309	–	3,042
Inventories	–	678	–	678
Allocatable non-current capital employed	**13,607**	**57,823**	**–**	**71,430**
Other assets[1]			5,902	5,902
Other liabilities[2]			(52,594)	(52,594)
Total net assets	**16,974**	**64,120**	**(46,692)**	**34,402**
Capital expenditure				
Metals and minerals	68	3,023	–	3,091
Energy products	420	1,031	–	1,451
Corporate and other	–	28	–	28
Capital expenditure - segmental	**488**	**4,082**	**–**	**4,570**
Proportionate adjustment – capital expenditure[3]	–	(426)	–	(426)
Capital expenditure - reported measure[4]	**488**	**3,656**	**–**	**4,144**

2019 US$ million	Marketing activities	Industrial activities	Corporate and other	Total[5]
Current assets	26,770	12,455	–	39,225
Current liabilities	(23,919)	(6,957)	–	(30,876)
Allocatable current capital employed	**2,851**	**5,498**	**–**	**8,349**
Property, plant and equipment	921	54,436	–	55,357
Intangible assets	5,293	1,713	–	7,006
Investments in associates and other investments	6,202	9,169	–	15,371
Non-current advances and loans	1,511	916	–	2,427
Inventories	–	575	–	575
Allocatable non-current capital employed	**13,927**	**66,809**	**–**	**80,736**
Other assets[1]			4,115	4,115
Other liabilities[2]			(53,964)	(53,964)
Total net assets	**16,778**	**72,307**	**(49,849)**	**39,236**
Capital expenditure				
Metals and minerals	94	3,963	–	4,057
Energy products	344	1,312	–	1,656
Corporate and other	–	74	–	74
Capital expenditure - segmental	**438**	**5,349**	**–**	**5,787**
Proportionate adjustment – capital expenditure[3]	–	(419)	–	(419)
Capital expenditure – reported measure[4]	**438**	**4,930**	**–**	**5,368**

1 Other assets include non-current financial assets, deferred tax assets, cash and cash equivalents and assets held for sale.
2 Other liabilities include borrowings, non-current deferred income, deferred tax liabilities, non-current provisions, non-current financial liabilities and liabilities held for sale.
3 Refer to APMs section for definition.
4 Includes $575 million (2019: $656 million), comprising $415 million (2019: $361 million) in Marketing activities and $160 million (2019: $295 million) in Industrial activities, of 'right-of-use assets' capitalised in accordance with IFRS 16 – Leases.
5 Certain balances have been represented to conform with current year presentation (see note 27).

2. Segment information continued

GEOGRAPHICAL INFORMATION

US$ million	2020	2019
Revenue from third parties[1]		
The Americas	25,762	38,114
Europe	42,682	75,749
Asia	60,360	82,988
Africa	6,701	8,214
Oceania	6,833	10,046
	142,338	**215,111**
Non-current assets[2]		
The Americas	17,347	21,702
Europe	11,051	11,048
Asia	4,802	4,669
Africa	13,798	17,548
Oceania	19,657	20,955
	66,655	**75,922**

1 Revenue by geographical destination is based on the country of incorporation of the sales counterparty, however this may not necessarily be the country of the counterparty's ultimate parent and/or final destination of product.

2 Non-current assets are non-current assets excluding other investments, advances and loans, other financial assets and deferred tax assets. Non-current assets comprise assets in Australia of $18,047 million (2019: $19,277 million), in Peru of $7,271 million (2019: $9,923 million) and the DRC of $6,849 (2019: $6,911 million).

3. Revenue

US$ million	2020	2019
Sale of commodities	139,486	212,244
Freight, storage and other services	2,852	2,867
Total	**142,338**	**215,111**

Revenue is derived principally from the sale of commodities, recognised once control of the goods has transferred from Glencore to the buyer. Revenue from sale of commodities includes $1,217 million (2019: $221 million) of mark-to-market related adjustments on provisionally priced sales arrangements. Revenue derived from freight, storage and other services is recognised over time as the service is rendered. Revenue is measured based on consideration specified in the contract with the customer and is presented net of amounts prepaid as incentives and/or rebates paid to customers, and excludes amounts collected on behalf of third parties. This is consistent with the revenue information disclosed for each reportable segment (see note 2).

4. Loss on disposals of non-current assets

US$ million	Notes	2020	2019
Revaluation of previously held interest in newly acquired business (Polymet)	25	–	(38)
Gain on sale of Terminales Portuarios Chancay S.A.	25	–	26
Net gain/(loss) on sale of other investments/operations		9	(8)
Loss on disposal of property, plant and equipment		(45)	(23)
Total		**(36)**	**(43)**

POLYMET

In June 2019, Glencore concluded the acquisition of an additional 42.9% interest in Polymet Mining Corp. Prior to acquisition, Glencore owned a 28.8% interest in Polymet which was accounted for as an associate. The revaluation of the existing interest at the date of acquisition resulted in a reported loss of $38 million (see note 25).

TERMINALES PORTUARIOS CHANCAY S.A.

In April 2019, Glencore disposed of a 60% interest in Terminales Portuarios Chancay S.A. for $11 million, subsequently accounting for its remaining share of 40% using the equity method (see notes 10 and 25).

5. Other income/(expense) – net

US$ million	Notes	**2020**	2019
Net changes in mark-to-market valuations on investments		438	47
Disposal of Rosneft stake related income		–	325
Net foreign exchange losses		(192)	(70)
Legal related costs		(113)	(159)
Closed site rehabilitation costs		(80)	(81)
Closure and severance costs		(214)	(173)
Acquisition related costs	25	–	(6)
Other expenses – net		(12)	(56)
Total		**(173)**	**(173)**

Together with foreign exchange movements and mark-to-market movements on investments, other net expense includes other items that, due to their nature and variable financial impact or infrequency of the events giving rise to these items, are reported separately from operating segment results.

NET CHANGES IN MARK-TO-MARKET VALUATIONS ON INVESTMENTS

Primarily relates to movements on interests in investments (see note 10), the ARM Coal non-discretionary dividend obligation (see note 28) and deferred consideration related to Mototolo stake sale in 2018 (see notes 11 and 13), all carried at fair value.

LEGAL RELATED COSTS

Includes various investigations (legal, expert and compliance) related costs of $95 million (2019: $117 million)(see note 30).

In November 2020, claims brought against the Group by the Strategic Fuel Fund Association of South Africa (SFF) asserting that certain historical purchases of oil from SFF were invalid were settled, with related costs and charges recognised amounting to $18 million (2019: $42 million).

CLOSED SITE REHABILITATION COSTS

Comprises movements in restoration, rehabilitation and decommissioning estimates related to sites that are no longer operational (see note 22).

CLOSURE AND SEVERANCE RELATED COSTS

In 2020, closure and severance related costs were primarily incurred in respect of the suspension of operations at Prodeco coal in Colombia ($147 million), the Aguilar zinc mine in Argentina ($43 million) and the Lydenburg chrome smelter in South Africa ($24 million).

In 2019, closure and severance related costs were incurred at the following operations: Mutanda ($83 million), Katanga ($57 million) and Brunswick lead smelter ($33 million).

DISPOSAL OF ROSNEFT STAKE RELATED INCOME

In September 2019, a gain of $325 million was recognised in respect of the settlement of a 50:50 consortium with Qatar Investment Auhority that was established to acquire a stake in OSJC Rosneft Oil, representing the reversal of a provision of the same amount recorded in 2018.

6. Impairments

US$ million	Notes	2020	2019
Property, plant and equipment and intangible assets	8/9	(5,508)	(1,954)
Investments	10	(96)	(137)
Advances and loans	11/13	(343)	(86)
VAT receivables		–	(162)
Inventory and other		–	(69)
Total impairments[1]		**(5,947)**	**(2,408)**

1 Impairments recognised during the year are allocated to Glencore's operating segments as follows: Marketing activities $228 million (2019: $201 million) and Industrial activities $5,719 million (2019: $2,207 million).

As part of a regular portfolio review, Glencore carries out an assessment of whether there are indicators of asset impairment or whether a previously recorded impairment may no longer be required.

The recoverable amounts of the property, plant and equipment and intangible assets were measured based on fair value less costs of disposal (FVLCD), or in certain cases value in use (VIU). In particular, market pressures regarding potential future investment in Coal mining operations have reduced the availability of an active market for acquiring such operations, and thus the recoverable amounts of our Coal CGUs have been measured using a VIU approach. The FVLCD or VIU of all CGUs are determined by discounted cash flow techniques based on the most recent approved financial budgets, underpinned and supported by the life of asset plans of the respective operations. The valuation models use the most recent reserve and resource estimates, relevant cost assumptions generally and where possible, market forecasts of commodity price and foreign exchange rate assumptions, discounted using operation specific post-tax real discount rates (unless otherwise indicated) ranging from 6.1% – 13.5% (2019: 6.6% – 13.5%). The valuations generally remain most sensitive to price and a deterioration / improvement in the pricing outlook may result in additional impairments/reversals. The determination of FVLCD uses Level 3 valuation techniques for both years. In providing sensitivity analysis (and particularly on commodity price assumptions), a 10% change, representing a typical deviation parameter common in the industry, has been provided. Where a higher percentage is reasonably possible on an operational assumption, that has been clearly identified.

As a result of the regular impairment assessment, the following significant impairment charges were recognised:

2020

Property, plant and equipment and intangible assets

- Volcan is a listed zinc / silver mining entity in Peru, in which the Group acquired a 63% controlling (23% economic) interest at the end of 2017 (Industrial activities segment). The operations primarily comprise two cash-generating units (Yauli and Chungar) and at the time of the acquisition, approximately one third of the value was ascribed to realising the future potential of various projects / resources. Due to the impact Covid-19 has had on the long-term outlook of the global economy, a comprehensive review of the life of mine plan and related expansion projects was carried out in Q2 2020 where it was determined that the related risk / confidence levels in deploying capital to longer-term greenfield projects and the probability of approving development and realisation of these projects had reduced. This, along with the shift in long-term zinc pricing, lead to an impairment of $2,347 million (related deferred tax obligations of $716 million were released) to its estimated recoverable amount of $1,503 million. The valuation assumes long-term zinc and silver prices of $2,400/t and $20.00/lb, respectively and an operation specific discount rate of 9.2%. Should the zinc and silver price assumptions fall by 10% (across the curve), a further impairment of $450 million would be recognised. A 10% reduction in estimated annual production over the life of mine could result in an additional impairment of $540 million.

- As a result of persistent operational challenges, further technical analysis resulting in a reduced life of mine forecast, delays in key development projects and cost increases owing to inflation, tax and other regulatory pressures, a decision was made, in Q2 2020, to place the Mopani copper operations in Zambia (Industrial activities segment) on extended care and maintenance subject to government approval. In January 2021, an agreement was reached to sell Mopani to ZCCM (see note 15). At year end, the carrying value was determined with reference to the estimated fair value of the consideration receivable from the sale transaction noted above. The Mopani operations were therefore impaired by $1,041 million, to $861 million, reflecting the estimated fair value of the agreed sales terms. The valuation remains sensitive to price and production volumes and a deterioration in these assumptions could result in additional impairments. The operation specific discount rate used in the valuation was 10.5%. The short to long-term copper price assumptions were $7,900/mt – 6,300/mt. Should the copper price assumptions fall by 10% (across the curve), considering historical production performance, production volumes decline by 20%, a further $150 million and $235 million, respectively, of impairment would be recognised.

- During H1 2020, pressure on the API2 European coal market (primary price reference market for our Colombian coal operations) increased as European economies continue to progress their decarbonisation trajectory, exacerbated by the significant drop in oil and gas prices (supply and demand factors). A review of Prodeco's operations determined that, in addition to a deteriorating market environment, there were increasing challenges with respect to obtaining several key approvals from government agencies and other key stakeholders. In Q2 2020, an application was therefore made to place Prodeco on extended care and maintenance until these conditions improve. In Q4, the application was rejected and it was subsequently decided to relinquish the mining licenses.

6. Impairments continued

Consequently, the full carrying value of the mining operations related to such licenses ($835 million) (Industrial activities segment) were fully impaired (property, plant and equipment - $789 million and non-current advances and loans - $46 million).

- As noted above, oil prices were significantly impacted by demand destruction from Covid-19, the lack of timely effective supply response from OPEC+ and the longer term outlook for oil prices also deteriorated due to updated expectations surrounding decarbonisation. In addition, Covid-19 disrupted and restricted international mobility, which had a particularly significant impact on our workforce arrangements in Chad, resulting in these fields being placed on care and maintenance in March. As a result, in Q2 2020, the Chad oil operations (Industrial activities segment) were impaired by $673 million to their estimated recoverable amount of $145 million. The valuation remains sensitive to Covid-19 related disruptions on international mobility and a timely restart of the operations in a safe and economic manner. Should such restart be prolonged by an extended period of time, an additional future impairment of the balance of the carrying amount could result.
- In June 2020, it was determined to keep the Lydenburg chrome smelter (Industrial activities segment) on care and maintenance, reflecting the challenging operating and market environment across the South African ferrochrome industry, including unsustainably increasing electricity tariffs / supply interruption and other sources of real cost inflation. These macro factors outweigh the significant efforts made over the past years to make the operation more competitive, rendering its estimated fair value as negative. As a result, the entire carrying value of the Lydenburg smelter ($116 million) was impaired.
- The global macro-economic impact of Covid-19 on refined petroleum product demand and resulting global refinery overcapacity has had a negative effect on refining margins. As a result, Astron (Industrial activities segment) has lowered its long term through-the-cycle outlook on refining margins by approximately 30%. As a result, the Astron oil refinery was impaired by $480 million to its estimated recoverable amount of $1,015 million, including its related downstream supply business. The operation specific discount rate used in the valuation was a pre-tax nominal discount rate of 12.3%. The valuation remains most sensitive to refining margins and a deterioration in these assumptions could result in additional impairments. Should the margin assumptions fall by $1/bbl (across the curve), a further $243 million of impairment would be recognised. Should the discount rate increase by 1%, a further $88 million of impairment would be recognised.
- The balance of the impairment charges on property, plant and equipment (none of which were individually material) relate to specific assets where utilisation is no longer required or to projects no longer progressed due to changes in production and development plans. As a result, the full carrying amount of these assets/projects was impaired, with $62 million recognised in our Industrial activities segment.

Advances and loans – current and non-current

In Q2 2020, loans of $103 million were impaired in full due to financial difficulties faced by one of the Group's associates (Marketing activities segment). The balance of the impairment charges on advances and loans (none of which were individually material) were recognised in our Marketing activities segment ($125 million) and our Industrial activities segment ($115 million), following the restructuring of certain loans and physical advances due to various non-performance factors.

2019

Property, plant and equipment and intangible assets

- Following the sharp further decline in cobalt prices over H1 2019 and in response thereof, significant updates were made to Mutanda's mine plans, culminating in the decision to place the operation on temporary care and maintenance in December 2019, for future restart, once the oversupplied cobalt market sufficiently recovers. As a result, the Mutanda operations (Industrial activities segment) were impaired by $300 million to its estimated recoverable amount of $2,600 million, including continued value recognition for the long-term copper sulphide resource potential. The valuation remains sensitive to price and a prolonged temporary care and maintenance scenario and further deteriorations in these key assumptions may result in additional impairment. The operation specific discount rate used in the valuation was 13.5%. The long-term copper and cobalt price assumptions were $6,500/mt and $27.00/lb, respectively. As at 31 December 2019, had the future copper and cobalt assumptions fallen by 10% (across the curve), or had it be determined that the temporary care and maintenance scenario be prolonged for an additional 2 years, with all other assumptions held constant, a further impairment ranging between $317 million and $468 million would have been recognised.
- During H1 2019, Glencore's exploration licenses in Chad East expired and Glencore entered into discussions with the Government of the Republic of Chad with a view to extending the exploration licenses on terms acceptable to both parties. The discussions did not result in any agreement to extend the licenses. As a result, the full carrying value pertaining to the acreage held under exploration licenses ($538 million) (Industrial activities segment) was impaired. The expiry of the exploration licences had no impact on Glencore's current production and development assets in the Mangara, Badila and Krim fields (Chad West), which are held under exploitation licences.
- During H1 2019, challenging warehousing conditions persisted and as a result, the remaining goodwill of $50 million related to the Access World warehousing business (Marketing activities segment) was impaired.

6. Impairments continued

- Global LNG oversupply with resultant low spot gas prices, and to a lesser extent, higher EU carbon prices, placed considerable pressure on the API2 European coal market, the primary price reference market for our Colombian coal operations. This impact, including reflecting our latest Colombian mine-life approval expectations, resulted in a reduction in future production and revenue estimates. As a result, the Prodeco operation (Industrial activities segment) was impaired by $514 million, along with an inventory write down of $41 million to its estimated recoverable amount of $778 million. The valuation remains sensitive to price and a further deterioration in the pricing outlook may result in a further impairment. The operation specific discount rate used in the valuation was 8.1%. The short to long-term API2 price assumptions were $70 - 83/mt. As at 31 December 2019, had the future price assumptions fallen by 10% (across the curve) with all other assumptions held constant, a further impairment of $466 million would have been recognised.
- In November 2019, an agreement to dispose of the Oxidos and Cerro de Pasco operations (separately identifiable zinc and silver processing areas within the Volcan group) (Industrial activities segment), which predominantly comprise an oxide processing plant, environmental and rehabilitation provisions and old tailings dumps, was reached with $30 million due over a two year period plus a royalty, contingent upon the price of silver and gold over certain thresholds, estimated to be worth $100 million on a discounted basis. The transaction was subject to customary regulatory approvals and expected to close during 2020. As a result of the agreed disposal, it has been determined that these operations meet the requirements of IFRS 5, which requires that its assets and liabilities be presented as current assets and liabilities "held for sale" as at 31 December 2019 at the lower of their carrying value or fair value less costs to sell, and as a result of this reclassification to assets held for sale, an impairment charge of $354 million was recognised as well as a VAT impairment of $24 million. Also see note 15.
- The balance of the impairment charges on property, plant and equipment (none of which were individually material) relate to specific assets where utilisation is no longer required or to projects no longer progressed due to changes in production and development plans. As a result, the full carrying amount of these asses/projects was impaired, with $168 million recognised in our Industrial activities segment and $30 million recognised in our Marketing activities segment.

VAT receivables

As a result of the continued decline in the Zambian government's cash flow position and continued challenge by the Zambian Revenue Authority on the validity of Mopani's (Industrial activities segment) Value Added Tax ("VAT") claims pertaining to 2013-15 submissions, such claims amounting to $127 million were impaired in full.

The balance of the impairment charges on VAT receivables (none of which were individually material) were recognised in our Industrial activities segment ($5 million) and in our Marketing activities segment ($6 million).

7. Income taxes

Income taxes consist of the following:

US$ million	**2020**	2019
Current income tax expense	(931)	(1,315)
Adjustments in respect of prior year current income tax	88	74
Deferred income tax credit	2,005	603
Adjustments in respect of prior year deferred income tax	8	20
Total tax credit/(expense) reported in the statement of income	**1,170**	**(618)**
Deferred income tax credit recognised directly in other comprehensive income	6	4
Total tax credit recognised directly in other comprehensive income	**6**	**4**

The effective Group tax rate is different from the statutory Swiss income tax rate applicable to the Company for the following reasons:

US$ million	**2020**	2019
Loss before income taxes	(5,116)	(888)
Less: Share of income from associates and joint ventures	(444)	(114)
Parent Company's and subsidiaries' loss before income tax and attribution	**(5,560)**	**(1,002)**
Income tax credit calculated at the Swiss income tax rate of 12% (2019: 15%)	667	150
Tax effects of:		
Different tax rates from the standard Swiss income tax rate	1,572	450
Tax-exempt income ($206 million (2019: $175 million) from recurring items and $4 million (2019: $37 million) from non-recurring items)	210	212
Items not tax deductible ($589 million (2019: $689 million) from recurring items and $280 million (2019: $200 million) from non-recurring items)	(869)	(889)
Foreign exchange fluctuations	(76)	(12)
Changes in tax rates ($Nil (2019: $Nil) from recurring items and $9 million (2019: $13 million) from non-recurring items)	(9)	(13)
Utilisation and changes in recognition of tax losses and temporary differences	(249)	(187)
Recognition of temporary differences arising from retrospective changes in Australian tax restructuring regulations	–	120
Tax losses not recognised	(169)	(543)
Adjustments in respect of prior years	96	94
Other	(3)	–
Income tax credit/(expense)	**1,170**	**(618)**

The non-tax deductible items of $869 million (2019: $889 million) primarily relate to financing costs, impairments and various other expenses.

The impact of tax-exempt income of $210 million (2019: $212 million) primarily relates to non-taxable intra-group dividends, income that is not effectively connected to the taxable jurisdiction, and various other items.

The tax impact of foreign exchange fluctuations relates to the foreign currency movements on deferred tax balances where the underlying tax balances are denominated in a currency different to the functional currency determined for accounting purposes.

In 2020, adjustments in respect of non-recurring tax losses of $724 million (2019: $Nil) have been recognised, of which $130 million relate to previously unrecognised tax losses and provisions, and $594 million to tax losses arising on intra-group impairments in the current period.

7. Income taxes continued

DEFERRED TAXES

Deferred taxes as at 31 December 2020 and 2019 are attributable to the items in the table below:

US$ million	2020	Recognised in the statement of income	Recognised in other comprehensive income	Business combination and disposal of subsidiaries	Foreign currency exchange movements	Other	2019
Deferred tax assets[1]							
Tax losses carried forward	1,951	741	–	–	(2)	–	1,212
Other	301	33	3	–	(13)	13	265
Total	**2,252**	**774**	**3**	**–**	**(15)**	**13**	**1,477**
Deferred tax liabilities[1]							
Depreciation and amortisation	(4,123)	1,550	–	–	75	(68)	(5,680)
Mark-to-market valuations	(128)	(56)	–	–	(1)	–	(71)
Other	(470)	(255)	3	–	3	122	(343)
Total	**(4,721)**	**1,239**	**3**	**–**	**77**	**54**	**(6,094)**
Total Deferred tax - net	**(2,469)**	**2,013**	**6**	**–**	**62**	**67**	**(4,617)**

US$ million	2019[2]	Recognised in the statement of income	Recognised in other comprehensive income	Business combination and disposal of subsidiaries	Foreign currency exchange movements	Other	2018
Deferred tax assets[1]							
Tax losses carried forward	1,212	(308)	–	6	–	–	1,514
Other	265	54	4	7	(1)	(13)	214
Total	**1,477**	**(254)**	**4**	**13**	**(1)**	**(13)**	**1,728**
Deferred tax liabilities[1]							
Depreciation and amortisation	(5,680)	742	–	(69)	(35)	–	(6,318)
Mark-to-market valuations	(71)	(10)	9	3	–	–	(73)
Other	(343)	145	(9)	–	(1)	90	(568)
Total	**(6,094)**	**877**	**–**	**(66)**	**(36)**	**90**	**(6,959)**
Total Deferred tax - net	**(4,617)**	**623**	**4**	**(53)**	**(37)**	**77**	**(5,231)**

1 Asset and liability positions in the same category reflect the impact of tax assets and liabilities arising in local tax jurisdictions that cannot be offset against tax assets and liabilities arising in other tax jurisdictions.

2 As at 31 December 2019, deferred tax liabilities were restated by $120 million to reflect reclassification of uncertain tax provisions from provisions (see note 22).

Deferred tax assets are net of $579 million of uncertain tax liabilities related to tax estimation and judgement uncertainties with respect to various open tax disputes discussed below.

Deferred tax assets are recognised for tax losses carried forward only to the extent that realisation of the related tax benefit is probable. As at 31 December 2020, $2,998 million (2019: $1,571 million) of deferred tax assets related to available loss carry forwards have been brought to account, of which $1,951 million (2019: $1,212 million) are disclosed as deferred tax assets with the remaining balance being offset against deferred tax liabilities arising in the same tax entity. This balance is primarily comprised of:

- $843 million (2019: $517 million) in entities domiciled in the DRC,
- $658 million (2019: $287 million) in entities domiciled in Switzerland, and
- $365 million (2019: $366 million) in entities domiciled in the U.S.

In evaluating whether it is probable that taxable profits will be earned in future accounting periods prior to any tax loss expiry as may be the case, all available evidence was considered, including approved budgets, forecasts and business plans and, in certain cases, analysis of historical operating results. These forecasts are consistent with those prepared and used internally for business planning and impairment testing purposes. Following this evaluation, it was determined there would be sufficient taxable income generated to realise the benefit of the deferred tax assets. With the exception of the deferred tax assets raised in respect of the Group's DRC operations (see below), no reasonably possible change in any of the key assumptions would result in a material reduction in forecast headroom of tax profits so that the recognised deferred tax asset would not be realised.

7. Income taxes continued

The recognised losses carried forward in the DRC primarily relate to historical development, ramp-up and financing related costs at KCC. The losses carried forward have an unlimited carry forward period, but are subject to annual utilisation limitation. Following KCC's successful ramp-up of its operations to near name plate capacity, deferred taxation assets have been recognised for the full estimated available tax losses at 31 December 2020 as sufficient future taxable profits are expected to fully utilise the recognised carry forward tax losses. In recognising these deferred tax assets, consideration was given to the range of possible outcomes to determine the expected value of the tax losses available for future offset, including to what extent previously incurred tax losses would be available to offset future taxable profits. As part of the DRC tax audit noted below, certain previously incurred tax losses may be disallowed. In addition, as noted in our 2019 financial statements, during 2018, the DRC parliament adopted a new mining code ("2018 Mining Code") which introduced wide-ranging reforms including the introduction of higher royalties, a new Super Profits Tax regime and further regulatory controls. The uncertainties of the 2018 Mining Code, specifically the application and interpretation of the Super Profits Tax, remain. Any adverse challenge by the DRC tax authorities could materially impact the currently recognised tax losses and could result in a reversal of part or all of the recognised deferred tax assets.

The recognised losses carried forward in Switzerland primarily relate to non-recurring events. Based on the core business activities conducted in Switzerland and taxable income forecasts going forward, sufficient taxable profits are expected to fully utilise the recognised tax losses prior to expiration.

The recognised losses carried forward in the U.S. primarily relate to non-recurring events in 2011 and have a carry forward period of 20 years. The U.S. entities comprise our core U.S. marketing activities and based on taxable income forecasts going forward, sufficient taxable profits are expected to fully utilise the recognised tax losses prior to expiration.

INCOME TAX RECEIVABLE / PAYABLE

US$ million	**2020**	2019[1]
Income tax receivable	444	350
Income tax payable	(927)	(764)
Net income tax payable	**(483)**	**(414)**

1 As at 31 December 2019, income tax payable was restated by $410 million to reflect reclassification of uncertain tax provisions from provisions (see note 22).

INCOME TAX JUDGEMENTS AND UNCERTAIN TAX LIABILITIES

Glencore assesses its liabilities and contingencies for all tax years open to audit based upon the latest information available. Inherent uncertainties exist in estimates of tax contingencies due to complexities of interpretation and changes in tax laws. For those matters where it is probable that an adjustment will be made, the Group records its reasoned estimate of these tax liabilities, including related interest charges. These current open tax matters are spread across numerous jurisdictions and consist primarily of legacy transfer pricing matters that have been open for a number of years and may take several more years to resolve. In recognising a provision for these taxation exposures, consideration was given to the range of possible outcomes to determine the Group's best estimate of the amount to provide. As at 31 December 2020, the Group has recognised $1,189 million (2019: $989 million) of uncertain tax liabilities related to possible adverse outcomes of these open matters, of which, $579 million (2019: $579 million) has been recognised net of deferred tax assets, with the balance of $610 million (2019: $410 million) recognised as an income tax payable.

UK Tax Audit

HMRC have issued formal transfer pricing, unallowable purposes and diverted profits tax assessments for the 2008-2018 tax years, amounting to $774 million. The Group has appealed against, and continues to vigorously contest, these assessments, following, over the years, various legal opinions received and detailed analysis conducted, supporting its positions and policies applied. Therefore, the Group has not fully provided for the amount assessed. The matter is now proceeding through the Mutual Agreement Process, pursuant to article 24 of the Switzerland – United Kingdom Income Tax Treaty 1977. Management does not anticipate a significant risk of material changes in estimates in this matter in the next financial year.

DRC Tax Audit

Various tax authorities in the DRC have issued assessments denying financing related costs and other items, along with customs related claims for alleged non-compliance or incorrect coding on certain filings. The Group is currently engaged with these tax authorities working through a dispute resolution process. As the dispute resolution process is ongoing and its ultimate outcome remains uncertain, there remains a risk that the outcome could materially impact the recognised balances within the next financial year. It is impractical to provide further sensitivity estimates of potential downside variances.

7. Income taxes continued

AVAILABLE GROSS TAX LOSSES

Available gross tax losses carried forward and deductible temporary differences, for which no deferred tax assets have been recognised in the consolidated financial statements, are detailed below and will expire as follows:

US$ million	**2020**	2019
1 year	1,155	41
2 years	496	45
3 years	530	307
Thereafter	11,099	3,172
Unlimited	8,366	9,292
Total	**21,646**	**12,857**

As at 31 December 2020, unremitted earnings of $56,677 million (2019: $55,282 million) have been retained by subsidiaries for reinvestment. No provision is made for income taxes.

8. Property, plant and equipment

2020

US$ million	Notes	Freehold land and buildings	Plant and equipment	Right-of-use assets	Mineral and petroleum rights	Exploration and evaluation	Deferred mining costs	**Total**
Gross carrying amount:								
1 January 2020		6,211	46,225	2,313	30,223	2,248	18,009	105,229
Restatement[1]		–	(160)	–	540	–	(380)	–
1 January 2020 (restated)		6,211	46,065	2,313	30,763	2,248	17,629	105,229
Disposal of subsidiaries	25	(35)	(321)	(16)	(24)	–	(233)	(629)
Additions		32	2,746	575	58	–	721	4,132
Disposals		(28)	(1,260)	(265)	(42)	(274)	(90)	(1,959)
Effect of foreign currency exchange movements		(13)	(121)	(2)	(114)	–	(1)	(251)
Reclassification to held for sale	15	(111)	(1,833)	–	(692)	–	(1,002)	(3,638)
Reclassification from held for sale	15	176	36	1	16	1	8	238
Other movements[2]		344	(798)	(30)	530	(1)	430	475
31 December 2020		**6,576**	**44,514**	**2,576**	**30,495**	**1,974**	**17,462**	**103,597**
Accumulated depreciation and impairment:								
1 January 2020		2,017	24,646	633	10,910	2,158	9,508	49,872
Restatement[1]		–	–	–	150	–	(150)	–
1 January 2020 (restated)		2,017	24,646	633	11,060	2,158	9,358	49,872
Disposal of subsidiaries	25	(35)	(321)	(3)	(24)	–	(234)	(617)
Disposals		(22)	(1,173)	(135)	(29)	(274)	(88)	(1,721)
Depreciation		375	2,680	519	1,363	–	1,522	6,459
Impairment	6	278	1,120	–	2,860	–	992	5,250
Effect of foreign currency exchange movements		–	(14)	1	(9)	–	6	(16)
Reclassification to held for sale	15	(89)	(1,405)	–	(461)	–	(938)	(2,893)
Reclassification from held for sale	15	27	–	–	14	1	–	42
Other movements[2]		75	(95)	(11)	64	(1)	79	111
31 December 2020		**2,626**	**25,438**	**1,004**	**14,838**	**1,884**	**10,697**	**56,487**
Net book value 31 December 2020		**3,950**	**19,076**	**1,572**	**15,657**	**90**	**6,765**	**47,110**

1 Certain balances in the prior year have been restated to reflect their appropriate classification. Other than the restatement within property, plant and equipment headings, there are no depreciation or amortisation changes.

2 Primarily consists of increases in rehabilitation costs of $399 million and reclassifications within the various property, plant and equipment headings.

Plant and equipment includes expenditure for construction in progress of $3,247 million (2019: $4,161 million). Mineral and petroleum rights include biological assets of $19 million (2019: $19 million). Depreciation expenses included in cost of goods sold are $6,385 million (2019: $6,970 million) and in selling and administrative expenses, $74 million (2019: $46 million).

During 2020, $33 million (2019: $66 million) of interest was capitalised. With the exception of project specific borrowings, the rate used to determine the amount of borrowing costs eligible for capitalisation was 3% (2019: 4%).

8. Property, plant and equipment continued

As at 31 December 2020, with the exception of leases, no property, plant or equipment was pledged as security for borrowings (2019: $Nil).

LEASES

The Group leases various assets including land and buildings and plant and equipment. As at 31 December 2020, the net book value of recognised right-of use assets relating to land and buildings was $519 million (2019: $595 million) and plant and equipment $1,053 million (2019: $1,085 million). The depreciation charge for the period relating to those assets was $101 million (2019: $103 million) and $418 million (2019: $293 million), respectively.

Disclosure of amounts recognised as lease liabilities in the statement of financial position and cash outflows for leases in the year are included within note 20 and their maturity analysis within note 26.

Amounts recognised in the statement of income are detailed below:

US$ million	**2020**	**2019**
Depreciation on right-of-use assets	(519)	(396)
Interest expense on lease liabilities	(96)	(101)
Expense relating to short-term leases	(863)	(758)
Expense relating to low-value leases	(4)	(3)
Expense relating to variable lease payments not included in the measurement of the lease liability	(3)	(1)
Income from subleasing right-of-use assets	349	231
Total	**(1,136)**	**(1,028)**

At 31 December 2020, the Group is committed to $235 million of short-term lease payments and $370 million related to capitalised leases not yet commenced.

2019

US$ million	Notes	Freehold land and buildings	Plant and equipment	Right-of-use assets	Mineral and petroleum rights	Exploration and evaluation	Deferred mining costs	**Total**
Gross carrying amount:								
1 January 2019 (restated)		6,062	42,779	1,635	29,687	2,183	17,066	99,412
Business combination	25	200	772	169	467	–	15	1,623
Disposal of subsidiaries	25	(59)	(32)	–	–	–	–	(91)
Additions		65	3,558	656	104	1	962	5,346
Disposals		(33)	(679)	(90)	(40)	–	(632)	(1,474)
Effect of foreign currency exchange movements		4	81	(1)	74	–	9	167
Reclassification to held for sale	15	(176)	(36)	(1)	(16)	(1)	(8)	(238)
Other movements		148	(218)	(55)	(53)	65	597	484
31 December 2019		**6,211**	**46,225**	**2,313**	**30,223**	**2,248**	**18,009**	**105,229**
Accumulated depreciation and impairment:								
1 January 2019 (restated)		1,655	21,430	312	8,758	1,588	8,112	41,855
Disposal of subsidiaries	25	(4)	(32)	–	–	–	–	(36)
Disposals		(6)	(553)	(77)	(1)	–	(611)	(1,248)
Depreciation		377	3,059	396	1,709	6	1,469	7,016
Impairment	6	20	264	–	804	532	265	1,885
Effect of foreign currency exchange movements		1	26	–	15	–	–	42
Reclassification to held for sale	15	(27)	–	–	(14)	(1)	–	(42)
Other movements		1	452	2	(361)	33	273	400
31 December 2019		**2,017**	**24,646**	**633**	**10,910**	**2,158**	**9,508**	**49,872**
Net book value 31 December 2019		**4,194**	**21,579**	**1,680**	**19,313**	**90**	**8,501**	**55,357**

9. Intangible assets

2020

US$ million	Notes	Goodwill	Port allocation rights	Licences, trademarks and software	Customer relationships and other	**Total**
Cost:						
1 January 2020		13,293	1,374	596	720	15,983
Additions		–	–	5	7	12
Disposals		–	–	(16)	(9)	(25)
Effect of foreign currency exchange movements		–	(62)	(18)	(41)	(121)
Other movements		–	–	18	16	34
31 December 2020		**13,293**	**1,312**	**585**	**693**	**15,883**
Accumulated amortisation and impairment:						
1 January 2020		8,293	198	315	171	8,977
Disposals		–	–	(16)	(9)	(25)
Amortisation expense[1]		–	52	44	116	212
Impairment	6	–	–	5	253	258
Effect of foreign currency exchange movements		–	(3)	(1)	(7)	(11)
Other movements		–	–	(5)	10	5
31 December 2020		**8,293**	**247**	**342**	**534**	**9,416**
Net book value 31 December 2020		**5,000**	**1,065**	**243**	**159**	**6,467**

1 Recognised in cost of goods sold.

2019

US$ million	Notes	Goodwill	Port allocation rights	Licences, tradmarks and software	Customer relationships and other	**Total**
Cost:						
1 January 2019 (restated)		13,293	1,336	521	424	15,574
Business combination	25	–	–	24	347	371
Disposal of subsidiaries	25	–	–	–	(33)	(33)
Additions		–	–	10	12	22
Disposals		–	(1)	(11)	(1)	(13)
Effect of foreign currency exchange movements		–	40	(4)	(1)	35
Other movements		–	(1)	56	(28)	27
31 December 2019		**13,293**	**1,374**	**596**	**720**	**15,983**
Accumulated amortisation and impairment:						
1 January 2019		8,243	159	268	86	8,756
Disposals		–	–	(11)	(1)	(12)
Amortisation expense[1]		–	33	35	76	144
Impairment	6	50	–	–	19	69
Effect of foreign currency exchange movements		–	7	–	–	7
Other movements		–	(1)	23	(9)	13
31 December 2019		**8,293**	**198**	**315**	**171**	**8,977**
Net book value 31 December 2019		**5,000**	**1,176**	**281**	**549**	**7,006**

1 Recognised in cost of goods sold.

9. Intangible assets continued

GOODWILL

The carrying amount of goodwill has been allocated to cash-generating units (CGUs), or groups of CGUs as follows:

US$ million	**2020**	2019
Metals and minerals marketing business	3,326	3,326
Coal marketing business	1,674	1,674
Total	**5,000**	**5,000**

METALS AND MINERALS AND COAL MARKETING BUSINESSES

Goodwill of $3,326 million and $1,674 million was recognised in connection with previous business combinations and was allocated to the metals and minerals marketing and coal marketing CGUs respectively, based on the annual synergies expected to accrue to the respective marketing departments as a result of increased volumes, blending opportunities and freight and logistics arbitrage opportunities.

PORT ALLOCATION RIGHTS

Port allocation rights represent contractual entitlements to export certain amounts of coal on an annual basis from Richard Bay Coal Terminal in South Africa recognised as part of previous business combinations. The rights are amortised on a straight-line basis over the estimated economic life of the port of 15 years.

LICENCES, TRADEMARKS AND SOFTWARE

Intangibles related to internally developed technology and patents were recognised in previous business combinations and are amortised over the estimated economic life of the technology which ranges between 3 – 20 years.

CUSTOMER RELATIONSHIPS

Customer relationships mainly represent intangible assets related to long-standing customer relationships recognised in respect of business combinations completed in 2019 (see note 25). These intangible assets are being amortised on a straight-line basis over their estimated economic life which ranges between 5 – 9 years.

GOODWILL IMPAIRMENT TESTING

Given the nature of each CGU's activities, information on its fair value is usually difficult to obtain unless negotiations with potential purchasers or similar transactions are taking place. Consequently,

- The recoverable amount for each of the marketing CGUs is determined by reference to the FVLCD which utilises a price to earnings multiple approach based on the 2021 approved financial budget which includes factors such as marketing volumes handled and operating, interest and income tax charges, generally based on past experience. The price to earnings multiple of 15 times (2019: 15 times) is derived from observable market data for broadly comparable businesses; and
- Glencore believes that no reasonably possible changes in any of the above key assumptions would cause the recoverable amount to fall below the carrying value of the CGU. The determination of FVLCD for each of the marketing CGUs used Level 3 valuation techniques in both years.

10. Investments in associates, joint ventures and other investments

INVESTMENTS IN ASSOCIATES AND JOINT VENTURES

US$ million	Notes	2020	2019
1 January		12,984	13,909
Additions		102	104
Disposals		(14)	(96)
Share of income from associates and joint ventures		444	114
Share of other comprehensive loss from associates and joint ventures		(14)	(37)
Transfer of previously equity accounted investment to subsidiary	25	–	(40)
Fair value of retained interest in Terminales Portuarios Chancay S.A.	25	–	150
Impairments	6	(96)	(137)
Dividends received		(1,015)	(942)
Other movements		9	(41)
31 December		**12,400**	**12,984**
Of which:			
Investments in associates		6,038	6,858
Investments in joint ventures		6,362	6,126

As at 31 December 2020, the carrying value of our listed associates is $508 million (2019: $605 million), mainly comprising Century Aluminum and Trevali, which have carrying values of $261 million (2019: $395 million) and $77 million (2019: $119 million), respectively. The fair value of our listed associates, using published price quotations (a Level 1 fair value measurement) is $737 million (2019: $427 million). As at 31 December 2020, $111 million (2019: $104 million) of the carrying amount of Glencore's investment in Century Aluminium was pledged under a loan facility, with proceeds received and recognised in current borrowings of $100 million (2019: $80 million)(see note 20).

Cerrejón

Included in share of income from associates is Glencore's attributable share of impairment relating to Cerrejón amounting to $445 million (net of taxes of $211 million). As at 31 December 2020, the carrying amount of Glencore's investment in Cerrejón amounts to $595 million (2019: $1,143 million) which is equivalent to its recoverable amount based on a VIU calculation. The impairment results from lower API 2 coal price assumptions and reduced production estimates, including updated via mine-life approval expectations. The operation specific discount rate used in the valuation was 7.9%. The short to long-term API 2 price assumptions were $57 - 65/mt. Should the price assumptions fall by 10% (across the curve), with all other assumptions held constant, a further impairment of $231 million would be recognised. A 10% reduction in estimated annual production over the life of mine could result in an additional impairment of $216 million.

Impairments

Primarily comprises an impairment charge in respect of our investment in Century Aluminum ($73 million). 2019 primarily comprised Trevali ($48 million) and Oil vessels' entities ($67 million).

Terminales Portuarios Chancay S.A.

In April 2019, Glencore disposed of a 60% interest in Terminales Portuarios Chancay S.A. for $11 million (see notes 4 and 25), subsequently accounting for its remaining share of 40% using the equity method.

10. Investments in associates, joint ventures and other investments continued

2020 Details of material associates and joint ventures

Summarised financial information in respect of Glencore's associates and joint ventures, reflecting 100% of the underlying associates' and joint ventures' relevant figures, is set out below.

US$ million	Cerrejón	Antamina	**Total material associates**	Collahuasi	Viterra	**Total material joint ventures**	**Total material associates and joint ventures**
Non-current assets	2,302	4,755	**7,057**	5,141	5,846	**10,987**	**18,044**
Current assets	455	1,584	**2,039**	1,407	10,529	**11,936**	**13,975**
Non-current liabilities	(707)	(1,538)	**(2,245)**	(1,380)	(3,057)	**(4,437)**	**(6,682)**
Current liabilities	(102)	(698)	**(800)**	(845)	(9,041)	**(9,886)**	**(10,686)**
The above assets and liabilities include the following:							
Cash and cash equivalents	99	91	**190**	99	327	**426**	**616**
Current financial liabilities[1]	(20)	(53)	**(73)**	(288)	(4,351)	**(4,639)**	**(4,712)**
Non-current financial liabilities[1]	(15)	(476)	**(491)**	(100)	(2,547)	**(2,647)**	**(3,138)**
Net assets 31 December 2020	**1,948**	**4,103**	**6,051**	**4,323**	**4,277**	**8,600**	**14,651**
Glencore's ownership interest	33.3%	33.8%		44.0%	49.9%		
Acquisition fair value and other adjustments	(54)	1,813	**1,759**	1,089	1,237	**2,326**	**4,085**
Carrying value	595	3,200	**3,795**	2,991	3,371	**6,362**	**10,157**

1 Financial liabilities exclude trade, other payables and provisions.

Summarised profit and loss in respect of Glencore's associates and joint ventures, reflecting 100% of the underlying associates' and joint ventures' relevant figures for the year ended 31 December 2020 including group adjustments relating to alignment of accounting policies or fair value adjustments, is set out below.

US$ million	Cerrejón	Antamina	**Total material associates**	Collahuasi	Viterra	**Total material joint ventures**	**Total material associates and joint ventures**
Revenue	626	3,126	**3,752**	3,936	28,342	**32,278**	**36,030**
(Loss)/income for the year	(1,613)	794	**(819)**	1,414	414	**1,828**	**1,009**
Other comprehensive (loss)/income	–	–	**–**	(19)	4	**(15)**	**(15)**
Total comprehensive (loss)/income	(1,613)	794	**(819)**	1,395	418	**1,813**	**994**
Glencore's share of dividends paid	11	363	**374**	598	–	**598**	**972**
The above (loss)/income for the year includes the following:							
Depreciation and amortisation	(329)	(843)	**(1,172)**	(659)	(548)	**(1,207)**	**(2,379)**
Interest income[1]	–	–	**–**	2	13	**15**	**15**
Interest expense[2]	(21)	(51)	**(72)**	(71)	(176)	**(247)**	**(319)**
Impairment, net of tax[3]	(1,969)	–	**(1,969)**	–	–	**–**	**(1,969)**
Income tax credit/(expense)	692	(553)	**139**	(815)	(143)	**(958)**	**(819)**

1 Includes foreign exchange gains and other income of $4 million.
2 Includes foreign exchange losses and other expenses of $87 million.
3 Glencore's attributable share of impairment relating to Cerrejón amounts to $445 million, net of taxes of $211 million.

10. Investments in associates, joint ventures and other investments continued

2019 Details of material associates and joint ventures

Summarised financial information in respect of Glencore's associates and joint ventures, reflecting 100% of the underlying associates' and joint ventures' relevant figures, is set out below.

US$ million	Cerrejón	Antamina	**Total material associates**	Collahuasi	Viterra	**Total material joint ventures**	**Total material associates and joint ventures**
Non-current assets	2,399	4,589	**6,988**	4,905	5,712	**10,617**	**17,605**
Current assets	630	1,276	**1,906**	1,306	7,363	**8,669**	**10,575**
Non-current liabilities	(768)	(1,170)	**(1,938)**	(1,207)	(3,855)	**(5,062)**	**(7,000)**
Current liabilities	(57)	(486)	**(543)**	(794)	(5,389)	**(6,183)**	**(6,726)**
The above assets and liabilities include the following:							
Cash and cash equivalents	157	55	**212**	163	184	**347**	**559**
Current financial liabilities[1]	(21)	(53)	**(74)**	(15)	(2,770)	**(2,785)**	**(2,859)**
Non-current financial liabilities[1]	(15)	(146)	**(161)**	(95)	(3,450)	**(3,545)**	**(3,706)**
Net assets 31 December 2019	**2,204**	**4,209**	**6,413**	**4,210**	**3,831**	**8,041**	**14,454**
Glencore's ownership interest	33.3%	33.8%		44.0%	49.9%		
Acquisition fair value and other adjustments	409	1,872	**2,281**	1,116	1,246	**2,362**	**4,643**
Carrying value	1,143	3,295	**4,438**	2,968	3,158	**6,126**	**10,564**

1 Financial liabilities exclude trade, other payables and provisions.

Summarised profit and loss in respect of Glencore's associates and joint ventures, reflecting 100% of the underlying associates' and joint ventures' relevant figures for the year ended 31 December 2019, including group adjustments relating to alignment of accounting policies or fair value adjustments, is set out below.

US$ million	Cerrejón	Antamina	**Total material associates**	Collahuasi	Viterra	**Total material joint ventures**	**Total material associates and joint ventures**
Revenue	1,483	3,038	**4,521**	3,147	25,057	**28,204**	**32,725**
(Loss)/income for the year	(1,440)	892	**(548)**	945	(29)	**916**	**368**
Other comprehensive loss	–	–	**–**	(23)	(3)	**(26)**	**(26)**
Total comprehensive (loss)/income	(1,440)	892	**(548)**	922	(32)	**890**	**342**
Glencore's share of dividends paid	66	243	**309**	467	–	**467**	**776**
The above (loss)/income for the year includes the following:							
Depreciation and amortisation	(565)	(811)	**(1,376)**	(640)	(524)	**(1,164)**	**(2,540)**
Interest income[1]	–	15	**15**	35	28	**63**	**78**
Interest expense[2]	(12)	(3)	**(15)**	(25)	(202)	**(227)**	**(242)**
Impairment, net of tax[3]	(1,305)	–	**(1,305)**	–	–	**–**	**(1,305)**
Income tax credit/(expense)	46	(489)	**(443)**	(437)	(40)	**(477)**	**(920)**

1 Includes foreign exchange gains and other income of $68 million.
2 Includes foreign exchange losses of $16 million.
3 Glencore's attributable share of impairment relating to Cerrejón amounts to $435 million, net of taxes of $213 million, resulting from lower API2 coal price assumptions and reduced production estimates, including in relation to updated mine-life approval expectations. The operation specific discount rate used in the valuation was 8.1%. The short to long-term API 2 price assumptions were $70 - 83/mt. As at 31 December 2019, had the price assumptions fallen by 10% (across the curve) with all other assumptions held constant a further impairment of $312 million would have been recognised.

10. Investments in associates, joint ventures and other investments continued

Aggregate information of associates that are not individually material:

US$ million	**2020**	2019
The Group's share of loss	(120)	(110)
The Group's share of other comprehensive loss	(8)	(25)
The Group's share of total comprehensive loss	(128)	(135)
Aggregate carrying value of the Group's interests	2,243	2,420

The amount of corporate guarantees in favour of associates and joint ventures as at 31 December 2020 was $560 million (2019: $983 million). No amounts have been claimed or provided as at 31 December 2020. Glencore's share of joint ventures' capital commitments amounts to $105 million (2019: $108 million).

OTHER INVESTMENTS

US$ million	**2020**	2019
Fair value through other comprehensive income[1]		
EN+ GROUP PLC	701	674
OAO NK Russneft[2]	309	869
Yancoal	164	172
OSJC Rosneft	357	440
Other	116	135
	1,647	2,290
Fair value through profit and loss		
Century Aluminum cash-settled equity swaps	49	69
Champion Iron Limited share warrants[3]	37	28
	86	97
Total	**1,733**	**2,387**

1 Fair value through other comprehensive income includes net disposals of $12 million for the period.
2 Glencore's investment in OAO NK Russneft is pledged under a loan facility issued to OAO NK Russneft.
3 The warrants are exercisable until October 2025 for conversion into direct share ownership.

Although Glencore holds a 25% interest in Russneft, it does not exercise significant influence over its financial and operating policy decisions as the majority shareholder retains operational and board control.

During the year, dividend income from equity investments designated as at fair value through other comprehensive income amounted to $32 million (2019: $49 million).

11. Advances and loans

US$ million	Notes	**2020**	2019
Financial assets at amortised cost			
Loans to associates		246	294
Other non-current receivables and loans		600	466
Rehabilitation trust fund		148	147
Financial assets at fair value through profit and loss			
Other non-current receivables and loans		102	116
Deferred consideration	28	302	45
Non-financial instruments			
Pension surpluses	23	40	42
Advances repayable with product[1]		1,334	1,172
Land rights prepayment		150	–
Other non-current receivables		120	145
Total		**3,042**	**2,427**

1 Net of $1,534 million (2019: $1,216 million) provided by various banks, the repayment terms of which are contingent upon and connected to the future delivery of contractual production.

FINANCIAL ASSETS AT AMORTISED COST

Loans to associates

Loans to associates generally bear interest at applicable floating market rates plus a premium.

Other non-current receivables and loans

Other non-current receivables and loans comprise the following:

US$ million	**2020**	2019
Secured financing arrangements	585	448
Other	15	18
Total	**600**	**466**

Various financing facilities, generally marketing related and secured against certain assets and/or payable from the future sale of production of the counterparty. The non-current receivables and loans are interest-bearing and on average are to be repaid over a three-year period.

Rehabilitation trust fund

Glencore makes contributions to controlled funds established to meet the costs of its restoration and rehabilitation liabilities, primarily in South Africa. These funds are not available for the general purposes of the Group, and there is no present obligation to make any further contributions.

Loss allowances of financial assets at amortised cost

The Group determines the expected credit loss of loans to associates and other non-current receivables and loans (at amortised cost) based on different scenarios of probability of default and expected loss applicable to each of the material underlying balances. Expected credit losses for these assets are measured as either 12-month expected credit losses, taking into account prior experience regarding probability of default adjusted for forward looking information, or as lifetime expected credit losses (when there is significant increase in credit risk or the asset is credit-impaired). The gross carrying value of other non-current receivables and loans measured as 12-month expected credit losses was $626 million (2019:$507 million) and as lifetime expected credit losses $314 million (2019:$302 million), the expected credit losses on which were $37 million (2019:$57 million) and $303 million (2019:$298 million) respectively. The movement in loss allowance for financial assets classified at amortised cost is detailed below:

US$ million	Loans to associates	Other non-current receivables and loans	**2020**	Loans to associates	Other non-current receivables and loans	**2019**
Gross carrying value 31 December	308	940	1,248	325	821	1,146
Loss allowances						
1 January	31	355	386	27	323	350
Released during the period[1]	–	(48)	(48)	–	(10)	(10)
Charged during the period[1]	31	33	64	4	42	46
31 December	62	340	402	31	355	386
Net carrying value 31 December	**246**	**600**	**846**	**294**	**466**	**760**

1 $45 million (2019: $31 million) recognised as an impairment (see note 6) and the balancing credit of $29 million (2019: charge of $5 million) recognised in cost of goods sold.

11. Advances and loans continued

FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT AND LOSS

Deferred consideration

In 2020, fair value movements of net positive $379 million (2019: $35 million) were recognised (see note 5).

NON-FINANCIAL INSTRUMENTS

Advances repayable with product

US$ million	2020	2019
Counterparty		
Société Nationale d'Electricité (SNEL) power advances	312	303
Chad State National Oil Company	347	360
Société Nationale des Pétroles du Congo	156	18
Other[1]	519	491
Total	**1,334**	**1,172**

1 Comprises no individually material items..

SNEL power advances

In early 2012, a joint agreement with Société Nationale d'Électricité (SNEL), the Democratic Republic of the Congo's (DRC) national electricity utility, was signed whereby Glencore's operations would contribute $375 million to a major electricity infrastructure refurbishment programme, including transmission and distribution systems. This facilitated a progressive increase in power availability to 450 megawatts by the end of Q1 2020. Funding commenced in the second quarter of 2012 and is due to end in Q1 2021. The loans are being repaid via discounts on electricity purchases, which are expected to accelerate upon completion of the refurbishment programme.

Chad State National Oil Company

Glencore has provided a net $359 million (2019: $379 million) to the Chad State National Oil Company (SHT) to be repaid through future oil deliveries over ten years. As at 31 December 2020 the advance is net of $714 million (2019: $778 million) provided by a syndicate of lenders, the repayment terms of which are contingent upon and connected to the receipt of oil due from SHT under the prepayment. Of the net amount advanced, $347 million (2019: $360 million) is receivable after 12 months and is presented within Other non-current receivables and loans and $12 million (2019: $19 million) is due within 12 months and included within Accounts receivable.

Société Nationale des Pétroles du Congo (SNPC)

Glencore has provided a net $156 million (2019: $156 million) to SNPC repayable through future oil deliveries over five years. As at 31 December 2020, the advance is net of $498 million (2019: $498 million) provided by the lenders, the repayment terms of which are contingent upon and connected to the future receipt of oil contractually due from SNPC. Of the net amount advanced, $156 million (2019: $18 million) is due after 12 months and is presented within Other long-term receivables and loans and $Nil (2019: $138 million) is due within 12 months and included within Accounts receivable. SNPC has indicated to Glencore and the syndicate of banks that it wishes to restructure the terms of this arrangement.

Land rights prepayment

On 19 December 2019, Kamoto Copper Company ("KCC") entered into an agreement with La Générale des Carrières et des Mines ("Gécamines"), Glencore's 25% joint venture partner in KCC, to acquire from Gécamines a comprehensive land package covering areas adjacent to KCC's existing mining concessions for $250 million. The package includes multiple blocks for construction of a new long-term tailings facility and the possible exploitation of additional resources that will enhance KCC's ability to more efficiently operate its mines, facilities and other key infrastructure requirements.

In addition to the above consideration, the agreement includes the following key additional undertakings:

- obligations on KCC to remove tailings (estimated at circa 15m dmt), currently in a sub-section of these areas, to another suitable location;
- contingent obligations to pay "Pas de Porte" payments to Gécamines if KCC declares a JORC compliant reserve or otherwise elects to mine any resources in the Resource Areas; and
- a new royalty to Gécamines of 2.5% of net sales from the acquired land areas if KCC elects to mine any resources in such areas.

In August 2020, KCC advanced $150 million to Gécamines as an agreed prepayment of the consideration due. If the closing conditions as prescribed in the agreement are not fulfilled, Glencore has the right to accrue interest on the prepaid amount, terminate the agreement and, if funds are not returned, offset against future amounts owing to Gécamines. The balance of the consideration is due 5 days after the respective closing conditions of each area to be transferred are satisfied.

12. Inventories

CURRENT INVENTORY

Inventories of $22,852 million (2019: $19,936 million) comprise $12,260 million (2019: $10,516 million) of inventories carried at fair value less costs of disposal and $10,592 million (2019: $9,420 million) valued at the lower of cost or net realisable value. The amount of inventories and related ancillary costs recognised as an expense during the period was $124,037 million (2019: $192,418 million).

Fair value of inventories is a Level 2 fair value measurement (see note 28) using observable market prices obtained from exchanges, traded reference indices or market survey services adjusted for relevant location and quality differentials. There are no significant unobservable inputs in the fair value measurement of such inventories.

Glencore has a number of dedicated financing facilities, which finance a portion of its inventories. In each case, the inventory has not been derecognised as the Group has not transferred control. The proceeds received are recognised as current borrowings (see note 20). As at 31 December 2020, the total amount of inventory pledged under such facilities was $804 million (2019: $430 million). The proceeds received and recognised as current borrowings were $679 million (2019: $339 million) and $80 million (2019: $80 million) as non-current borrowings.

NON-CURRENT INVENTORY

$678 million (2019: $575 million) of inventories valued at lower of cost or net realisable value are not expected to be utilised or sold within the normal operating cycle and are therefore classified as non-current inventory.

13. Accounts receivable

US$ million	Notes	**2020**	2019
Financial assets at amortised cost			
Trade receivables		3,360	3,692
Trade advances		–	44
Margin calls paid[1]		3,692	2,198
Associated companies		288	326
Other receivables[2]		356	394
Financial assets at fair value through profit and loss			
Trade receivables containing provisional pricing features	28	4,459	6,526
Finance lease receivable	28	9	14
Deferred consideration	28	130	37
Non-financial instruments			
Advances repayable with product[3]		922	1,433
Other tax and related receivables		1,938	2,007
Total		**15,154**	**16,671**

1 Includes $65 million (2019: $635 million) of cash collateral payments under margin arrangements related to cross currency swaps held to hedge non-U.S. dollar denominated bonds.
2 Includes current portion of non-current loans receivable of $241 million (2019: $129 million).
3 Includes advances, net of $298 million (2019: $1,248 million) provided by banks, the repayment terms of which are contingent upon and connected to the future delivery of contractual production over the next 12 months.

The average credit period on sales of goods is 24 days (2019: 18 days). The carrying value of trade receivables approximates fair value.

13. Accounts receivable continued

The Group applies a simplified approach to measure the loss allowance for trade receivables classified at amortised cost, using the lifetime expected loss provision. The expected credit loss on trade receivables is estimated using a provision matrix by reference to past default experience and credit rating, adjusted as appropriate for current observable data. Expected credit loss provisions are recognised in cost of goods sold and during the period, a credit of $3 million (2019: charge of $2 million) of such losses were recognised. The following table details the risk profile of trade receivables based on the Group's provision matrix.

US$ million	Trade receivables – days past due					
As at 31 December 2020	**Not past due**	**<30**	**31 – 60**	**61 – 90**	**>90**	**Total**
Gross carrying amount	2,941	224	44	21	143	3,373
Expected credit loss rate	0.27%	0.54%	0.82%	1.09%	2.31%	
Lifetime expected credit loss	(8)	(1)	(1)	–	(3)	(13)
Total	**2,933**	**223**	**43**	**21**	**140**	**3,360**

US$ million	Trade receivables – days past due					
As at 31 December 2019	**Not past due**	**<30**	**31 – 60**	**61 – 90**	**>90**	**Total**
Gross carrying amount	3,077	356	56	59	192	3,740
Expected credit loss rate	0.28%	0.55%	0.83%	1.10%	2.34%	
Lifetime expected credit loss	(9)	(2)	–	(1)	(4)	(16)
Total	**3,068**	**354**	**56**	**58**	**188**	**3,724**

The movement in allowance for credit loss relating to receivables from associates and other receivables is detailed below:

US$ million	Receivables from associates	Other receivables	**2020**	Receivables from associates	Other receivables	**2019**
Gross carrying value 31 December	410	488	**898**	336	473	809
Allowance for credit loss						
1 January	10	79	89	9	35	44
Released during the period[1]	(1)	(3)	(4)	–	(7)	(7)
Charged during the period[1]	103	62	165	1	51	52
Utilised during the period	–	(6)	(6)	–	–	–
Effect of foreign currency exchange movements	10	–	10	–	–	–
31 December	122	132	**254**	10	79	89
Net carrying value 31 December	**288**	**356**	**644**	**326**	**394**	**720**

1 $123 million (2019: $Nil) recognised as an impairment (see note 6) and the balancing $38 million (2019: $45 million) net charge recognised in cost of good sold

Glencore has a number of dedicated financing facilities, which finance a portion of its receivables. The receivables have not been derecognised, as the Group retains the principal risks and rewards of ownership. The proceeds received are recognised as current borrowings (see note 20). As at 31 December 2020, the total amount of trade receivables pledged was $693 million (2019: $837 million) and proceeds received and classified as current borrowings amounted to $567 million (2019: $719 million).

14. Cash and cash equivalents

US$ million	**2020**	2019
Bank and cash on hand	1,387	1,618
Deposits and treasury bills	111	281
Total	**1,498**	**1,899**

Cash and cash equivalents comprise cash held at bank, cash in hand and short-term bank deposits with an original maturity of three months or less. The carrying amount of these assets approximates their fair value.

As at 31 December 2020, $82 million (2019: $92 million) was restricted.

15. Assets and liabilities held for sale

In November 2020, Glencore agreed, subject to various conditions precedent and documentation, to sell its controlling interest in Mopani to minority shareholder, ZCCM Investments Holding plc (ZCCM) for $1, leaving $1.5 billion of Glencore loans outstanding, where the pace and size of repayment instalments is linked to Mopani's future production and copper prices. Completion of the sale is conditional on receipt of certain regulatory approvals in Zambia and ZCCM shareholders, expected to occur over H1 2021. The sale is considered highly probable as at 31 December 2020 and as a result, it has been determined that these operations meet the requirements of IFRS 5 which requires that its assets and liabilities be presented as current assets and liabilities "held for sale" as at 31 December 2020 at the lower of their carrying value or fair value less costs to sell. Also see note 6.

In November 2019, an agreement was reached to dispose the Oxidos and Cerro de Pasco operations (separately identifiable zinc and silver processing areas within the Volcan group) which predominantly comprise an oxide processing plant, environmental and rehabilitation provisions and old tailings dumps for $30 million, due over a two year period, and a royalty contingent upon the price of silver and gold over certain thresholds, estimated to be worth $100 million on a discounted basis. The transaction was subject to customary regulatory approvals and was expected to close during 2020. The long stop date has, however, elapsed with the conditions precedent not having been fulfilled. As a result, net assets (assets of $286 million and liabilities of $156 million) previously classified as held for sale in 2019 were reclassified to the respective line items in the statement of financial position at depreciated cost and a one-time depreciation charge of $18 million was recognised to reflect the additional depreciation that would have been charged if the related assets had not previously been classified as held for sale.

Assets of $1,046 million and liabilities of $185 million have been classified as held for sale within the Industrial activities segment as detailed below:

US$ million	**2020** **Mopani**	2019 Cerro de Pasco
Non-current assets		
Property, plant and equipment	745	196
Advances and loans	5	–
Deferred tax assets	–	13
	750	**209**
Current assets		
Inventories	187	22
Accounts receivable	106	53
Prepaid expenses	3	–
Cash and cash equivalents	–	2
	296	**77**
Total assets held for sale	**1,046**	**286**
Non-current liabilities		
Deferred tax liabilities	–	(68)
Provisions	(64)	(52)
	(64)	**(120)**
Current liabilities		
Borrowings	(26)	(2)
Accounts payable	(58)	(34)
Provisions	(24)	–
Income tax payable	(13)	–
	(121)	**(36)**
Total liabilities held for sale	**(185)**	**(156)**
Total net assets held for sale	**861**	**130**

16. Share capital and reserves

	Number of shares (thousand)	Share capital (US$ million)	Share premium (US$ million)
Authorised:			
31 December 2020 and 2019 Ordinary shares with a par value of $0.01 each	50,000,000		
Issued and fully paid up:			
1 January 2019 and 31 December 2019 – Ordinary shares	**14,586,200**	**146**	**45,794**
31 December 2020 – Ordinary shares	**14,586,200**	**146**	**45,794**

	Treasury Shares		Trust Shares		**Total**	
	Number of shares (thousand)	Share premium (US$ million)	Number of shares (thousand)	Share premium (US$ million)	**Number of shares (thousand)**	**Share premium (US$ million)**
Own shares:						
1 January 2019	583,572	(2,483)	170,130	(835)	**753,702**	**(3,318)**
Own shares purchased during the year	678,315	(2,318)	–	–	**678,315**	**(2,318)**
Own shares disposed during the year	–	–	(40,138)	199	**(40,138)**	**199**
31 December 2019	**1,261,887**	**(4,801)**	**129,992**	**(636)**	**1,391,879**	**(5,437)**
1 January 2020	1,261,887	(4,801)	129,992	(636)	**1,391,879**	**(5,437)**
Own shares disposed during the year	–	–	(26,991)	133	**(26,991)**	**133**
31 December 2020	**1,261,887**	**(4,801)**	**103,001**	**(503)**	**1,364,888**	**(5,304)**

OWN SHARES

Own shares comprise shares acquired under the Company's share buy-back programmes and shares of Glencore plc held by Group employee benefit trusts ("the Trusts") to satisfy the potential future settlement of the Group's employee stock plans, primarily assumed as part of previous business combinations.

The Trusts also coordinate the funding and manage the delivery of ordinary shares and free share awards under certain of Glencore's share plans. The shares have been acquired by either stock market purchases or share issues from the Company. The Trusts are permitted to sell the shares and may hold up to 5% of the issued share capital of the Company at any one time. The Trusts have waived the right to receive distributions from the shares that they hold. Costs relating to the administration of the Trusts are expensed in the period in which they are incurred.

As at 31 December 2020: 1,364,888,033 shares (2019: 1,391,879,129 shares), equivalent to 9.36% (2019: 9.54%) of the issued share capital were held at a cost of $5,304 million (2019: $5,437 million) and market value of $4,341 million (2019: $4,347 million).

16. Share capital and reserves continued

OTHER RESERVES

US$ million	Translation adjustment	Cash flow hedge reserve	Net unrealised gain/(loss)	Net ownership changes in subsidiaries	Total
1 January 2020	(2,665)	(97)	364	(2,573)	(4,971)
Exchange loss on translation of foreign operations	(167)	–	–	–	(167)
Loss on cash flow hedges, net of tax	–	(50)	–	–	(50)
Loss on equity investments accounted for at fair value through other comprehensive income	–	–	(631)	–	(631)
Change in ownership interest in subsidiaries (see note 33)	–	–	–	(31)	(31)
Gain due to changes in credit risk on financial liabilities accounted for at fair value through profit and loss	–	–	19	–	19
Reclassifications	–	–	(18)	1	(17)
31 December 2020	**(2,832)**	**(147)**	**(266)**	**(2,603)**	**(5,848)**
1 January 2019	(2,779)	(47)	38	(2,149)	(4,937)
Exchange gain on translation of foreign operations	114	–	–	–	114
Loss on cash flow hedges, net of tax	–	(51)	–	–	(51)
Gain on equity investments accounted for at fair value through other comprehensive income	–	–	342	–	342
Change in ownership interest in subsidiaries (see note 33)	–	–	–	(418)	(418)
Loss due to changes in credit risk on financial liabilities accounted for at fair value through profit and loss	–	–	(1)	–	(1)
Reclassifications	–	1	(15)	(6)	(20)
31 December 2019	**(2,665)**	**(97)**	**364**	**(2,573)**	**(4,971)**

The translation adjustment reserve is used to capture the cumulative impact of foreign currency translation adjustments arising from the Group's non-USD denominated functional currency subsidiaries.

The cash flow hedge reserve is used to accumulate the gains and losses from hedging instruments contained within hedge relationships until the hedged item impacts profit or loss.

The net unrealised gain/loss reserve is used to accumulate the gains and lossess associated with the remeasurement of the Group's investments carried at FVTOCI.

The net ownership changes in subsidiaries reserve is used to capture equity movements arising from changes in the Group's ownership in its subdiairies.

17. Earnings per share

US$ million	2020	2019
Loss attributable to equity holders of the Parent for basic earnings per share	(1,903)	(404)
Weighted average number of shares for the purposes of basic earnings per share (thousand)	13,216,886	13,684,091
Effect of dilution:		
Equity-settled share-based payments (thousand)[1]	139,989	92,470
Weighted average number of shares for the purposes of diluted earnings per share (thousand)	13,216,886	13,684,091
Basic loss per share (US$)	**(0.14)**	**(0.03)**
Diluted loss per share (US$)	**(0.14)**	**(0.03)**

HEADLINE EARNINGS:

Headline earnings is a Johannesburg Stock Exchange (JSE) defined performance measure. The calculation of basic and diluted earnings per share, based on headline earnings as determined by the requirements of the Circular 1/2019 as issued by the South African Institute of Chartered Accountants (SAICA), is reconciled using the following data:

US$ million	2020	2019
Loss attributable to equity holders of the Parent for basic earnings per share	(1,903)	(404)
Net loss on disposals[2]	36	43
Net loss on disposals – tax	(11)	(6)
Impairments[3]	6,693	3,191
Impairments – non-controlling interest	(1,596)	(270)
Impairments – tax	(1,214)	(323)
Headline earnings for the year	**2,005**	**2,231**
Headline earnings per share (US$)	**0.15**	**0.16**
Diluted headline earnings per share (US$)	**0.15**	**0.16**

1 These equity-settled share-based payments could potentially dilute basic earnings per share in the future, but did not impact diluted loss per share because they were anti-dilutive..

2 See note 4.

3 Comprises impairments of property, plant and equipment, investments and advances and loans (see note 6), Glencore's share of impairments booked directly by various associates (see note 2) and impairments related to Cerrejón (see note 10).

18. Distributions

The proposed distribution in respect of the year ended 31 December 2020 of $0.12 per ordinary share amounting to $1,587 million is subject to approval by shareholders at the Annual General Meeting and has not been included as a liability in these financial statements. Owing to the uncertainty resulting from the Covid pandemic and to support the Group's overall financial position during 2020, the Board elected not to pay any distributions in 2020. A distribution of $0.20 per ordinary share amounting to $2,710 million was paid in 2019.

19. Share-based payments

US$ million	Number of awards granted (thousands)	Fair value at grant date (US$ million)	**Number of awards outstanding 2020 (thousands)**	Number of awards outstanding 2019 (thousands)	**Expense recognised 2020 (US$ million)**	Expense recognised 2019 (US$ million)
Deferred Bonus Plan - Bonus share award						
2018 Series	12,891	65	4,316	11,052	–	–
2019 Series	10,791	37	7,914	9,552	–	33
2020 Series	45,798	85	45,798	–	85	–
	69,480		**58,028**	**20,604**	**85**	**33**
Performance Share Plan						
2015 Series	79,787	109	9,509	11,878	–	5
2016 Series	23,984	84	–	7,407	3	9
2017 Series	19,732	95	5,965	12,498	10	27
2018 Series	28,458	104	18,396	27,912	29	54
2019 Series	29,689	90	28,330	12,171	55	–
2020 Series	19,761	59	19,761	–	–	–
	201,411		**81,961**	**71,866**	**97**	**95**
Total	**270,891**		**139,989**	**92,470**	**182**	**128**

DEFERRED BONUS PLAN

Under the Glencore Deferred Bonus Plan (DBP), the payment of a portion of a participant's annual bonus is deferred for a period of one to two years as an award of either ordinary shares (a "Bonus Share Award") or cash. The awards are vested at grant date with no further service conditions, however they are subject to forfeiture for malus events. The Bonus Share Awards may be satisfied, at Glencore's option, in shares by the issue of new ordinary shares, by the transfer of ordinary shares held in treasury or by the transfer of ordinary shares purchased in the market or in cash, with a value equal to the market value of the award at settlement, including distributions paid between award and settling. Glencore currently intends to settle these awards in shares. The associated expense is recorded in the statement of income/loss as part of the expense for performance bonuses. The fair value at grant date is determined with respect to the average share price of Glencore plc in the month of granting.

PERFORMANCE SHARE PLAN

Under the Glencore Performance Share Plan (PSP), participants are awarded PSP awards which vest in annual tranches over a specified period, subject to continued employment and forfeiture for malus events. At grant date, each PSP award is equivalent to one ordinary share of Glencore. The awards vest in three or five equal tranches on 31 December or 31 January of the years following the year of grant, as may be the case. The fair value of the awards is determined by reference to the market price of Glencore's ordinary shares at grant date. The PSP awards may be satisfied, at Glencore's option, in shares by the issue of new ordinary shares, by the transfer of ordinary shares held in treasury or by the transfer of ordinary shares purchased in the market or in cash, with a value equal to the market value of the award at vesting, including distributions paid between award and vesting. Glencore currently intends to settle these awards in shares. The fair value at grant date is determined with respect to the average share price of Glencore plc in the month of granting.

SHARE-BASED AWARDS ASSUMED IN PREVIOUS BUSINESS COMBINATIONS

	Total options outstanding (thousands)	**Weighted average exercise price (GBP)**
1 January 2020	102,623	3.98
Lapsed	(30,956)	3.38
Exercised	–	–
31 December 2020	**71,667**	**4.25**
1 January 2019	106,637	3.88
Lapsed	–	–
Exercised[1]	(4,014)	1.10
31 December 2019	**102,623**	**3.98**

1 The weighted average share price at date of exercise of the share based awards was GBP3.03.

19. Share-based payments continued

As at 31 December 2020, a total of 71,667,011 options (2019: 102,623,112 options) were outstanding and exercisable, having a range of exercise prices from GBP3.91 to GBP4.80 (2019: GBP3.37 to GBP4.80) and a weighted average exercise price of GBP4.25 (2019: GBP3.98). These outstanding awards have expiry dates ranging from February 2021 to February 2022 (2019: February 2020 to February 2022) and a weighted average contractual life of 275 days (2019: 438 days). The awards may be satisfied at Glencore's option, by the issue of new ordinary shares, by the transfer of ordinary shares held in treasury or by the transfer of ordinary shares purchased in the market. Glencore currently intends to settle these awards, when exercised, by the transfer of ordinary shares held in treasury.

20. Borrowings

US$ million	Notes	2020	2019
Non-current borrowings			
Capital market notes		22,353	21,452
Committed syndicated revolving credit facilities		4,766	5,615
Lease liabilities		1,008	1,158
Other bank loans		1,100	842
Total non-current borrowings		**29,227**	**29,067**
Current borrowings			
Secured inventory/receivables/other facilities	10/12/13	1,346	1,138
U.S. commercial paper		1,090	675
Capital market notes		2,018	2,455
Lease liabilities		513	484
Other bank loans[1]		3,285	3,224
Total current borrowings		**8,252**	**7,976**
Total borrowings		**37,479**	**37,043**

1 Comprises various uncommitted bilateral bank credit facilities and other financings and is net of $135 million (2019: $Nil) of funds advanced by the Group under a netting arrangement with a bank and a subsidiary.

RECONCILIATION OF CASH FLOW TO MOVEMENT IN BORROWINGS

US$ million	Notes	2020	2019
Cash related movements in borrowings[1]			
Proceeds from issuance of capital market notes		3,362	3,866
Repayment of capital market notes		(4,017)	(3,167)
Repurchase of capital market notes		(72)	–
Repayment of revolving credit facilities		(870)	(29)
Proceeds from other non-current borrowings		392	291
Repayment of other non-current borrowings		(44)	(325)
Repayment of lease liabilities		(560)	(358)
Proceeds from U.S. commercial papers		415	79
Proceeds from/(repayment of) current borrowings		217	(682)
		(1,177)	(325)
Non-cash related movements in borrowings			
Borrowings (disposed of)/acquired in business combinations	25	(13)	284
Foreign exchange movements		812	231
Fair value hedge movements[2]		344	387
Impact of adoption of IFRS 16		–	865
Change in lease liabilities		435	582
Interest on convertible bonds		20	19
Other non-cash movements		15	6
		1,613	2,374
Increase in borrowings for the year		**436**	**2,049**
Total borrowings – opening		37,043	34,994
Total borrowings – closing		**37,479**	**37,043**

1 See consolidated statement of cash flows.

2 The fair value hedge movements were equivalent to the change in fair value of the respective hedging instrument (see note 26).

20. Borrowings continued

CAPITAL MARKET NOTES

US$ million	Maturity	**2020**	2019
Euro 1,250 million 1.25% coupon bonds	Mar 2021	–	1,386
Euro 600 million 2.75% coupon bonds	Apr 2021	–	667
Euro 700 million 1.625% coupon bonds	Jan 2022	865	793
Euro 1,000 million 1.875% coupon bonds	Sep 2023	1,219	1,118
Euro 400 million 3.70% coupon bonds	Oct 2023	520	480
Euro 600 million 0.625% coupon bonds	Sep 2024	732	672
Euro 750 million 1.75% coupon bonds	Mar 2025	951	860
Euro 500 million 3.75% coupon bonds	Apr 2026	680	616
Euro 500 million 1.50% coupon bonds	Oct 2026	632	568
Euro 950 million 1.125% coupon bonds	Mar 2028	1,159	–
Eurobonds		**6,758**	**7,160**
JPY 10 billion 1.075% coupon bonds	May 2022	97	92
GBP 500 million 6.00% coupon bonds	Apr 2022	685	664
GBP 500 million 3.125% coupon bonds	Mar 2026	724	672
Sterling bonds		**1,409**	**1,336**
CHF 250 million 2.25% coupon bonds	May 2021	–	254
CHF 175 million 1.25% coupon bonds	Oct 2024	202	184
CHF 250 million 0.35% coupon bonds	Sep 2025	283	258
CHF 225 million 1.00% coupon bonds	Mar 2027	256	–
Swiss Franc bonds		**741**	**696**
US$ 1,000 million 4.95% coupon bonds	Nov 2021	–	1,022
US$ 600 million 5.375% coupon bonds	Feb 2022	535	535
US$ 250 million LIBOR plus 1.65% coupon bonds	May 2022	250	250
US$ 1,000 million 4.25% coupon bonds	Oct 2022	1,002	1,005
US$ 500 million 3.00% coupon bonds	Oct 2022	461	498
US$ 1,500 million 4.125% coupon bonds	May 2023	1,580	1,542
US$ 1,000 million 4.125% coupon bonds	Mar 2024	969	993
US$ 1,000 million 4.625% coupon bonds	Apr 2024	1,069	1,042
US$ 625 million non-dilutive convertible bonds	Mar 2025	532	513
US$ 500 million 4.00% coupon bonds	Apr 2025	531	502
US$ 1,000 million 1.625% coupon bonds	Sep 2025	992	–
US$ 1,000 million 4.00% coupon bonds	Mar 2027	1,103	1,030
US$ 50 million 4.00% coupon bonds	Mar 2027	50	50
US$ 500 million 3.875% coupon bonds	Oct 2027	553	514
US$ 750 million 4.875% coupon bonds	Mar 2029	864	801
US$ 1,000 million 2.500% coupon bonds	Sep 2030	991	–
US$ 250 million 6.20% coupon bonds	Jun 2035	270	271
US$ 500 million 6.90% coupon bonds	Nov 2037	586	589
US$ 500 million 6.00% coupon bonds	Nov 2041	537	538
US$ 500 million 5.55% coupon bonds	Oct 2042	473	473
US$ bonds		**13,348**	**12,168**
Total non-current bonds		**22,353**	**21,452**

20. Borrowings continued

US$ million	Maturity	**2020**	2019
GBP 500 million 7.375% coupon bonds	May 2020	–	675
Euro 750 million 3.375% coupon bonds	Sep 2020	–	842
Euro 600 million 2.750% coupon bonds	Apr 2021	724	–
CHF 500 million 1.250% coupon bonds	Dec 2020	–	519
CHF 250 million 2.250% coupon bonds	May 2021	284	–
US$ 1,000 million 2.875% coupon bonds	Apr 2020	–	419
US$ 1,000 million 4.950% coupon bonds	Nov 2021	1,010	–
Total current bonds		**2,018**	**2,455**

2020 BOND ACTIVITIES

- In September 2020, issued:
  - 7.5 year EUR 850 million, 1.125% coupon bonds
  - 5.5 year CHF 225 million, 1.000% coupon bonds
  - 5 year $1,000 million, 1.625% coupon bonds
  - 10 year $1,000 million, 2.500% coupon bonds
- In December 2020, issued 7.5 year EUR 100 million, 1.125% coupon bonds

2019 BOND ACTIVITIES

- In March 2019, issued:
  - 5 year $1,000 million, 4.125% coupon bonds
  - 10 year $750 million, 4.875% coupon bonds
  - 7 year GBP 500 million 3.125% coupon bonds
- In April 2019, issued 7 year EUR 500 million 1.50% coupon bonds
- In September 2019, issued 6 year CHF 250 million 0.35% coupon bonds and 5 year EUR 600 million 0.625% coupon bonds

COMMITTED SYNDICATED REVOLVING CREDIT FACILITIES

In March 2020 (effective May 2020), Glencore signed new one-year revolving credit facilities of $9,975 million, refinancing the $9,775 million one-year revolving facilities signed in March 2019, as well as extended its medium term facilities of $4,650 million. Funds drawn under the facilities bear interest at US$LIBOR plus a margin of 40 basis points.

As at 31 December 2020, the active facilities comprise:

- a $9,975 million one year revolving credit facility with a one-year borrower's term-out option (to May 2022) and a one-year extension option; and
- a $4,650 million medium-term revolving credit facility (to May 2025), with a one-year extension option.

As in previous years, these committed unsecured facilities contain no financial covenants, no rating triggers, no material adverse change clauses and no external factor clauses.

SECURED FACILITIES

US$ million	Maturity[1]	Interest	**2020**	2019
Syndicated committed metals inventory/receivables facilities[2]	Nov 2024	3.2%	81	82
Syndicated uncommitted metals and oil inventory/receivables facilities	Jan[3]/Jul/Aug 2021	US$ LIBOR + 65 bps	1,245	1,056
Other secured facilities	Mar 2021	US$ LIBOR + 75 bps	100	80
Total			**1,426**	**1,218**
Current			1,346	1,138
Non-current			80	80

1 Uncommitted facilities are re-drawn several times until actual expiry of the facility contract.
2 Comprises various facilities. The maturity and interest detail represent the weighted average of the various debt balances outstanding at year end.
3 Since year-end, in the ordinary course of business, these maturities have been rolled/extended as required.

21. Deferred income

US$ million	Unfavourable contracts	Prepayments	**Total**
1 January 2020	609	2,619	3,228
Additions	–	1,047	1,047
Accretion in the year	–	127	127
Utilised in the year	(66)	(663)	(729)
Effect of foreign currency exchange difference	(14)	1	(13)
31 December 2020	**529**	**3,131**	**3,660**
Current	79	991	1,070
Non-current	450	2,140	2,590
1 January 2019	684	2,029	2,713
Additions	–	940	940
Accretion in the year	–	134	134
Utilised in the year	(83)	(484)	(567)
Effect of foreign currency exchange difference	8	–	8
31 December 2019	**609**	**2,619**	**3,228**
Current	78	480	558
Non-current	531	2,139	2,670

UNFAVOURABLE CONTRACTS

In several business combinations, Glencore recognised liabilities related to various assumed contractual agreements to deliver tonnes of coal over various periods ending until 2034 at fixed prices lower than the prevailing market prices on the respective acquisition dates.

These amounts are released to revenue as the underlying commodities are delivered to the buyers over the life of the contracts at rates consistent with the extrapolated forward price curves at the time of the acquisitions.

PREPAYMENTS

Prepayments comprise various short to long-term product supply agreements whereby an upfront prepayment is received in exchange for the future delivery of a specific product, such as gold, silver or cobalt. The arrangements are accounted for as executory contracts whereby the advance payment is recorded as deferred revenue. The revenue from the advance payment is recognised as the specific product identified in the contract is delivered consistent with the implied forward price curve at the time of the transaction and an accretion expense, representing the time value of the upfront deposit, is also recognised.

Prepayments predominantly comprise:

- Life of mine arrangements - long-term streaming agreements for the future delivery of gold and/or silver produced over the life of mine from our Antamina, Antapaccay and Ernest Henry operations. In addition to the upfront payment received, for product delivered from the Antamina and Antapaccay operations, Glencore receives an ongoing amount equal to 20% of the spot silver and gold price. Once certain delivery thresholds have been met at Antapaccay, the ongoing cash payment increases to 30% of the spot gold and silver prices. As at 31 December 2020, $1,391 million (2019: $1,499 million) of product delivery obligations remain of which, $118 million (2019: $103 million) are due within 12 months.
- Silver supply arrangement – In December 2019, Glencore signed an extension of a silver prepayment arrangement, in exchange for an upfront advance payment of $500 million. Under the terms of the arrangement, Glencore is required to deliver an average of 19 million ounces of silver per annum, over a three year period. In December 2020, Glencore signed an extension of and one new silver prepayment arrangement, in exchange for an upfront advance of $426 million required to deliver an average of 6 million ounces of silver per annum, over a five year period. As at 31 December 2020, $841 million (2019: $680 million) of product delivery obligations remain of which, $292 million (2019: $265 million) are due within 12 months.
- Cobalt supply arrangement – In March 2019, Glencore signed a six year cobalt prepayment arrangement in exchange for an upfront advance payment of $100 million. Under the terms of the arrangement, Glencore is required to deliver an average of 1,621 metric tons of cobalt per annum over a four year period starting 2021. As at 31 December 2020, $100 million (2019: $102 million) of delivery obligations remain of which, $5 million (2019: $1 million) are due within 12 months.
- Palladium supply arrangement – In June 2019, Glencore signed a five year palladium prepayment arrangement in exchange for an upfront advance payment of $200 million. Under the terms of the arrangement, Glencore is required to deliver a minimum of 44 thousand ounces ounces of palladium per annum over a five year. In May 2020, Glencore signed a three year palladium prepayment arrangement in exchange for an upfront advance payment of $40 million. Under the terms of the arrangement, Glencore is required to deliver a minimum of 12 thousand ounces of palladium per annum over three year period. As at 31 December 2020, $200 million (2019: $200 million) of product delivery obligations remain of which, $63million (2019: $40 million) are due within 12 months.

21. Deferred income continued

- Gold supply arrangement – In December 2020, Glencore signed a 12 month gold prepayment arrangement in exchange for an upfront advance payment of $360 million. Under the terms of the arrangement, Glencore is required to deliver an average of 19 thousand ounces of gold per month. As at 31 December 2020, $360 million (2019: $Nil) of product delivery obligations remain of which, $360million (2019: $Nil) are due within 12 months.

22. Provisions (including post-retirement benefits)

US$ million	Notes	Post-retirement employee benefits	Other employee entitlements	Rehabilitation costs	Onerous contracts	Other	**Total[1]**
1 January 2020		958	228	4,847	595	633	7,261
Utilised		(106)	(71)	(189)	–	(37)	(403)
Released		–	–	–	(282)	(42)	(324)
Accretion		26	–	144	40	4	214
Disposal of subsidiaries	25	–	(9)	(208)	–	(15)	(232)
Additions		94	38	614	184	245	1,175
Reclassification to held for sale	15	–	(10)	(54)	–	(24)	(88)
Reclassification from held for sale	15	–	–	45	–	7	52
Effect of foreign currency exchange movements		8	5	(17)	(2)	(25)	(31)
31 December 2020		**980**	**181**	**5,182**	**535**	**746**	**7,624**
Current		–	–	297	143	253	693
Non-current		980	181	4,885	392	493	6,931
1 January 2019		798	243	4,457	722	628	6,848
Utilised		(93)	(25)	(171)	(1)	(118)	(408)
Released		–	(8)	(46)	(195)	(18)	(267)
Accretion		28	–	139	40	3	210
Assumed in business combination	25	44	–	80	–	2	126
Additions		153	19	419	36	151	778
Impact of adoption of IFRS 16		–	–	–	(8)	–	(8)
Reclassification to held for sale	15	–	–	(45)	–	(7)	(52)
Effect of foreign currency exchange movements		28	(1)	14	1	(8)	34
31 December 2019		**958**	**228**	**4,847**	**595**	**633**	**7,261**
Current		–	10	239	98	142	489
Non-current		958	218	4,608	497	491	6,772

1` As at 31 December 2019, provisions were restated by $530 million to reflect reclassification of uncertain tax provisions to current ($410 million) and deferred tax liabilities ($120 million).

POST-RETIREMENT EMPLOYEE BENEFITS

The provision for post-retirement employee benefits includes pension plan liabilities of $504 million (2019: $446 million) and post-retirement medical plan liabilities of $476 million (2019: $512 million), see note 23.

OTHER EMPLOYEE ENTITLEMENTS

The employee entitlement provision represents the value of governed employee entitlements due to employees upon their termination of employment. The associated expenditure will occur in a pattern consistent with when employees choose to exercise their entitlements.

REHABILITATION COSTS

Rehabilitation provision represents the accrued cost required to provide adequate restoration and rehabilitation upon the completion of production activities. These amounts will be settled when rehabilitation is undertaken, generally at the end of a project's life, which ranges from two to in excess of 50 years with an average for all sites, weighted by closure provision, of some 23 years (2019: 24 years).

As at 31 December 2020, the discount rate applied in calculating the restoration and rehabilitation provision is a pre-tax risk free rate specific to the liability and the currency in which they are denominated as follows: US dollar 1.6% (2019: 1.8%), South African rand 3.6% (2019: 3.8%), Australian dollar 2.3% (2019: 2.5%), Canadian dollar 1.7% (2019: 2.0%), and Chilean peso 2.6% (2019: 2.8%).

22. Provisions (including post-retirement benefits) continued

The effect of decreasing the discount rates used by 0.5% would result in an increase in the overall rehabilitation provision by $426 million, with a resulting movement of $348 million in property, plant and equipment and $78 million in the statement of income. In the following year, the depreciation expense would increase by some $15 million, with an opposite direction interest expense adjustment of $7 million. The resulting net impact in the statement of income would be a decrease of $8 million, eventually netting to $Nil over the weighted average settlement date of the provision.

ONEROUS CONTRACTS

Onerous contracts represent liabilities related to contractual take or pay commitments for securing coal logistics capacity and LNG re-gasification capacity at fixed prices and quantities higher than the acquisition date forecasted usage and prevailing market price. The provision is released to costs of goods sold as the underlying commitments are incurred.

OTHER

Other comprises provisions for possible demurrage, mine concession and construction related claims.

23. Personnel costs and employee benefits

Total personnel costs, which include salaries, wages, social security, other personnel costs and share-based payments, incurred for the years ended 31 December 2020 and 2019, were $5,403 million and $5,231 million, respectively. Personnel costs related to consolidated industrial subsidiaries of $3,944 million (2019: $4,035 million) are included in cost of goods sold. Other personnel costs, including deferred bonus and performance share plans, are included in selling and administrative expenses.

The Company and certain subsidiaries sponsor various pension schemes in accordance with local regulations and practices. Eligibility for participation in the various plans is either based on completion of a specified period of continuous service, or date of hire. Among these schemes are defined contribution plans as well as defined benefit plans.

DEFINED CONTRIBUTION PLANS

Glencore's contributions under these plans amounted to $122 million in 2020 (2019: $141 million).

POST-RETIREMENT MEDICAL PLANS

The Company participates in a number of post-retirement medical plans, principally in Canada, which provide coverage for prescription drugs, medical, dental, hospital and life insurance to eligible retirees. Almost all of the post-retirement medical plans in the Group are unfunded.

DEFINED BENEFIT PENSION PLANS

The Company operates defined benefit plans in various countries, the main locations being Canada, Switzerland, UK and the U.S.. Approximately 65% of the present value of obligations accrued relates to the defined benefit plans in Canada, which are pension plans that provide benefits to members in the form of a guaranteed level of pension payable for life. Contributions to the Canadian plans are made to meet or exceed minimum funding requirements based on provincial statutory requirements and associated federal taxation rules.

The majority of benefit payments are from trustee-administered funds; however, there are also a number of unfunded plans where Glencore meets the benefit payments as they fall due. Plan assets held in trusts are governed by local regulations and practices in each country. Responsibility for governance of the plans – overseeing all aspects of the plans including investment decisions and contribution schedules – lies with Glencore. Glencore has set up committees to assist in the management of the plans and has also appointed experienced, independent professional experts such as investment managers, actuaries, custodians, and trustees.

23. Personnel costs and employee benefits continued

The movement in the defined benefit pension and post-retirement medical plans over the year is as follows:

			Defined benefit pension plans		
US$ million	Notes	Post-retirement medical plans	Present value of defined benefit obligation	Fair value of plan assets	Net liability for defined benefit pension plans
1 January 2020		**512**	2,951	(2,547)	**404**
Current service cost		8	59	–	59
Past service cost - plan amendments		–	2	–	2
Settlement of pension plan disposal		–	(41)	48	7
Interest expense/(income)		19	75	(68)	7
Total expense/(income) recognised in consolidated statement of income		**27**	95	(20)	**75**
Gain on plan assets, excluding amounts included in interest expense - net		–	–	(150)	(150)
Gain from change in demographic assumptions		(75)	(3)	–	(3)
Loss from change in financial assumptions		28	211	–	211
Loss from actuarial experience		4	5	–	5
Actuarial (gains)/losses recognised in consolidated statement of comprehensive income		**(43)**	213	(150)	**63**
Employer contributions		–	–	(83)	(83)
Employee contributions		–	1	(1)	–
Benefits paid directly by the Company		(23)	(8)	8	–
Benefits paid from plan assets		–	(174)	174	–
Net cash (outflow)/inflow		**(23)**	(181)	98	**(83)**
Exchange differences		3	60	(55)	5
31 December 2020		**476**	3,138	(2,674)	**464**
Of which:					
Pension surpluses	11	–			(40)
Pension deficits	22	476			504

The actual return on plan assets in respect of defined benefit pension plans amounted to a gain of $273 million (2019: $396 million), comprising interest income and the re-measurement of plan assets.

During the next financial year, the Group expects to make a contribution of $84 million to the defined benefit pension and post-retirement medical plans across all countries, including current service costs and contributions required by pension legislation. Contributions over the next five years for the Canadian plans only, based on the most recently filed actuarial reports, approximate $121 million. Future funding requirements and contributions are reviewed and adjusted on an annual basis.

23. Personnel costs and employee benefits continued

US$ million	Notes	Post-retirement medical plans	Defined benefit pension plans: Present value of defined benefit obligation	Fair value of plan assets	Net liability for defined benefit pension plans
1 January 2019		**405**	2,651	(2,299)	**352**
Current service cost		7	52	–	52
Past service cost - plan amendments		(1)	(5)	–	(5)
Settlement of pension plan disposal		–	(86)	85	(1)
Interest expense/(income)		21	93	(83)	10
Total expense recognised in consolidated statement of income		**27**	54	2	**56**
Gain on plan assets, excluding amounts included in interest expense - net		–	–	(207)	(207)
Gain from change in demographic assumptions		–	(2)	–	(2)
Loss from change in financial assumptions		39	256	–	256
Loss from actuarial experience		1	12	–	12
Actuarial losses/(gains) recognised in consolidated statement of comprehensive income		**40**	266	(207)	**59**
Employer contributions		–	–	(72)	(72)
Employee contributions		–	1	(1)	–
Benefits paid directly by the Company		(21)	(8)	8	–
Benefits paid from plan assets		–	(153)	153	–
Net cash (outflow)/inflow		**(21)**	(160)	88	**(72)**
Acquisition of business	25	44	25	(25)	–
Exchange differences		17	115	(106)	9
31 December 2019		**512**	2,951	(2,547)	**404**
Of which:					
Pension surpluses	11	–			(42)
Pension deficits	22	512			446

The defined benefit obligation accrued in Canada represents the majority for the Company. The breakdown below provides details of the Canadian plans for both the statement of financial position and the weighted average duration of the defined benefit obligation as at 31 December 2020 and 2019. The net liability of any of the Group's defined benefit plans outside of Canada as at 31 December 2020 does not exceed $92 million (2019: $108 million).

23. Personnel costs and employee benefits continued

2020

US$ million	Canada	Other	**Total**
Post-retirement medical plans			
Present value of defined benefit obligation	415	61	**476**
of which: amounts owing to active members	142	11	153
of which: amounts owing to pensioners	273	50	323
Defined benefit pension plans			
Present value of defined benefit obligation	2,041	1,097	**3,138**
of which: amounts owing to active members	501	533	1,034
of which: amounts owing to non-active members	37	192	229
of which: amounts owing to pensioners	1,503	372	1,875
Fair value of plan assets	(1,917)	(757)	**(2,674)**
Net defined benefit liability at 31 December 2020	**124**	**340**	**464**
Of which:			
Pension surpluses	(38)	(2)	(40)
Pension deficits	162	342	504
Weighted average duration of defined benefit obligation - years	13	16	**14**

2019

US$ million	Canada	Other	**Total**
Post-retirement medical plans			
Present value of defined benefit obligation	443	69	**512**
of which: amounts owing to active members	140	13	153
of which: amounts owing to pensioners	303	56	359
Defined benefit pension plans			
Present value of defined benefit obligation	1,967	984	**2,951**
of which: amounts owing to active members	525	453	978
of which: amounts owing to non-active members	24	188	212
of which: amounts owing to pensioners	1,418	343	1,761
Fair value of plan assets	(1,882)	(665)	**(2,547)**
Net defined benefit liability at 31 December 2019	**85**	**319**	**404**
Of which:			
Pension surpluses	(40)	(2)	(42)
Pension deficits	125	321	446
Weighted average duration of defined benefit obligation - years	12	17	**14**

Estimated future benefit payments of the Canadian plans, which reflect expected future service but exclude plan expenses, up until 2030 are as follows:

US$ million	Post-retirement medical plans	Defined benefit pension plans	**Total**
2021	19	137	156
2022	19	106	125
2023	19	106	125
2024	19	149	168
2025	19	102	121
2026-2030	91	502	593
Total	**186**	**1,102**	**1,288**

23. Personnel costs and employee benefits continued

The plan assets consist of the following:

	2020		2019	
	Active market	Non-active market	Active market	Non-active market
Cash and short-term investments	24	21	15	19
Fixed income	844	213	900	185
Equities	979	–	960	–
Other	393	200	296	172
Total	**2,240**	**434**	**2,171**	**376**

The fair value of plan assets includes none of Glencore's own financial instruments and no property occupied by or other assets used by Glencore. For many of the plans, representing a large portion of the global plan assets, asset-liability matching strategies are in place, where the fixed-income assets are invested broadly in alignment with the duration of the plan liabilities, and the proportion allocated to fixed-income assets is raised when the plan funding level increases. The asset mix for each plan reflects the nature, expected changes in, and size of the liabilities and the assessment of long-term economic conditions, market risk, expected investment returns as considered during a formal asset mix study, including sensitivity analysis and/or scenario analysis, conducted periodically for the plans.

Through its defined benefit plans, Glencore is exposed to a number of risks, the most significant of which are detailed below:

Asset volatility: The plan liabilities are calculated using a discount rate set with reference to corporate bond yields; if plan assets underperform this yield, this will create a deficit. The funded plans hold a significant proportion of equities, which are expected to outperform bonds in the long term while contributing volatility and risk in the short term. Glencore believes that due to the long-term nature of the plan liabilities, a level of continuing equity investment is an appropriate element of Glencore's long-term strategy to manage the plans efficiently.

Change in bond yields: A decrease in bond yields will increase plan liabilities, although this will be partially offset by an increase in the value of the plans' bond holdings.

Inflation risk: Some of the plans' benefit obligations are linked to inflation, and higher inflation will lead to higher liabilities, although, in most cases, caps on the level of inflationary increases are in place to protect the plan against extreme inflation.

Life expectancy: The majority of the plans' obligations are to provide benefits for the life of the member, so increases in life expectancy will result in an increase in the plans' liability.

Salary increases: Some of the plans' benefit obligations related to active members are linked to their salaries. Higher salary increases will therefore tend to lead to higher plan liabilities.

The principal weighted-average actuarial assumptions used were as follows:

	Post-retirement medical plans		Defined benefit pension plans	
	2020	2019	**2020**	2019
Discount rate	3.6%	3.9%	2.2%	2.7%
Future salary increases	–	–	2.6%	2.6%
Future pension increases	–	–	0.4%	0.4%
Ultimate medical cost trend rate	4.6%	4.5%	–	–

Mortality assumptions are based on the latest available standard mortality tables for the individual countries concerned. As at 31 December 2020, these tables imply expected future life expectancy, for employees aged 65, 16 to 23 years for males (2019: 16 to 24) and 20 to 25 years for females (2019: 20 to 25). The assumptions for each country are reviewed regularly and are adjusted where necessary to reflect changes in fund experience and actuarial recommendations.

23. Personnel costs and employee benefits continued

The sensitivity of the defined benefit obligation to changes in principal assumptions as at 31 December 2020 is set out below, assuming that all other assumptions are held constant and the effect of interrelationships is excluded.

	Increase/(decrease) in pension obligation		
US$ million	Post-retirement medical plans	Defined benefit pension plans	**Total**
Discount rate			
Increase by 50 basis points	(33)	(200)	**(233)**
Decrease by 50 basis points	37	219	**256**
Rate of future salary increase			
Increase by 100 basis points	–	41	**41**
Decrease by 100 basis points	–	(39)	**(39)**
Rate of future pension benefit increase			
Increase by 100 basis points	–	65	**65**
Decrease by 100 basis points	–	(58)	**(58)**
Medical cost trend rate			
Increase by 100 basis points	60	–	**60**
Decrease by 100 basis points	(47)	–	**(47)**
Life expectancy			
Increase in longevity by one year	14	77	**91**

24. Accounts payable

US$ million	Notes	**2020**	2019
Financial liabilities at amortised cost			
Trade payables		8,021	7,099
Margin calls received[1]		1,033	310
Associated companies		1,209	1,501
Other payables and accrued liabilities		1,844	1,776
Financial liabilities at fair value through profit and loss			
Trade payables containing provisional pricing features	28	11,264	14,808
Non-financial instruments			
Advances settled in product		289	240
Other tax and related payables		378	459
Total		**24,038**	**26,193**

1 Includes $988 million (2019: $263 million) of cash collateral receipts under margin arrangements related to cross currency swaps held to hedge non-U.S. dollar denominated bonds.

Trade payables are obligations to pay for goods and services. Trade payables typically have maturities up to 90 days depending on the type of material and the geographic area in which the purchase transaction occurs and the agreed terms. As at 31 December 2020, 10% (2019: 2%) of total trade payables of $19,285 million (2019: $21,907 million) include liabilities under supplier financing arrangements with maturities beyond 91 days (refer to note 1 for critical judgements associated with classification of liabilities which contain a financing element). The carrying value of trade payables approximates fair value.

25. Acquisition and disposal of subsidiaries and other entities

2020 ACQUISITIONS

In 2020, there were no material acquisitions of subsidiaries.

2019 ACQUISITIONS

In 2019, Glencore acquired a 75% controlling interest in Chevron South Africa Proprietary Limited and a 100% interest in Chevron Botswana Proprietary Limited (together "Astron Energy"), a 42.9% additional interest in Polymet Mining Corp ("Polymet") and increased its interest in Ulan and Hail Creek.

The net cash used in the acquisition of subsidiaries and the provisional fair value of assets acquired and liabilities assumed on the acquisition date are detailed below:

US$ million	Astron Energy	Polymet	Ulan	Hail Creek	Other	**Total**
Non-current assets						
Property, plant and equipment	1,013	420	134	40	16	1,623
Intangible assets	335	24	–	–	12	371
Advances and loans[1]	7	13	–	–	1	21
	1,355	457	134	40	29	**2,015**
Current assets						
Inventories	584	–	3	3	–	590
Accounts receivable[1]	294	2	8	3	–	307
Cash and cash equivalents	50	6	1	1	1	59
	928	8	12	7	1	**956**
Non-controlling interest	(260)	(111)	–	–	–	**(371)**
Non-current liabilities						
Borrowings	(151)	(1)	–	–	(2)	(154)
Deferred tax liabilities	(199)	–	–	–	(4)	(203)
Provisions including post-retirement benefits	(48)	(63)	(5)	(2)	–	(118)
	(398)	(64)	(5)	(2)	(6)	**(475)**
Current liabilities						
Borrowings	(130)	–	–	–	–	(130)
Accounts payable	(487)	(7)	(17)	(5)	(1)	(517)
Provisions	(3)	(4)	–	(1)	–	(8)
	(620)	(11)	(17)	(6)	(1)	**(655)**
Total fair value of net assets acquired	**1,005**	**279**	**124**	**39**	**23**	**1,470**
Less: cash and cash equivalents acquired	(50)	(6)	(1)	(1)	(1)	(59)
Less: amounts previously recognised as exchangeable loan	(1,005)	–	–	–	–	(1,005)
Less: amounts previously recognised as investments	–	(36)	–	–	(4)	(40)
Less: amounts previously recognised as non-current loan	–	(243)	–	–	–	(243)
Net cash used in acquisition of subsidiaries	**(50)**	**(6)**	**123**	**38**	**18**	**123**
Acquisition related costs	–	–	6	–	–	6

1 There is no material difference between the gross contractual amounts for advances and loans and accounts receivable and their fair value.

Astron Energy

On 6 October 2017, Glencore entered into an agreement with Off the Shelf Investments Fifty Six (RF) Proprietary Limited ("OTS") to acquire from OTS (i) a 75% stake in Chevron South Africa Proprietary Limited (Chevron SA) and certain related interests and (ii) the entire issued share capital of Chevron Botswana Proprietary Limited (together the "Astron Energy") following closing of OTS's exercise of its pre-emptive right to acquire Astron Energy from the Chevron group. OTS's acquisition from Chevron closed on 1 October 2018, at which time Glencore advanced $1,044 million to OTS under an exchangeable loan arrangement. On 8 April 2019, the loan was exchanged into the 75% stake in Chevron SA and the 100% stake in Chevron Botswana acquired by OTS. As Glencore holds the majority of the voting shares, providing it the ability to appoint a controlling number of directors to the board, Glencore is required to account for Astron Energy using the full consolidation method in accordance with IFRS 10. The acquisition accounting for Astron Energy has now been finalised, with no adjustments to the previously reported provisional fair values.

If the acquisition had taken place effective 1 January 2019, the operation would have contributed additional revenue of $1,914 million and additional attributable net loss of $1 million for the year ended 31 December 2019. From the date of acquisition, the operation contributed $3,888 million of revenue and $71 million of attributable net loss for the year ended 31 December 2019.

25. Acquisition and disposal of subsidiaries and other entities continued

Polymet

On 26 June 2019, Glencore concluded the acquisition (via a rights issue) of an additional 42.9% interest in Polymet Mining Corp ("Polymet"), a company in the early stages of developing the NorthMet polymetallic (copper, nickel and precious metals) deposit in Minnesota for a total consideration of $243 million. Polymet is listed on the Toronto and New York stock exchanges. The consideration was satisfied through Glencore's participation in Polymet's rights issue, in which the proceeds raised were used to repay loans previously extended to Polymet by Glencore. As such, Glencore did not commit any new funds to Polymet. Following the capital raise, Glencore's voting interest increased from 28.8% to 71.7%.

As Glencore holds the majority of the voting rights, providing it the ability to appoint a controlling number of directors to the board, Glencore is required to account for Polymet using the full consolidation method in accordance with IFRS 10.

Prior to acquisition, Glencore owned a 28.8% interest in Polymet which was accounted for as an associate. In accordance with IFRS 3: Business Combinations, this equity interest is required to be revalued, at the date of acquisition, to its fair value with any resulting gain or loss recognised in the statement of income. The fair value of the existing interest was determined to be $36 million, by reference to the Polymet share price on the date of acquisition and as a result, a loss of $38 million was recognised in loss on disposals and investments. The acquisition accounting for Polymet has now been finalised, with no adjustments to the previously reported provisional fair values.

If the acquisition had taken place effective 1 January 2019, the operation would have contributed additional revenue of $Nil and additional attributable net loss of $2 million for the year ended 31 December 2019. From the date of acquisition, the operation contributed $Nil of revenue and attributable net loss of $3 million for the year ended 31 December 2019.

Ulan/Hail Creek

In January 2019, Glencore completed the acquisition of an additional 10% of Ulan and 2.7% of Hail Creek for a net consideration of $124 million and $39 million respectively, increasing Glencore's interest in Ulan and Hail Creek to 100% and 84.7%, respectively.

25. Acquisition and disposal of subsidiaries and other entities continued

2020 DISPOSALS

In 2020, Glencore disposed of its controlling interest in Minera Alumbrera Limited. The carrying value of the assets and liabilities over which control was lost and the net cash used in the disposal are detailed below:

US$ million	Alumbrera
Non-current assets	
Property, plant and equipment	12
	12
Current assets	
Inventories	2
Accounts receivable	14
Cash and cash equivalents	222
	238
Non-controlling interest	**2**
Current liabilities	
Provisions	(182)
	(182)
Current liabilities	
Borrowings	(13)
Accounts payable	(9)
Provisions	(50)
	(72)
Carrying value of net assets disposed	**(2)**
Net gain on disposal	**(2)**
Cash and cash equivalents received	–
Less: cash and cash equivalents disposed	(222)
Net cash used in disposal	**(222)**

Minera Alumbrera Limited

In December 2020, Glencore disposed of its 50% interest in Minera Alumbrera Limited, a copper-gold operation in Argentina, in return for a 24.99% interest in Minera Agua Rica Alumbrera Limited. Glencore is no longer able to unilaterally direct the key strategic, operating and capital decisions of Minera Alumbrera Limited and was deemed to have disposed of its controlling interest at fair value. The difference to the net carrying value was recognised through the statement of income, with Glencore subsequently accounting for its share in Minera Agua Rica Alumbrera Limited using the equity method in accordance with IAS 28.

2019 DISPOSALS

In 2019, Glencore disposed of its controlling interest in Terminales Portuarios Chancay S.A.. The carrying value of the assets and liabilities over which control was lost and the net cash received from the disposal are detailed below:

US$ million	Terminales Portuarios Chancay	Others	**Total**
Non-current assets			
Property, plant and equipment	55	–	55
Intangible assets	33	–	33
Advances and loans	2	–	2
Deferred tax asset	1	–	1
	91	–	**91**
Current assets			
Accounts receivable	44	–	44
Cash and cash equivalents	1	–	1
	45	–	**45**
Current liabilities			
Accounts payable	(1)	(3)	(4)
	(1)	(3)	**(4)**
Carrying value of net assets disposed	**135**	**(3)**	**132**
Cash and cash equivalents received	–	(6)	(6)
Retained interest recognised as investment	(150)	–	(150)
Future consideration	(11)	(6)	(17)
Net loss/(gain) on disposal	**(26)**	**(15)**	**(41)**
Cash and cash equivalents received	–	6	6
Less: cash and cash equivalents disposed	(1)	–	(1)
Net cash received from disposal	**(1)**	**6**	**5**

Terminales Portuarios Chancay

In April 2019, Glencore disposed of a 60% interest in Terminales Portuarios Chancay S.A., a Peruvian port, for cash consideration of $11 million. Glencore is no longer able to unilaterally direct the key strategic, operating and capital decisions of Terminales Portuarios Chancay S.A. and was deemed to have disposed of its controlling interest at fair value. The difference to the net carrying value was recognised through the statement of income, with Glencore subsequently accounting for its remaining share using the equity method in accordance with IAS 28 (see note 10).

26. Financial and capital risk management

Financial risks arising in the normal course of business from Glencore's operations comprise market risk (including commodity price risk, interest rate risk and currency risk), credit risk (including performance risk) and liquidity risk. It is Glencore's policy and practice to identify and, where appropriate and practical, actively manage such risks (for management of "margin" risk within Glencore's extensive and diversified industrial portfolio, refer net present value at risk below) to support its objectives in managing its capital and future financial security and flexibility. Glencore's overall risk management programme focuses on the unpredictability of financial markets and seeks to protect its financial security and flexibility by using derivative financial instruments where possible to substantially hedge these financial risks. Glencore's finance and risk professionals, working in coordination with the commodity departments, monitor, manage and report regularly to senior management and the Board of Directors on the approach and effectiveness in managing financial risks along with the financial exposures facing the Group.

Glencore's objectives in managing its "capital attributable to equity holders" include preserving its overall financial health and strength for the benefit of all stakeholders, maintaining an optimal capital structure in order to provide a high degree of financial flexibility at an attractive cost of capital and safeguarding its ability to continue as a going concern, while generating sustainable long-term profitability. Central to meeting these objectives is maintaining an investment grade credit rating status. Glencore's current credit ratings are Baa1 (negative outlook) from Moody's and BBB+ (stable) from S&P.

DISTRIBUTION POLICY AND OTHER CAPITAL MANAGEMENT INITIATIVES

Glencore's cash distribution policy comprises two components: (1) a fixed $1 billion component and (2) a variable element representing 25% of free cash flow generated by our industrial assets during the year. The actual variable distribution component (25% pay-out guidance) will reflect prevailing balance sheet position, market conditions and outlook and be confirmed annually in respect of prior period's cash flows. Distributions are expected to be formally declared by the Board annually (with the preliminary full-year results). Distributions, when declared, will be settled equally in May and September of the year they are declared in. In addition and acknowledging the cyclical nature of the industry, in periods of strong earnings and cash generation the Board, considering all relevant factors, could declare additional distributions to be included with the distribution confirmed with respect to the prior year, consider top-up distributions during the year and/or initiate or continue share buy-back programmes. Notwithstanding that the distribution is declared and paid in U.S. dollars, shareholders will be able to elect to receive their distribution payments in Pounds Sterling, Euros or Swiss Francs based on the exchange rates in effect around the date of payment. Shareholders on the JSE will receive their distributions in South African Rand.

COMMODITY PRICE RISK

Glencore is exposed to price movements for the inventory it holds and the products it produces which are not held to meet priced forward contract obligations and forward priced purchase or sale contracts. Glencore manages a significant portion of this exposure through futures and options transactions on worldwide commodity exchanges or in over the counter (OTC) markets, to the extent available. Commodity price risk management activities are considered an integral part of Glencore's physical commodity marketing activities and the related assets and liabilities are included in other financial assets from and other financial liabilities to derivative counterparties, including clearing brokers and exchanges. Whilst it is Glencore's policy to substantially hedge its commodity price risks, there remains the possibility that the hedging instruments chosen may not always provide effective mitigation of the underlying price risk. The hedging instruments available to the marketing businesses may differ in specific characteristics to the risk exposure to be hedged, resulting in an ongoing and unavoidable basis risk exposure. Residual basis risk exposures represent a key focus point for Glencore's commodity department teams who actively engage in the management of such.

26. Financial and capital risk management continued

VALUE AT RISK

One of the tools used by Glencore to monitor and limit its primary market risk exposure, principally commodity price risk related to its physical marketing activities, is a value at risk (VaR) computation. VaR is a risk measurement technique which estimates a threshold for potential loss that could occur on risk positions as a result of movements in risk factors over a specified time horizon, given a specific level of confidence and based on a specific price history. The VaR methodology is a statistically defined, probability-based approach that takes into account market volatilities, as well as risk diversification by recognising offsetting positions and correlations between commodities and markets. In this way, risks can be measured consistently across markets and commodities and risk measures can be aggregated to derive a single risk value.

Glencore uses a VaR approach based on Monte Carlo simulations computed at a 95% confidence level and utilising a weighted data history for a one-day time horizon. Glencore's Board has set an unchanged consolidated VaR limit (one day 95% confidence level) of $100 million representing less than 0.2% of total equity, which the Board reviews annually. Given H1 2020's extreme implied market volatility, together with statistically elevated commodity correlations and increased Glencore Carry Trade transactions, the Board approved a temporary increase in the VaR limit to $120 million in May 2020. With markets having stabilized through June/July, the original $100 million limit has been restored. There were no limit breaches during the year.

Position sheets are regularly distributed and monitored and daily Monte Carlo simulations are applied to the various business groups' net marketing positions to determine potential losses.

Market risk VaR (one-day 95% confidence level) ranges and year-end positions were as follows:

US$ million	**2020**	2019
Year-end position	33	18
Average during the year	39	27
High during the year	102	43
Low during the year	14	18

VaR does not purport to represent actual gains or losses in fair value in earnings to be incurred by Glencore, nor does Glencore claim that these VaR results are indicative of future market movements or representative of any actual impact on its future results. VaR should always be viewed in the context of its limitations; notably, the use of historical data as a proxy for estimating future events, market illiquidity risks and tail risks. Glencore recognises these limitations, and thus complements and continuously refines its VaR analysis by analysing forward looking stress scenarios, benchmarking against an alternative VaR computation based on historical simulations and back testing calculated VaR against the hypothetical portfolio returns arising in the next business day.

Glencore's VaR computation currently covers its business in the key base metals (including aluminium, nickel, zinc, copper and lead), coal, iron ore and oil/natural gas and assesses the open priced positions which are subject to price risk, including inventories of these commodities. Due to the lack of a liquid terminal market, Glencore does not include a VaR calculation for products such as alumina, molybdenum, cobalt, freight and some risk associated with metals' concentrates as it does not consider the nature of these markets to be suited to this type of analysis. Alternative measures are used to monitor exposures related to these products.

NET PRESENT VALUE AT RISK

Glencore's future cash flows related to its forecast Industrial production activities are also exposed to commodity price movements. Glencore manages this exposure through a combination of portfolio diversification, occasional shorter-term hedging via futures and options transactions, insurance products and continuous internal monitoring, reporting and quantification of the underlying operations' estimated cash flows and valuations.

INTEREST RATE RISK

Glencore is exposed to various risks associated with the effects of fluctuations in the prevailing levels of market interest rates on its assets and liabilities and cash flows. Matching of assets and liabilities is utilised as the dominant method to hedge interest rate risks; other methods include the use of interest rate swaps and similar derivative instruments with the same critical terms as the underlying interest rate exposures. See details on swap instruments used below.

Floating rate debt which is predominantly used to fund fast turning working capital (interest is internally charged on the funding of this working capital) is primarily based on US$ LIBOR plus an appropriate premium. Accordingly, prevailing market interest rates are continuously factored into transactional pricing and terms.

Assuming the amount of floating rate liabilities at the reporting period end were outstanding for the whole year, interest rates were 50 basis points higher/lower and all other variables held constant, Glencore's income for the year ended 31 December 2020 would decrease/increase by $112 million (2019: $126 million).

Interest rate benchmark reform

Whereas initially the UK FCA announced that they would not compel the 20 panel banks to submit into the LIBOR interest rate setting mechanism by the end of 2021, in November 2020 they issued a revised timetable, with the consequence that overnight, 1, 3 and 6 month USD LIBOR's will continue to be quoted until 30 June 2023.

26. Financial and capital risk management continued

To cater for the envisaged transition of interest rate hedging arrangements, which have an accelerated timetable, the Group has agreed to align with the ISDA fall-back protocol. Therefore, all existing and new commercial and financial arrangements referencing LIBORs, will be amended in line with the timelines and announcements made by regulators in the respective currency jurisdiction.

The Group has additionally established a multidisciplinary working group, to prepare and implement a LIBOR transition plan. This working group is assessing on an ongoing basis the potential impact of LIBOR reform. This transition plan includes updating policies, systems and processes, in order to anticipate the appropriate changes as and when deemed necessary.

CURRENCY RISK

The U.S. dollar is the predominant functional currency of the Group. Currency risk is the risk of loss from movements in exchange rates related to transactions and balances in currencies other than the U.S. dollar. Such transactions include operating expenditure, capital expenditure and to a lesser extent purchases and sales in currencies other than the functional currency. Purchases or sales of commodities concluded in currencies other than the functional currency, apart from certain limited domestic sales at industrial operations which act as a hedge against local operating costs, are ordinarily economically hedged through forward exchange contracts. Consequently, foreign exchange movements against the U.S. dollar on recognised transactions would have an immaterial financial impact. Glencore enters into currency hedging transactions with leading financial institutions.

Glencore's debt related payments (both principal and interest) are primarily denominated in or swapped using hedging instruments into U.S. dollars. Glencore's operating expenses, being a small portion of its revenue base, are incurred in a mix of currencies of which the U.S. dollar, Swiss Franc, Pound Sterling, Canadian dollar, Australian dollar, Euro, Kazakhstan Tenge, Colombian Peso and South African Rand are the predominant currencies.

Glencore has issued Euro, Swiss Franc, Sterling and Yen denominated bonds (see note 20). Cross currency swaps were concluded to hedge the currency risk on the principal and related interest payments of these bonds. These contracts were designated as fair value or cash flow hedges of the associated foreign currency risks. The critical terms of these swap contracts and their corresponding hedged items are matched and the Group expects a highly effective hedging relationship with the swap contracts and the value of the corresponding hedged items to change systematically in opposite direction in response to movements in the underlying exchange rates. The corresponding fair value and notional amounts of these derivatives is as follows:

	Notional amounts		Average FX rates		Carrying amount Assets (Note 28)		Carrying amount Liabilities (Note 28)		Average maturity[1]
US$ million	**2020**	2019	**2020**	2019	**2020**	2019	**2020**	2019	
Cross currency swap agreements									
Cash flow hedges - currency risk									
Eurobonds	2,907	1,777	1.14	1.11	164	6	–	4	2025
Sterling bonds	798	1,783	1.60	1.79	–	–	126	454	2022
Swiss franc bonds	504	256	1.06	1.02	16	–	–	4	2026
Fair value hedges - currency and interest rate risk									
Eurobonds	4,323	6,664	1.27	1.24	232	128	120	513	2024
Yen bonds	81	81	0.01	0.01	16	10	–	–	2022
Sterling bonds	663	663	1.33	1.33	81	28	–	–	2026
Swiss franc bonds	440	956	1.04	1.04	48	–	–	2	2022
	9,716	12,180			557	172	246	977	
Interest rate swap agreements									
Fair value hedges - interest rate risk									
US$ bonds	5,250	5,670	–	–	525	235	4	1	2025
	14,966	**17,850**			**1,082**	**407**	**250**	**978**	

1 Refer to note 20 for details.

26. Financial and capital risk management continued

The gross liquidity risk relating to the above cross currency swaps entered into for the purposes of hedging foreign currency and interest rate risks arising from the Group's non-U.S. dollar denominated bonds is presented below. The amounts reflect the expected gross settlement of the U.S. dollar pay leg of these swaps. The inflows from the related foreign currency receive leg of these swaps are not presented in the below table, but would approximate the foreign currency equivalent of the US dollar pay leg. Counterparty settlement date risk related to these swaps is limited, as the Group has entered into margining arrangements for both the outflow and inflow legs of the swap.

US$ million	After 5 years	Due 3 - 5 years	Due 2 - 3 years	Due 1 - 2 years	Due 0 - 1 year	**Total**
2020	3,381	2,123	1,823	1,970	1,305	**10,602**
2019	3,099	2,804	1,987	2,688	1,909	**12,487**

The carrying amounts of the fair value hedged items are as follows:

	Carrying amount of the hedged item (Note 20)		Of which, accumulated amount of fair value hedge adjustments	
US$ million	**2020**	2019	**2020**	2019
Foreign exchange and interest rate risk				
Eurobonds	4,372	6,213	184	154
Yen bonds	97	92	–	–
Swiss franc bonds	486	957	5	1
Sterling bonds	724	672	45	12
US$ bonds	5,702	5,850	489	213
	11,381	**13,784**	**723**	**380**

CREDIT RISK

Credit risk arises from the possibility that counterparties may not be able to settle obligations due to Glencore within their agreed payment terms. Financial assets which potentially expose Glencore to credit risk consist principally of cash and cash equivalents, receivables and advances, derivative instruments and non-current advances and loans. Glencore's credit management process includes the assessment, monitoring and reporting of counterparty exposure on a regular basis. Glencore's cash and cash equivalents are placed overnight with a diverse group of highly credit rated financial institutions. Margin calls paid are similarly held with credit rated financial institutions. Glencore determines these instruments to have low credit risk at the reporting date. Credit risk with respect to receivables and advances is mitigated by the large number of customers comprising Glencore's customer base, their diversity across various industries and geographical areas, as well as Glencore's policy to mitigate these risks through letters of credit, netting, collateral and insurance arrangements where appropriate. Additionally, it is Glencore's policy that transactions and activities in trade related financial instruments be concluded under master netting agreements or long form confirmations to enable offsetting of balances due to/from a common counterparty in the event of default by the counterparty. Glencore actively and continuously monitors the credit quality of its counterparties through internal reviews and a credit scoring process, which includes, where available, public credit ratings. Balances with counterparties not having a public investment grade or equivalent internal rating are typically enhanced to investment grade through the extensive use of credit enhancement products, such as letters of credit or insurance products. Glencore has a diverse customer base, with no customer representing more than 5.1% (2019: 4.7%) of its trade receivables (on a gross basis taking into account credit enhancements) or accounting for more than 3.1% of its revenues over the year ended 31 December 2020 (2019: 3.5%)(see notes 3 and 13).

The maximum exposure to credit risk (including performance risk – see below), without considering netting agreements or without taking account of any collateral held or other credit enhancements, is equal to the carrying amount of Glencore's financial assets (see note 27) and physically-settled advances (see notes 11 and 13).

26. Financial and capital risk management continued

Performance risk

Performance risk (part of the broader credit risk subject matter, discussed above) is inherent in contracts, with agreements in the future, to physically purchase or sell commodities with fixed price attributes, and arises from the possibility that counterparties may not be willing or able to meet their future contractual physical sale or purchase obligations to/from Glencore. Glencore undertakes the assessment, monitoring and reporting of performance risk within its overall credit management process. Glencore's market breadth, diversified supplier and customer base as well as the standard pricing mechanism in the vast majority of Glencore's commodity portfolio which does not fix prices beyond three months, with the main exception being coal, where longer-term fixed price contracts are relatively common, ensure that performance risk is adequately mitigated. The commodity industry has trended towards shorter term fixed price contract periods, in part to mitigate against such potential performance risk, but also due to the continuous development of transparent and liquid spot commodity markets, with their associated derivative products and indexes.

LIQUIDITY RISK

Liquidity risk is the risk that Glencore is unable to meet its payment obligations when due, or that it is unable, on an ongoing basis, to borrow funds in the market on an unsecured or secured basis at an acceptable price to fund actual or proposed commitments. Prudent liquidity risk management implies maintaining sufficient cash and cash equivalents and availability of adequate committed funding facilities. Glencore has set itself an internal minimum liquidity target to maintain at all times, including via available committed undrawn credit facilities, of $3 billion (2019: $3 billion), which has purposely been substantially exceeded in recent years, accounting for the more volatile market backdrop. Glencore's credit profile, diversified funding sources and committed credit facilities, ensure that sufficient liquid funds are maintained to meet its liquidity requirements. As part of its liquidity management, Glencore closely monitors and plans for its future capital expenditure, working capital needs and proposed investments, as well as credit facility refinancing/extension requirements, well ahead of time (see notes 1, 11, 20, 21 and 24).

As at 31 December 2020, Glencore had available committed undrawn credit facilities and cash amounting to $10,259 million (2019: $10,141 million), refer to Other reconciliations section. The maturity profile of Glencore's financial liabilities based on the contractual terms is as follows:

2020

US$ million	After 5 years	Due 3 - 5 years	Due 2 - 3 years	Due 1 - 2 years	Due 0 - 1 year	**Total**
Borrowings excluding lease liabilities	8,887	6,566	3,690	9,077	7,739	35,959
Expected future interest payments	1,993	724	524	642	846	4,729
Lease liabilities - undiscounted	1,013	267	235	426	593	2,534
Accounts payable	–	–	–	–	23,371	23,371
Other financial liabilities	336	–	–	–	4,628	4,964
Total	**12,229**	**7,557**	**4,449**	**10,145**	**37,177**	**71,557**
Current assets					43,212	43,212

2019

US$ million	After 5 years	Due 3 - 5 years	Due 2 - 3 years	Due 1 - 2 years	Due 0 - 1 year	**Total**
Borrowings excluding lease liabilities	8,294	6,343	4,000	9,272	7,492	35,401
Expected future interest payments	2,586	866	613	834	925	5,824
Lease liabilities - undiscounted	618	289	239	385	569	2,100
Accounts payable	–	–	–	–	25,494	25,494
Other financial liabilities	379	–	–	–	3,722	4,101
Total	**11,877**	**7,498**	**4,852**	**10,491**	**38,202**	**72,920**
Current assets					41,410	41,410

27. Financial instruments

FAIR VALUE OF FINANCIAL INSTRUMENTS

The following tables present the carrying values and fair values of Glencore's financial instruments. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction in the principal (most advantageous) market at the measurement date under current market conditions. Where available, market values have been used to determine fair values. When market values are not available, fair values have been calculated by discounting expected cash flows at prevailing market interest and exchange rates. The estimated fair values have been determined using market information and appropriate valuation methodologies, but are not necessarily indicative of the amounts that Glencore could realise in the normal course of business.

The financial assets and liabilities are presented by class in the tables below at their carrying values, which generally approximate the fair values with the exception of $37,479 million (2019: $37,043 million) of borrowings, the fair value of which at 31 December 2020 was $38,672 million (2019: $37,670 million) based on observable market prices applied to the borrowing portfolio (a Level 2 fair value measurement). Presentation of prior period balances relating to financial derivatives has been restated to reflect their appropriate classification as either current or non-current, in accordance with contractual maturities. As a result, $428 million (2018: $252 million) was reclassified from other financial assets to non-current other financial assets and $850 million (2018: $1,091 million) was reclassified from other financial liabilities to non-current other financial liabilities as of 31 December 2019 and 31 December 2018 respectively.

2020 US$ million	Amortised cost	FVTPL[1]	FVTOCI[2]	**Total**
Assets				
Other investments[3]	–	86	1,647	1,733
Non-current other financial assets (see note 28)	–	1,106	–	1,106
Advances and loans	994	404	–	1,398
Accounts receivable	7,696	4,598	–	12,294
Other financial assets (see note 28)	–	1,998	–	1,998
Cash and cash equivalents	1,498	–	–	1,498
Total financial assets	**10,188**	**8,192**	**1,647**	**20,027**
Liabilities				
Borrowings	37,479	–	–	37,479
Non-current other financial liabilities (see note 28)	100	588	–	688
Accounts payable	12,107	11,264	–	23,371
Other financial liabilities (see note 28)	–	4,276	–	4,276
Total financial liabilities	**49,686**	**16,128**	**–**	**65,814**

1 FVTPL – Fair value through profit and loss.
2 FVTOCI – Fair value through other comprehensive income.
3 Other investments of $1,691 million are classified as Level 1 measured using quoted market prices with the remaining balance of $41 million being investments in private companies, classified as Level 2 measured using discounted cash flow models.

2019 US$ million	Amortised cost	FVTPL[1]	FVTOCI[2]	Total
Assets				
Other investments[3]	–	97	2,290	2,387
Non-current other financial assets (see note 28)	–	453	–	453
Advances and loans	907	161	–	1,068
Accounts receivable	6,654	6,577	–	13,231
Other financial assets (see note 28)	–	1,953	–	1,953
Cash and cash equivalents	1,899	–	–	1,899
Total financial assets	**9,460**	**9,241**	**2,290**	**20,991**
Liabilities				
Borrowings	37,043	–	–	37,043
Non-current other financial liabilities (see note 28)	98	1,131	–	1,229
Accounts payable	10,686	14,808	–	25,494
Other financial liabilities (see note 28)	–	2,872	–	2,872
Total financial liabilities	**47,827**	**18,811**	**–**	**66,638**

1 FVTPL – Fair value through profit and loss.
2 FVTOCI – Fair value through other comprehensive income.
3 Other investments of $2,345 million are classified as Level 1 measured using quoted market prices with the remaining balance of $42 million being investments in private companies, classified as Level 2 measured using discounted cash flow models.

27. Financial instruments continued

OFFSETTING OF FINANCIAL ASSETS AND LIABILITIES

In accordance with IAS 32 the Group reports financial assets and liabilities on a net basis in the consolidated statement of financial position only if there is a legally enforceable right to set off the recognised amounts and there is intention to settle on a net basis, or to realise the asset and settle the liability simultaneously. The financial assets and liabilities subject to offsetting, enforceable master netting and similar agreements as at 31 December 2020 and 2019 were as follows:

2020 US$ million	Amounts eligible for set off under netting agreements Gross amount	Amounts offset	Net amount	Related amounts not set off under netting agreements Financial instruments	Financial collateral	Net amount	Amounts not subject to netting agreements	Total as presented in the consolidated statement of financial position
Derivative assets[1]	11,575	(9,678)	**1,897**	(246)	(925)	726	**1,199**	**3,096**
Derivative liabilities[1]	(12,941)	9,678	**(3,263)**	246	2,389	(628)	**(1,365)**	**(4,628)**

1 Presented within current other financial assets and current other financial liabilities.

2019 US$ million	Amounts eligible for set off under netting agreements Gross amount	Amounts offset	Net amount	Related amounts not set off under netting agreements Financial instruments	Financial collateral	Net amount	Amounts not subject to netting agreements	Total as presented in the consolidated statement of financial position
Derivative assets[1]	7,334	(6,190)	**1,144**	(365)	(275)	504	**1,237**	**2,381**
Derivative liabilities[1]	(7,959)	6,190	**(1,769)**	365	1,135	(269)	**(1,953)**	**(3,722)**

1 Presented within current and non-current other financial assets and current and non-current other financial liabilities.

For the financial assets and liabilities subject to enforceable master netting or similar arrangements above, each agreement between the Group and the counterparty allows for net settlement of the relevant financial assets and liabilities when both elect to settle on a net basis. In the absence of such an election, financial assets and liabilities may be settled on a gross basis, however, each party to the master netting or similar agreement will have the option to settle all such amounts on a net basis in the event of default of the other party. Per the terms of each agreement, an event of default includes failure by a party to make payment when due, failure by a party to perform any obligation required by the agreement (other than payment) if such failure is not remedied within periods of 30 to 60 days after notice of such failure is given to the party or bankruptcy.

28. Fair value measurements

Fair values are primarily determined using quoted market prices or standard pricing models using observable market inputs where available and are presented to reflect the expected gross future cash in/outflows. Glencore classifies the fair values of its financial instruments into a three level hierarchy based on the degree of the source and observability of the inputs that are used to derive the fair value of the financial asset or liability as follows:

Level 1 Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that Glencore can assess at the measurement date, or

Level 2 Inputs other than quoted inputs included in Level 1 that are observable for the assets or liabilities, either directly or indirectly, or

Level 3 Unobservable inputs for the assets or liabilities, requiring Glencore to make market-based assumptions.

Level 1 classifications primarily include futures with a tenor of less than one year and options that are exchange traded, whereas Level 2 classifications primarily include futures with a tenor greater than one year, over the counter options, swaps and physical forward transactions which derive their fair value primarily from exchange quotes and readily observable broker quotes. Level 3 classifications primarily include physical forward transactions which derive their fair value predominantly from models that use broker quotes and applicable market-based estimates surrounding location, quality and credit differentials and financial liabilities linked to the fair value of certain mining operations. In circumstances where Glencore cannot verify fair value with observable market inputs (Level 3 fair values), it is possible that a different valuation model could produce a materially different estimate of fair value.

28. Fair value measurements continued

It is Glencore's policy that transactions and activities in trade related financial instruments be concluded under master netting agreements or long form confirmations to enable balances due to/from a common counterparty to be offset in the event of default, insolvency or bankruptcy by the counterparty.

The following tables show the fair values of the derivative financial instruments including trade related financial and physical forward purchase and sale commitments by type of contract and non-current other financial liabilities as at 31 December 2020 and 2019. Other assets and liabilities which are measured at fair value on a recurring basis are marketing inventories, other investments and certain advances and loans. There are no non-recurring fair value measurements.

FINANCIAL ASSETS

2020

US$ million	Level 1	Level 2	Level 3	**Total**
Accounts receivable	–	4,468	130	**4,598**
Other financial assets				
Commodity related contracts				
Futures	107	75	–	**182**
Options	19	13	–	**32**
Swaps	142	249	–	**391**
Physical forwards	–	916	258	**1,174**
Financial contracts				
Cross currency swaps	–	219	–	**219**
Current other financial assets	**268**	**1,472**	**258**	**1,998**
Non-current other financial assets				
Cross currency swaps	–	529	–	**529**
Foreign currency and interest rate contracts	–	569	–	**569**
Deferred consideration	–	–	302	**302**
Purchased call options over Glencore shares[1]	–	8	–	**8**
Non-current other financial assets	**–**	**1,106**	**302**	**1,408**
Total	**268**	**7,046**	**690**	**8,004**

1 Call options over the Company's shares in relation to conversion rights of the $500 million non-dilutive convertible bond, due in 2025. See note 20.

2019

US$ million	Level 1	Level 2	Level 3	**Total**
Accounts receivable	–	6,540	37	**6,577**
Other financial assets				
Commodity related contracts				
Futures	377	80	–	**457**
Options	14	63	–	**77**
Swaps	80	122	–	**202**
Physical forwards	–	898	317	**1,215**
Financial contracts				
Cross currency swaps	–	2	–	**2**
Current other financial assets	**471**	**1,165**	**317**	**1,953**
Non-current other financial assets				
Cross currency swaps	–	173	–	**173**
Foreign currency and interest rate contracts	–	255	–	**255**
Deferred consideration	–	–	45	**45**
Purchased call options over Glencore shares[1]	–	25	–	**25**
Non-current other financial assets	**–**	**453**	**45**	**498**
Total	**471**	**8,158**	**399**	**9,028**

28. Fair value measurements continued

FINANCIAL LIABILITIES

2020

US$ million	Level 1	Level 2	Level 3	**Total**
Accounts payable	–	11,264	–	**11,264**
Other financial liabilities				
Commodity related contracts				
Futures	2,652	264	–	**2,916**
Options	29	14	–	**43**
Swaps	228	224	–	**452**
Physical forwards	–	537	252	**789**
Financial contracts				
Cross currency swaps	–	76	–	**76**
Current other financial liabilities	**2,909**	**1,115**	**252**	**4,276**
Non-current other financial liabilities				
Cross currency swaps	–	171	–	**171**
Foreign currency and interest rate contracts	–	181	–	**181**
Non-discretionary dividend obligation[1]	–	–	150	**150**
Option over non-controlling interest in Ale	–	–	22	**22**
Deferred consideration	–	–	56	**56**
Embedded call options over Glencore shares[2]	–	8	–	**8**
Non-current other financial liabilities	**–**	**360**	**228**	**588**
Total	**2,909**	**12,739**	**480**	**16,128**

2019

US$ million	Level 1	Level 2	Level 3	**Total**
Accounts payable	–	14,808	–	**14,808**
Other financial liabilities				
Commodity related contracts				
Futures	1,141	151	–	**1,292**
Options	85	11	–	**96**
Swaps	90	179	–	**269**
Physical forwards	–	852	208	**1,060**
Financial contracts				
Cross currency swaps	–	155	–	**155**
Current other financial liabilities	**1,316**	**1,348**	**208**	**2,872**
Non-current other financial liabilities				
Cross currency swaps	–	824	–	**824**
Foreign currency and interest rate contracts	–	26	–	**26**
Non-discretionary dividend obligation[1]	–	–	161	**161**
Option over non-controlling interest in Ale	–	–	36	**36**
Deferred consideration	–	–	59	**59**
Embedded call options over Glencore shares[2]	–	25	–	**25**
Non-current other financial liabilities	**–**	**875**	**256**	**1,131**
Total	**1,316**	**17,031**	**464**	**18,811**

1 A ZAR denominated derivative liability payable to ARM Coal, a partner in one of the Group's principal coal joint operations based in South Africa. The liability arises from ARM Coal's rights as an investor to a share of agreed free cash flows from certain coal operations in South Africa and is valued based on those cash flows using a risk-adjusted discount rate. The derivative liability is settled over the life of those operations (modelled mine life of 12 years as at 31 December 2020) and has no fixed repayment date and is not cancellable within 12 months.

2 Embedded call option bifurcated from the 2025 convertible bond. See note 20.

28. Fair value measurements continued

The following table shows the net changes in fair value of Level 3 financial assets and financial liabilities:

US$ million	Accounts Receivable	Physical forwards	Options	Other	**Total Level 3**
1 January 2020	37	109	–	(211)	**(64)**
Total gain recognised in revenue	–	1	–	–	**1**
Total loss recognised in cost of goods sold	–	(63)	–	–	**(63)**
Non-discretionary dividend obligation	–	–	–	11	**11**
Option over non-controlling interest	–	–	–	14	**14**
Deferred consideration	133	–	–	260	**393**
Realised	(40)	(41)	–	–	**(81)**
31 December 2020	**130**	**6**	**–**	**74**	**210**
1 January 2019	7	305	(3)	(239)	**224**
Total gain recognised in revenue	–	154	–	–	**154**
Total loss recognised in cost of goods sold	–	(226)	–	–	**(226)**
Non-discretionary dividend obligation	–	–	–	27	**27**
Option over non-controlling interest	–	–	–	4	**4**
Deferred consideration	43	–	–	(3)	**40**
Realised	(13)	(124)	3	–	**(134)**
31 December 2019	**37**	**109**	**–**	**(211)**	**(65)**

During the year, no amounts were transferred between Level 1 and Level 2 of the fair value hierarchy and no amounts were transferred into or out of Level 3 of the fair value hierarchy for either other financial assets or other financial liabilities.

Some of the Group's financial assets and financial liabilities are measured at fair value at the end of each reporting period. The following table provides information about how the fair values of these financial assets and financial liabilities are determined, in particular, the valuation techniques and inputs used.

28. Fair value measurements continued

FAIR VALUE OF FINANCIAL ASSETS/FINANCIAL LIABILITIES

US$ million			2020	2019
Futures – Level 1		Assets	**107**	**377**
		Liabilities	**(2,652)**	**(1,141)**
Valuation techniques and key inputs:	Quoted bid prices in an active market			
Significant unobservable inputs:	None			
Futures – Level 2		Assets	**75**	**80**
		Liabilities	**(264)**	**(151)**
Valuation techniques and key inputs:	Discounted cash flow model Inputs include observable quoted prices sourced from exchanges or traded reference indices in active markets for identical assets or liabilities. Prices are adjusted by a discount rate which captures the time value of money and counterparty credit considerations, as required.			
Significant unobservable inputs:	None			
Options – Level 1		Assets	**19**	**14**
		Liabilities	**(29)**	**(85)**
Valuation techniques and key inputs:	Quoted bid prices in an active market			
Significant unobservable inputs:	None			
Options – Level 2		Assets	**13**	**63**
		Liabilities	**(14)**	**(11)**
Valuation techniques and key inputs:	Discounted cash flow model Inputs include observable quoted prices sourced from exchanges or traded reference indices in active markets for identical assets or liabilities. Prices are adjusted by a discount rate which captures the time value of money and counterparty credit considerations, as required.			
Significant unobservable inputs:	None			
Swaps – Level 1		Assets	**142**	**80**
		Liabilities	**(228)**	**(90)**
Valuation techniques and key inputs:	Quoted bid prices in an active market			
Significant unobservable inputs:	None			
Swaps – Level 2		Assets	**249**	**122**
		Liabilities	**(224)**	**(179)**
Valuation techniques and key inputs:	Discounted cash flow model Inputs include observable quoted prices sourced from exchanges or traded reference indices in active markets for identical assets or liabilities. Prices are adjusted by a discount rate which captures the time value of money and counterparty credit considerations, as required.			
Significant unobservable inputs:	None			

28. Fair value measurements continued

US$ million			2020	2019
Physical Forwards – Level 2		Assets	**916**	**898**
		Liabilities	**(537)**	**(852)**
Valuation techniques and key inputs:	Discounted cash flow model Inputs include observable quoted prices sourced from exchanges or traded reference indices in active markets for identical assets or liabilities. Prices are adjusted by a discount rate which captures the time value of money, and counterparty credit considerations, such as history of non-performance, collateral held and current market developments, as required.			
Significant unobservable inputs:	None			
Physical Forwards – Level 3		Assets	**258**	**317**
		Liabilities	**(252)**	**(208)**
Valuation techniques and key inputs:	Discounted cash flow model			
Significant unobservable inputs:	Valuation of the Group's commodity physical forward contracts categorised within this level is based on observable market prices that are adjusted by unobservable differentials, as required, including: – Quality; – Geographic location; – Local supply & demand; – Customer requirements; and – Counterparty credit considerations. These significant unobservable inputs generally represent 1%–30% of the overall value of the instruments. The valuation prices are applied consistently to value physical forward sale and purchase contracts, and changing a particular input to reasonably possible alternative assumptions does not result in a material change in the underlying value of the portfolio.			
Cross currency swaps – Level 2		Assets	**748**	**175**
		Liabilities	**(247)**	**(979)**
Valuation techniques and key inputs:	Discounted cash flow model Inputs include observable quoted prices sourced from exchanges or traded reference indices in active markets for identical assets or liabilities. Prices are adjusted by a discount rate which captures the time value of money and counterparty credit considerations, as required.			
Significant unobservable inputs:	None			
Foreign currency and interest rate contracts – Level 2		Assets	**569**	**255**
		Liabilities	**(181)**	**(26)**
Valuation techniques and key inputs:	Discounted cash flow model Inputs include observable quoted prices sourced from exchanges or traded reference indices in active markets for identical assets or liabilities. Prices are adjusted by a discount rate which captures the time value of money and counterparty credit considerations, as required.			
Significant unobservable inputs:	None			
Call options over Glencore shares – Level 2		Assets	**8**	**25**
		Liabilities	**(8)**	**(25)**
Valuation techniques and key inputs:	Option pricing model – Current price of Glencore shares; – Strike price; – Maturity date of the underlying convertible debt security; – Risk-free rate; and – Volatility.			
Significant unobservable inputs:	None			

28. Fair value measurements continued

US$ million			**2020**	2019
Accounts receivable and payable – Level 2		Assets	**4,468**	**6,540**
		Liabilities	**(11,264)**	**(14,808)**
Comprised of trade receivables/payables containing an embedded commodity derivative, which are designated and measured at fair value through profit and loss until final settlement.				
Valuation techniques and key inputs:	Discounted cash flow model Inputs include observable quoted commodity prices sourced from exchanges or traded reference indices in active markets for identical assets or liabilities. Prices are adjusted by a discount rate which captures the time value of money and counterparty credit considerations, as required.			
Significant unobservable inputs:	None			
Deferred consideration (Mototolo) – Level 3		Assets	**391**	**82**
		Liabilities	**–**	**–**
Valuation techniques and key inputs:	Discounted cash flow model			
Significant observable inputs:	– Forecast commodity prices; – Discount rates using weighted average cost of capital methodology; – Exchange rates; The valuation remains sensitive to price and a 10% increase/decrease in commodity price assumptions would result in an $48 million adjustment to the current carrying value.			
Deferred consideration (Orion) – Level 3		Assets	**41**	**–**
		Liabilities	**–**	**–**
Valuation techniques and key inputs:	Discounted cash flow model			
Significant observable inputs:	– Estimated production plan; – Forecast commodity prices; – Discount rates using weighted average cost of capital methodology; The valuation remains sensitive to commodity price assumptions and a 10% increase/decrease in gold price would result in a $14 million positive adjustment to the current carrying value of the asset, while a 10% decrease in gold price would result in a $21 million negative adjustment			
Non-discretionary dividend obligation – Level 3		Assets	**–**	**–**
		Liabilities	**(150)**	**(161)**
Valuation techniques:	Discounted cash flow model			
Significant observable inputs:	– Forecast commodity prices; – Discount rates using weighted average cost of capital methodology; – Production models; – Operating costs; and – Capital expenditures. The resultant liability is essentially a discounted cash flow valuation of the underlying mining operation. Increases/decreases in forecast commodity prices will result in an increase/decrease to the value of the liability though this will be partially offset by associated increases/decreases in the assumed production levels, operating costs and capital expenditures, which are inherently linked to forecast commodity prices. The valuation remains sensitive to price and a 10% increase/decrease in commodity price assumptions would result in an $105 million adjustment to the current carrying value.			
Option over non-controlling interest in Ale – Level 3		Assets	**–**	**–**
		Liabilities	**(22)**	**(36)**
Valuation techniques and key inputs:	Discounted cash flow model			
Significant unobservable inputs:	The resultant liability is the value of the remaining minority stake in the subsidiary, measured as the higher value of the acquisition date valuation of the shares, and a discounted future earnings based valuation. The valuation is additionally sensitive to movement in the spot exchange rates between the Brazilian Real and US Dollar.			

29. Future commitments

Capital expenditure for the acquisition of property, plant and equipment is generally funded through the cash flow generated by the respective industrial entities. As at 31 December 2020, $859 million (2019: $1,240 million), of which 87% (2019: 89%) relates to expenditure to be incurred over the next year, was contractually committed for the acquisition of property, plant and equipment.

Certain of Glencore's exploration tenements and licences require it to spend a minimum amount per year on development activities, a significant portion of which would have been incurred in the ordinary course of operations. As at 31 December 2020, $128 million (2019: $126 million) of such development expenditures are to be incurred, of which 27% (2019: 37%) are for commitments to be settled over the next year.

As part of Glencore's ordinary sourcing and procurement of physical commodities and other ordinary marketing obligations, the selling party may request that a financial institution act as either a) the paying party upon the delivery of product and qualifying documents through the issuance of a letter of credit or b) the guarantor by way of issuing a bank guarantee accepting responsibility for Glencore's contractual obligations. Similarly, Glencore is required to post rehabilitation and pension guarantees in respect of some of these future, primarily industrial, long-term obligations. As at 31 December 2020, $6,334 million (2019: $9,628 million) of procurement and $4,138 million (2019: $3,953 million) of rehabilitation and pension commitments have been issued on behalf of Glencore, which will generally be settled simultaneously with the payment for such commodity and rehabilitation and pension obligations.

ASTRON RELATED COMMITMENTS

As part of the regulatory approval process pertaining to the acquisition of a 75% shareholding in Astron Energy, Glencore and Astron Energy entered into certain commitments (subject to variation for good cause) with the South Africa Competition Tribunal and the South African Economic Development Department. These commitments include investment expenditure of up to ZAR 6.5 billion ($446 million) over the period to 2024 so as to debottleneck and improve the performance of the Cape Town oil refinery, contribute to the rebranding of certain retail sites and establish a development fund to support small and black-owned businesses in Astron Energy's value chain. In addition, Glencore has agreed to increase the level of BEE shareholding in Astron Energy from 25% to 35% in tranches up to 2026 which will include a minimum additional 3% held by qualifying employee stock ownership plans in 2021.

30. Contingent liabilities

The amount of corporate guarantees in favour of third parties as at 31 December 2020 was $Nil (2019: $Nil). Also see note 10. The Group is subject to various legal and regulatory proceedings as detailed below. These contingent liabilities are reviewed on a regular basis and where appropriate an estimate is made of the potential financial impact on the Group. As at 31 December 2020 and 2019, it was not feasible to make such an assessment.

LEGAL AND REGULATORY PROCEEDINGS

Under IAS 37 Provisions, Contingent Liabilities and Contingent Assets, a provision is recognised when Glencore has a present obligation (legal or constructive), as a result of a past event, and it is probable that an outflow of resources embodying economic benefits, that can be reliably estimated, will be required to settle the liability. A contingent liability is a possible obligation that arises from a past event and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of Glencore. If it is not clear whether there is a present obligation, a past event is deemed to give rise to a present obligation if, taking account of all available evidence, it is more likely than not that a present obligation exists at the end of the reporting period. When a present obligation arises but it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation or the amount of the obligation cannot be measured with sufficient reliability, a contingent liability is disclosed.

The Group is subject to various legal and regulatory proceedings as detailed below. The facts and circumstances of these proceedings are assessed on a regular basis to determine if the criteria for recognising a provision in accordance with IAS 37 are met. At 31 December 2020 and 31 December 2019, the Group has concluded that the recognition criteria have not been met, as such no liability has been recognised in relation to these matters in the consolidated statement of financial position at the end of the reporting periods. The nature of these contingent liabilities is disclosed below.

INVESTIGATIONS BY REGULATORY AND ENFORCEMENT AUTHORITIES

The Group is subject to a number of investigations by regulatory and enforcement authorities including:

- The United States Department of Justice is investigating the Group with respect to compliance with various criminal statutes, including the Foreign Corrupt Practices Act, United States money laundering statutes and fraud statutes related to the Group's business in certain overseas jurisdictions.
- The United States Commodity Futures Trading Commission ("CFTC") is investigating whether the Group may have violated certain provisions of the Commodity Exchange Act and/or CFTC Regulations including through corrupt practices in connection with commodities trading.
- The United Kingdom Serious Fraud Office is investigating the Group in respect of suspicions of bribery in the conduct of business of the Group.
- The Brazilian authorities are investigating the Group in relation to "Operation car wash", which relates to bribery allegations concerning Petrobras.
- The Office of the Attorney General of Switzerland is investigating Glencore International AG for failure to have the organisational measures in place to prevent alleged corruption.

The Board has appointed a committee, the Investigations Committee ("the Committee"), to oversee the response to the investigations on behalf of the Board. The Committee has engaged external legal counsel and forensic experts to assist in responding to the various investigations and to perform additional investigations at the request of the Committee covering various aspects of the Group's business.

The Group is continuing to cooperate fully with the various authorities, including through reporting to those authorities facts relevant to their investigations. The investigations are complex and dynamic including in relation to scope. The timing and outcome of the various investigations remain uncertain.

At 31 December 2020, taking account of all available evidence, the Committee concluded that it is not probable that a present obligation existed at the end of the reporting period for the above regulatory and enforcement proceedings. Consequently, the timing and amount, if any, of financial effects (such as fines, penalties or damages, which could be material) or other consequences, including external costs, from any of the various investigations and any change in their scope is not possible to predict or estimate.

OTHER LEGAL PROCEEDINGS

The Group was named in a securities class action suit in the United States District Court of New Jersey in connection with the various regulatory and enforcement authorities investigations. The District Court issued an order dismissing the suit on 31 July 2020.

Other claims and unresolved disputes are pending against Glencore, however, based on the Group's current assessment of these matters any future individually material financial obligations are considered to be remote.

30. Contingent liabilities continued

ENVIRONMENTAL CONTINGENCIES

Glencore's operations are subject to various environmental laws and regulations. Glencore is not aware of any material non-compliance with those laws and regulations. Glencore accrues for environmental contingencies when such contingencies are probable and reasonably estimable. Such accruals are adjusted as new information develops or circumstances change. Recoveries of environmental remediation costs from insurance companies and other parties are recorded as assets when the recoveries are virtually certain. At this time, Glencore is unaware of any material environmental incidents at its locations. Any potential liability arising from environmental incidents in the ordinary course of the Group's business would not usually be expected to have a material adverse effect on its consolidated income, financial position or cash flows.

31. Related party transactions

In the normal course of business, Glencore enters into various arm's length transactions with related parties, including fixed price commitments to sell and to purchase commodities, forward sale and purchase contracts, agency agreements and management service agreements. Outstanding balances at period end are unsecured and settlement occurs in cash (see notes 11, 13 and 24). There have been no guarantees provided or received for any related party receivables or payables.

All transactions between Glencore and its subsidiaries are eliminated on consolidation along with any unrealised profits and losses between its subsidiaries, associates and joint ventures. In 2020, sales and purchases with associates and joint ventures amounted to $2,710 million (2019: $3,727 million) and $5,033 million (2019: $4,923 million) respectively.

32. Principal subsidiaries with material non-controlling interests

Non-controlling interest is comprised of the following:

US$ million	**2020**	2019
Volcan	(136)	1,217
Kazzinc	1,362	1,298
Koniambo	(4,098)	(3,607)
Other[1]	(363)	54
Total	**(3,235)**	**(1,038)**

1 Other comprises various subsidiaries in which no individual balance attributable to non-controlling interests is material.

2020 KML MINORITY SHARE ACQUISITION AND DELISTING

On 3 June 2020, Glencore completed the acquisition of the remaining 0.5% minority interest in Katanga Mining Limited ("KML"), an entity listed on the Toronto Stock Exchange which in turn owns a 75% interest in Kamoto Copper Company ("KCC") for $39 million (Canadian $56 million). As a result, KML is now a wholly-owned subsidiary of the Group and an amount of $18 million was recognised directly in 'other equity reserves' in accordance with IFRS 10. Following such acquisition, KML has been delisted from the Toronto Stock Exchange and is no longer considered a "reporting issuer" under applicable Canadian securities legislation.

The remaining non-controlling interest balance of $232 million (2019: $159 million) represents the 25% interest in KCC held by La Générale des Carrières et des Mines ("Gécamines").

32. Principal subsidiaries with material non-controlling interests continued

Summarised financial information in respect of Glencore's subsidiaries that have material non-controlling interest as at 31 December 2020, reflecting 100% of the underlying subsidiary's relevant figures, is set out below.

US$ million	Kazzinc	Koniambo	Volcan
31 December 2020			
Non-current assets	4,407	1,594	1,793
Current assets	1,167	307	293
Total assets	**5,574**	**1,901**	**2,086**
Non-current liabilities	737	12,719	1,350
Current liabilities	333	91	348
Total liabilities	**1,070**	**12,810**	**1,698**
Net assets	**4,504**	**(10,909)**	**388**
Equity attributable to owners of the Company	3,142	(6,811)	524
Non-controlling interest	1,362	(4,098)	(136)
Non-controlling interest %	30.3%	51.0%	76.7%
2020			
Revenue	3,032	239	547
Expenses	(2,418)	(1,201)	(2,307)
Net profit/(loss) for the year	**614**	**(962)**	**(1,760)**
Profit/(loss) attributable to owners of the Company	428	(471)	(413)
Profit/(loss) attributable to non-controlling interests	186	(491)	(1,347)
Total comprehensive income/(loss) for the year	**614**	**(962)**	**(1,760)**
Dividends paid to non-controlling interests	(120)	–	–
Net cash inflow/(outflow) from operating activities	1,010	(194)	129
Net cash outflow from investing activities	(388)	(36)	(117)
Net cash (outflow)/inflow from financing activities	(597)	233	67
Total net cash inflow	**25**	**3**	**79**

US$ million	Kazzinc	Koniambo	Volcan
31 December 2019			
Non-current assets	4,229	1,648	4,230
Current assets	1,133	369	255
Total assets	**5,362**	**2,017**	**4,485**
Non-current liabilities	785	11,857	1,778
Current liabilities	287	106	555
Total liabilities	**1,072**	**11,963**	**2,333**
Net assets	**4,290**	**(9,946)**	**2,152**
Equity attributable to owners of the Company	2,992	(6,339)	935
Non-controlling interest	1,298	(3,607)	1,217
Non-controlling interest %	30.3%	51.0%	76.7%
2019			
Revenue	2,917	315	756
Expenses	(2,458)	(1,159)	(1,259)
Net profit/(loss) for the year	**459**	**(844)**	**(503)**
Profit/(loss) attributable to owners of the Company	320	(414)	(117)
Profit/(loss) attributable to non-controlling interests	139	(430)	(386)
Other comprehensive income attributable to owners of the Company	–	–	–
Other comprehensive income attributable to non-controlling interests	–	–	–
Total comprehensive income/(loss) for the year	**459**	**(844)**	**(503)**
Dividends paid to non-controlling interests	(196)	–	–
Net cash inflow/(outflow) from operating activities	750	(172)	178
Net cash outflow from investing activities	(427)	(39)	(172)
Net cash (outflow)/inflow from financing activities	(325)	219	(33)
Total net cash (outflow)/inflow	**(2)**	**8**	**(27)**

ALTERNATIVE PERFORMANCE MEASURES

Alternative performance measures are denoted by the symbol ◊

When assessing and discussing the Group's reported financial performance, financial position and cash flows, Glencore makes reference to Alternative performance measures (APMs), which are not defined or specified under the requirements of IFRS, but are derived from the financial statements prepared in accordance with IFRS. The APMs are consistent with how business performance is measured and reported within the internal management reporting to the Board and management and assist in providing meaningful analysis of the Group's results both internally and externally in discussions with the financial analyst and investment community.

The Group uses APMs to aid the comparability of information between reporting periods and segments and to aid the understanding of the activity taking place across the Group by adjusting for items that are of an infrequent nature and by aggregating or disaggregating (notably in the case of relevant material associates and joint ventures accounted for on an equity basis) certain IFRS measures. APMs are also used to approximate the underlying operating cash flow generation of the operations (Adjusted EBITDA).

Investments in the extractive industry are typically significant and the initial spend generally occurs over several years, "upfront", prior to the operations generating cash. As a result, the investments are sometimes made with partners and an assessment to approximate the operating cash flow generation/pay-back of the investment (Adjusted EBITDA) is required. Against this backdrop, the key APMs used by Glencore are Adjusted EBITDA, Net funding/Net debt and the disaggregation of the equivalent key APMs of our relevant material associates and joint ventures ("Proportionate adjustment") to enable a consistent evaluation of the financial performance and returns attributable to the Group.

Adjusted EBITDA is a useful approximation of the operating cash flow generation by eliminating depreciation and amortisation adjustments. Adjusted EBITDA is not a direct measure of our liquidity, which is shown by our cash flow statement and needs to be considered in the context of our financial commitments.

Proportionate adjustments are useful to enable a consistent evaluation of the financial performance and returns available to the Group, irrespective of the differing accounting treatments required to account for our minority/joint ownership interests of our relevant material investments.

Net funding is an aggregation of IFRS measures (Borrowings less cash and cash equivalents) and Net debt is Net funding less Readily marketable inventories and provides a measure of our financial leverage and, through Net debt to Adjusted EBITDA relationships, provides an indication of relative financial strength and flexibility.

APMs used by Glencore may not be comparable with similarly titled measures and disclosures by other companies. APMs have limitations as an analytical tool, and a user of the financial statements should not consider these measures in isolation from, or as a substitute for, analysis of the Group's results of operations; and they may not be indicative of the Group's historical operating results, nor are they meant to be a projection or forecast of its future results.

Listed below are the definitions and reconciliations to the underlying IFRS measures of the various APMs used by the Group.

Proportionate adjustment

For internal reporting and analysis, management evaluates the performance of Antamina copper/zinc mine (34% owned), Cerrejón coal mine (33% owned) and Collahuasi copper mine (44% owned) under the proportionate consolidation method reflecting Glencore's proportionate share of the revenues, expenses, assets and liabilities of these investments.

In November 2017, Glencore increased its voting interest in Volcan to 63%, but its total economic interest only increased to 23.3%. For internal reporting and analysis, management evaluates the performance of Volcan under the equity method, reflecting the Group's relatively low 23.3% economic ownership in this fully ring-fenced listed entity, with its stand-alone, independent and separate capital structure. The impact is that we reflect 23.3% of Volcan's net income in the Group's Adjusted EBIT/EBITDA and its consolidated results are excluded from all other APM's including production data.

The Viterra joint venture is a stand-alone group with a fully independent capital structure, governance and credit profile, supporting a global business, across many geographies, products and activities. Glencore's management evaluates this investment's financial performance on a net return basis, as opposed to an Adjusted EBITDA basis and thus, the financial results of Viterra are presented on a basis consistent with its underlying IFRS treatment (equity accounting).

See reconciliation of revenue and relevant material associates' and joint ventures' Adjusted EBIT to "Share of net income from associates and joint ventures" below.

APMS DERIVED FROM THE STATEMENT OF INCOME

Revenue

Revenue represents revenue by segment (see note 2 of the financial statements), as reported on the face of the statement of income plus the relevant Proportionate adjustments. See reconciliation table below.

US$ million	**2020**	2019
Revenue – Marketing activities	124,137	194,188
Revenue – Industrial activities	41,453	42,743
Intersegment eliminations	(20,803)	(19,672)
Revenue - segmental	**144,787**	**217,259**
Proportionate adjustment material associates and joint ventures – revenue	(2,996)	(2,904)
Proportionate adjustment Volcan – revenue	547	756
Revenue – reported measure	**142,338**	**215,111**

Share of income from material associates and joint ventures

US$ million	**2020**	2019
Associates' and joint ventures' Adjusted EBITDA	2,061	1,754
Depreciation and amortisation	(683)	(745)
Associates' and joint ventures' Adjusted EBIT	1,378	1,009
Impairment, net of tax[1]	(445)	(435)
Net finance costs	(56)	5
Income tax expense	(524)	(342)
	(1,025)	(772)
Share of income from relevant material associates and joint ventures	**353**	**237**
Share of income from other associates and joint ventures	91	(123)
Share of income from associates and joint ventures[2]	**444**	**114**

1 Represents an impairment of $445 million, net of taxes of $211 million (2019: $435 million, net of taxes of $213 million) relating to Cerrejón, resulting from lower API2 coal price assumptions and reduced production estimates, including in relation to updated mine-life approval expectations.

2 Comprises share in earnings of $197 million (2019: losses of $58 million) from Marketing activities and share in earnings of $247 million (2019: $172 million) from Industrial activities.

Adjusted EBIT/EBITDA

Adjusted EBIT/EBITDA provide insight into our overall business performance (a combination of cost management, seizing market opportunities and growth), and are the corresponding flow drivers towards our objective of achieving industry-leading returns.

Adjusted EBIT is the net result of revenue less cost of goods sold and selling and administrative expenses, plus share of income from associates and joint ventures, dividend income and the attributable share of Adjusted EBIT of relevant material associates and joint ventures, which are accounted for internally by means of proportionate consolidation, excluding Significant items, see below.

Adjusted EBITDA consists of Adjusted EBIT plus depreciation and amortisation, including the related Proportionate adjustments. See reconciliation table below.

US$ million	**2020**	2019
Reported measures		
Revenue	142,338	215,111
Cost of goods sold	(138,640)	(210,434)
Selling and administrative expenses	(1,681)	(1,391)
Share of income from associates and joint ventures	444	114
Dividend income	32	49
	2,493	**3,449**
Adjustments to reported measures		
Share of associates' significant items	92	219
Share of associates' significant items – Volcan	–	73
Movement in unrealised inter-segment profit elimination	760	(468)
Proportionate adjustment material associates and joint ventures – net finance, impairment and income tax expense	1,025	772
Proportionate adjustment Volcan – net finance, income tax expense and non-controlling interests	46	106
Adjusted EBIT	**4,416**	**4,151**
Depreciation and amortisation	6,671	7,161
Proportionate adjustment material associates and joint ventures – depreciation	683	745
Proportionate adjustment Volcan - depreciation	(210)	(456)
Adjusted EBITDA	**11,560**	**11,601**

Significant items

Significant items of income and expense which, due to their nature and variable financial impact or the expected infrequency of the events giving rise to them, are separated for internal reporting and analysis of Glencore's results to aid in an understanding and comparative basis of the underlying financial performance. Refer to reconciliation below.

Reconciliation of net significant items 2020

US$ million	Gross significant charges	Non-controlling interests' share	Significant items tax	**Equity holders' share**
Share of Associates' significant items[1]	(92)	–	–	(92)
Movement in unrealised inter-segment profit elimination[1]	(760)	–	80	(680)
Loss on disposals of non-current assets[2]	(36)	–	–	(36)
Other expense – net[3]	(173)	(12)	(69)	(254)
Tax significant items in their own right[4]	–	–	479	479
	(1,061)	(12)	490	(583)
Impairments attributable to equity holders				
Impairments[5]	(3,600)	350	270	(2,980)
Impairment Volcan[5]	(2,347)	1,251	716	(380)
Impairments - net, related to material associates and joint ventures[6]	(445)	–	–	(445)
	(6,392)	1,601	986	(3,805)
Total significant items	**(7,453)**	**1,589**	**1,476**	**(4,388)**

1 See note 2 of the financial statements.
2 See note 4 of the financial statements.
3 See note 5 of the financial statements.
4 Tax credits related to certain recognition of tax adjustments ($724 million), offset by tax expenses related to foreign exchange fluctuations ($76 million) and tax losses not recognised ($169 million), see note 7 of the financial statements.
5 See note 6 of the financial statements.
6 See Proportionate adjustment reconciliation above.

Reconciliation of net significant items 2019

US$ million	Gross significant charges	Non-controlling interests' share	Significant items tax	Equity holders' share
Share of Associates' significant items[1]	(219)	–	–	(219)
Share of significant items - Volcan	(73)	–	–	(73)
Movement in unrealised inter-segment profit elimination[1]	468	–	(46)	422
Loss on disposals of non-current assets[2]	(43)	–	–	(43)
Other expense – net[3]	(173)	–	–	(173)
Tax significant items in their own right[4]	–	–	(435)	(435)
	(40)	–	(481)	(521)
Impairments attributable to equity holders				
Impairments[5]	(2,408)	286	232	(1,890)
Impairments - net, related to material associates and joint ventures[6]	(435)	–	–	(435)
	(2,843)	286	232	(2,325)
Total significant items	**(2,883)**	**286**	**(249)**	**(2,846)**

1 See note 2 of the financial statements.
2 See note 4 of the financial statements.
3 See note 5 of the financial statements.
4 Tax expenses related to foreign exchange fluctuations ($12 million) and tax losses not recognised ($543 million), net of tax credits related to the recognition of temporary differences arising from retrospective changes in tax restructuring regulations ($120 million), see note 7 of the financial statements.
5 See note 6 of the financial statements.
6 See Proportionate adjustment reconciliation above.

Net income attributable to equity shareholder pre-significant items

Net income attributable to equity shareholders pre-significant items is a measure of our ability to generate shareholder returns. The calculation of tax items to be excluded from Net income, includes the tax effect of significant items and significant tax items themselves. Refer to reconciliation below.

US$ million	**2020**	2019
Loss attributable to equity holders of the Parent	(1,903)	(404)
Significant items	4,388	2,846
Income attributable to equity holders of the Parent pre-significant items	**2,485**	**2,442**

APMS DERIVED FROM THE STATEMENT OF FINANCIAL POSITION

Net funding/Net debt and Net debt to Adjusted EBITDA

Net funding/debt demonstrates how our debt is being managed and is an important factor in ensuring we maintain investment grade credit rating status and a competitive cost of capital. Net funding is defined as total current and non-current borrowings less cash and cash equivalents and related Proportionate adjustments. Net debt is defined as Net funding less readily marketable inventories and related Proportionate adjustments. Consistent with the general approach in relation to our internal reporting and evaluation of Volcan, its consolidated net debt has also been adjusted to reflect the Group's relatively low 23.3% economic ownership (compared to its 63% voting interest) in this still fully ring-fenced listed entity, with its standalone, independent and separate capital structure. Furthermore, the relationship of Net debt to Adjusted EBITDA provides an indication of financial flexibility. See reconciliation table below.

Readily marketable inventories (RMI)

RMI comprising the core inventories which underpin and facilitate Glencore's marketing activities, represent inventories, that in Glencore's assessment, are readily convertible into cash in the short term due to their liquid nature, widely available markets and the fact that price risk is primarily covered either by a forward physical sale or hedge transaction. Glencore regularly assesses the composition of these inventories and their applicability, relevance and availability to the marketing activities. As at 31 December 2020, $19,584 million (2019: $16,810 million) of inventories were considered readily marketable. This comprises $12,260 million (2019: $10,516 million) of inventories carried at fair value less costs of disposal and $7,324 million (2019: $6,294 million) carried at the lower of cost or net realisable value. Total readily marketable inventories includes $128 million (2019: $148 million) related to the relevant material associates and joint ventures (see note 2) presented under the proportionate consolidation method, comprising inventory carried at lower of cost or net realisable value. Given the highly liquid nature of these inventories, which represent a significant share of current assets, the Group believes it is appropriate to consider them together with cash equivalents in analysing Group net debt levels and computing certain debt coverage ratios and credit trends.

Net funding/net debt at 31 December 2020

US$ million	Reported measure	Proportionate adjustment material associates and joint ventures	Proportionate adjustment Volcan	**Adjusted measure**
Non-current borrowings	29,227	210	(889)	28,548
Current borrowings	8,252	151	(33)	8,370
Total borrowings	**37,479**	**361**	**(922)**	**36,918**
Less: cash and cash equivalents	(1,498)	(107)	115	(1,490)
Net funding	**35,981**	**254**	**(807)**	**35,428**
Less: Readily marketable inventories	(19,456)	(128)	–	(19,584)
Net debt	**16,525**	**126**	**(807)**	**15,844**
Adjusted EBITDA				**11,560**
Net debt to Adjusted EBITDA				**1.37**

Net funding/net debt at 31 December 2019

US$ million	Reported measure	Proportionate adjustment material associates and joint ventures	Proportionate adjustment Volcan	Adjusted measure
Non-current borrowings	29,067	95	(576)	28,586
Current borrowings	7,976	31	(221)	7,786
Total borrowings	**37,043**	**126**	**(797)**	**36,372**
Less: cash and cash equivalents	(1,899)	(143)	36	(2,006)
Net funding	**35,144**	**(17)**	**(761)**	**34,366**
Less: Readily marketable inventories	(16,662)	(148)	–	(16,810)
Net debt	**18,482**	**(165)**	**(761)**	**17,556**
Adjusted EBITDA				**11,601**
Net debt to Adjusted EBITDA				**1.51**

Capital expenditure ("Capex")

Capital expenditure is expenditure capitalised as property, plant and equipment. For internal reporting and analysis, Capex includes related Proportionate adjustments. See reconciliation table below.

US$ million	**2020**	2019
Capital expenditure – Marketing activities	488	438
Capital expenditure – Industrial activities	4,082	5,349
Capital expenditure - segmental	**4,570**	**5,787**
Proportionate adjustment material associates and joint ventures – capital expenditure	(543)	(609)
Proportionate adjustment Volcan – capital expenditure	117	190
Capital expenditure – reported measure	**4,144**	**5,368**

APMS DERIVED FROM THE STATEMENT OF CASH FLOWS

Net purchase and sale of property, plant and equipment

Net purchase and sale of property, plant and equipment is cash purchases of property, plant and equipment, net of proceeds from sale of property, plant and equipment. For internal reporting and analysis, Net purchase and sale of property, plant and equipment includes proportionate adjustments. See reconciliation table below.

2020 US$ million	Reported measure	Proportionate adjustment material associates and joint ventures	Proportionate adjustment Volcan	**Adjusted measure**
Purchase of property, plant and equipment	(3,569)	(513)	105	(3,977)
Proceeds from sale of property, plant and equipment	52	4	–	56
Net purchase and sale of property, plant and equipment	**(3,517)**	**(509)**	**105**	**(3,921)**

2019 US$ million	Reported measure	Proportionate adjustment material associates and joint ventures	Proportionate adjustment Volcan	**Adjusted measure**
Purchase of property, plant and equipment	(4,712)	(603)	180	(5,135)
Proceeds from sale of property, plant and equipment	178	–	(9)	169
Net purchase and sale of property, plant and equipment	**(4,534)**	**(603)**	**171**	**(4,966)**

Funds from operations (FFO) and FFO to Net debt

FFO is a measure that reflects our ability to generate cash for investment, debt servicing and distributions to shareholders.
It comprises cash provided by operating activities before working capital changes, less tax and net interest payments plus dividends received and related Proportionate adjustments. Furthermore, the relationship of FFO to net debt is an indication of our financial flexibility and strength. See reconciliation table below.

-

2020 US$ million	Reported measure	Proportionate adjustment material associates and joint ventures	Proportionate adjustment Volcan	**Adjusted measure**
Cash generated by operating activities before working capital changes	8,568	–	–	8,568
Addback EBITDA of relevant material associates and joint ventures	–	2,061	(131)	1,930
Non-cash adjustments included within EBITDA	–	15	–	15
Adjusted cash generated by operating activities before working capital changes	8,568	2,076	(131)	10,513
Income taxes paid	(820)	(383)	14	(1,189)
Interest received	100	1	(1)	100
Interest paid	(1,174)	(12)	44	(1,142)
Dividends received from associates and joint ventures	1,015	(972)	–	43
Funds from operations (FFO)	**7,689**	**710**	**(74)**	**8,325**
Net debt				**15,844**
FFO to net debt				**52.5%**

2019 US$ million	Reported measure	Proportionate adjustment material associates and joint ventures	Proportionate adjustment Volcan	**Adjusted measure**
Cash generated by operating activities before working capital changes	10,346	–	–	10,346
Addback EBITDA of relevant material associates and joint ventures	–	1,754	(232)	1,522
Non-cash adjustments included within EBITDA	–	7	6	13
Adjusted cash generated by operating activities before working capital changes	10,346	1,761	(226)	11,881
Income taxes paid	(2,301)	(544)	31	(2,814)
Interest received	200	2	(1)	201
Interest paid	(1,604)	(8)	43	(1,569)
Dividends received from associates and joint ventures	942	(776)	–	166
Funds from operations (FFO)	**7,583**	**435**	**(153)**	**7,865**
Net debt				**17,556**
FFO to net debt				**44.8%**

OTHER RECONCILIATIONS

AVAILABLE COMMITTED LIQUIDITY[1]

US$ million	**2020**	2019
Cash and cash equivalents – reported	1,498	1,899
Proportionate adjustment – cash and cash equivalents	(8)	107
Headline committed syndicated revolving credit facilities	14,625	14,425
Amount drawn under syndicated revolving credit facilities	(4,766)	(5,615)
Amounts drawn under U.S. commercial paper programme	(1,090)	(675)
Total	**10,259**	**10,141**

1 Presented on an adjusted measured basis.

CASH FLOW RELATED ADJUSTMENTS 2020

US$ million	Reported measure	Proportionate adjustment material associates and joint ventures	Proportionate adjustment Volcan	**Adjusted measure**
Funds from operations (FFO)	7,689	710	(74)	8,325
Working capital changes	(4,010)	(314)	6	(4,318)
Net cash received from disposal of subsidiaries	(222)	–	–	(222)
Purchase of investments	(122)	–	–	(122)
Proceeds from sale of investments	135	–	–	135
Purchase of property, plant and equipment	(3,569)	(513)	105	(3,977)
Proceeds from sale of property, plant and equipment	52	4	–	56
Margin receipts in respect of financing related hedging activities	1,040	–	–	1,040
Acquisition of non-controlling interests in subsidiaries	(56)	–	–	(56)
Return of capital/distributions to non-controlling interests	(127)	–	–	(127)
Cash movement in net funding	**810**	**(113)**	**37**	**734**

CASH FLOW RELATED ADJUSTMENTS 2019

US$ million	Reported measure	Proportionate adjustment material associates and joint ventures	Proportionate adjustment Volcan	**Adjusted measure**
Funds from operations (FFO)	7,583	435	(153)	7,865
Working capital changes	2,088	122	(35)	2,175
Net cash used in acquisitions of subsidiaries	(123)	–	–	(123)
Net cash received from disposal of subsidiaries	5	–	1	6
Purchase of investments	(125)	–	–	(125)
Proceeds from sale of investments	119	–	–	119
Purchase of property, plant and equipment	(4,712)	(603)	180	(5,135)
Proceeds from sale of property, plant and equipment	178	–	(9)	169
Margin payments in respect of financing related hedging activities	529	–	–	529
Acquisition of non-controlling interests in subsidiaries	(24)	–	–	(24)
Return of capital/distributions to non-controlling interests	(305)	–	–	(305)
Purchase of own shares	(2,318)	–	–	(2,318)
Disposal of own shares	6	–	–	6
Distributions paid to equity holders of the Parent	(2,710)	–	–	(2,710)
Cash movement in net funding	**191**	**(46)**	**(16)**	**129**

RECONCILIATION OF TAX EXPENSE 2020

US$ million	Total
Adjusted EBIT, pre-significant items	4,416
Net finance costs	(1,453)
Adjustments for:	
Net finance cost from material associates and joint ventures	(56)
Proportional adjustment and net finance costs - Volcan	84
Share of income from other associates pre-significant items	(183)
Profit on a proportionate consolidation basis before tax and pre-significant items	**2,808**
Income tax expense, pre-significant items	(306)
Adjustments for:	
Tax expense from material associates and joint ventures	(524)
Tax credit from Volcan	(3)
Tax expense on a proportionate consolidation basis	**(833)**
Applicable tax rate	**29.7%**

US$ million	Pre-significant tax expense	Significant items tax[1]	Total tax credit
Tax expense/(credit) on a proportionate consolidation basis	833	(971)	(138)
Adjustment in respect of material associates and joint ventures – tax	(524)	211	(313)
Adjustment in respect of Volcan – tax	(3)	(716)	(719)
Tax expense/(credit) on the basis of the income statement	**306**	**(1,476)**	**(1,170)**

1 See table above.

RECONCILIATION OF TAX EXPENSE 2019

US$ million	Total
Adjusted EBIT, pre-significant items	4,151
Net finance costs	(1,713)
Adjustments for:	
Net finance cost from material associates and joint ventures	5
Proportional adjustment and net finance costs - Volcan	82
Share of income from other associates pre-significant items	(96)
Profit on a proportionate consolidation basis before tax and pre-significant items	**2,429**
Income tax expense, pre-significant items	(369)
Adjustments for:	
Tax expense from material associates and joint ventures	(342)
Tax credit from Volcan	(29)
Tax expense on a proportionate consolidation basis	**(740)**
Applicable tax rate	**30.5%**

US$ million	Pre-significant tax expense	Significant items tax[1]	Total tax expense
Tax expense on a proportionate consolidation basis	740	142	882
Adjustment in respect of material associates and joint ventures – tax	(342)	213	(129)
Adjustment in respect of Volcan – tax	(29)	(106)	(135)
Tax expense on the basis of the income statement	**369**	**249**	**618**

1 See table above.

PRODUCTION BY QUARTER – Q4 2019 TO Q4 2020

Metals and minerals

PRODUCTION FROM OWN SOURCES – TOTAL[1]

		Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	**2020**	2019	Change 2020 vs 2019 %	Change Q4 20 vs Q4 19 %
Copper	kt	355.4	293.3	294.8	346.6	323.4	1,258.1	1,371.2	(8)	(9)
Cobalt	kt	11.9	6.1	8.2	7.3	5.8	27.4	46.3	(41)	(51)
Zinc	kt	268.3	295.6	254.5	310.0	310.3	1,170.4	1,077.5	9	16
Lead	kt	60.2	61.7	66.2	66.4	65.1	259.4	280.0	(7)	8
Nickel	kt	31.2	28.2	27.0	26.6	28.4	110.2	120.6	(9)	(9)
Gold	koz	240	211	200	244	261	916	886	3	9
Silver	koz	8,285	7,778	6,407	9,035	9,546	32,766	32,018	2	15
Ferrochrome	kt	408	388	78	185	378	1,029	1,438	(28)	(7)
Coal	mt	35.5	31.9	26.2	25.4	22.7	106.2	139.5	(24)	(36)
Oil (entitlement interest basis)	kbbl	1,880	1,806	806	748	584	3,944	5,518	(29)	(69)

PRODUCTION FROM OWN SOURCES – COPPER ASSETS[1]

			Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	**2020**	2019	Change 2020 vs 2019 %	Change Q4 20 vs Q4 19 %
African Copper (Katanga, Mutanda, Mopani)											
Katanga	Copper metal	kt	65.4	67.3	67.1	67.5	68.8	270.7	234.5	15	5
	Cobalt[2]	kt	6.2	5.3	7.2	6.4	5.0	23.9	17.1	40	(19)
Mutanda	Copper metal	kt	18.0	–	–	–	–	–	103.2	(100)	(100)
	Cobalt[2]	kt	4.5	–	–	–	–	–	25.1	(100)	(100)
Mopani	Copper metal	kt	–	–	6.7	13.3	10.3	30.3	21.6	40	n.m.
	Copper in concentrates	kt	3.3	–	–	–	–	–	10.6	(100)	(100)
African Copper – total production including third party feed											
Mopani	*Copper metal*	*kt*	*–*	*5.6*	*21.1*	*29.5*	*26.3*	*82.5*	*51.3*	*61*	*n.m.*
	Copper in concentrates	*kt*	*3.3*	*–*	*–*	*–*	*–*	*–*	*10.6*	*(100)*	*(100)*
	Total Copper metal	**kt**	**83.4**	**67.3**	**73.8**	**80.8**	**79.1**	**301.0**	**359.3**	**(16)**	**(5)**
	Total Copper in concentrates	**kt**	**3.3**	**–**	**–**	**–**	**–**	**–**	**10.6**	**(100)**	**(100)**
	Total Cobalt[2]	**kt**	**10.7**	**5.3**	**7.2**	**6.4**	**5.0**	**23.9**	**42.2**	**(43)**	**(53)**
Collahuasi[3]	**Copper in concentrates**	**kt**	**72.3**	**66.5**	**75.6**	**75.5**	**59.2**	**276.8**	**248.8**	**11**	**(18)**
	Silver in concentrates	**koz**	**910**	**1,063**	**850**	**1,155**	**893**	**3,961**	**2,878**	**38**	**(2)**
	Gold in concentrates[4]	**koz**	**14**	**12**	**14**	**18**	**9**	**53**	**38**	**39**	**(36)**
Antamina[5]	**Copper in concentrates**	**kt**	**37.6**	**33.1**	**17.8**	**36.1**	**40.7**	**127.7**	**151.4**	**(16)**	**8**
	Zinc in concentrates	**kt**	**26.7**	**36.9**	**16.4**	**44.2**	**44.9**	**142.4**	**102.4**	**39**	**68**
	Silver in concentrates	**koz**	**1,304**	**1,316**	**686**	**1,516**	**2,017**	**5,535**	**5,051**	**10**	**55**
Other South America (Antapaccay, Lomas Bayas)											
Antapaccay	Copper in concentrates	kt	47.5	38.0	43.1	53.0	51.5	185.6	197.6	(6)	8
	Gold in concentrates	koz	23	22	12	24	32	90	85	6	39
	Silver in concentrates	koz	338	270	295	378	355	1,298	1,576	(18)	5
Lomas Bayas	Copper metal	kt	19.2	18.4	18.5	19.2	18.0	74.1	78.9	(6)	(6)
	Total Copper metal	**kt**	**19.2**	**18.4**	**18.5**	**19.2**	**18.0**	**74.1**	**78.9**	**(6)**	**(6)**
	Total Copper in concentrates	**kt**	**47.5**	**38.0**	**43.1**	**53.0**	**51.5**	**185.6**	**197.6**	**(6)**	**8**
	Total Gold in concentrates and in doré	**koz**	**23**	**22**	**12**	**24**	**32**	**90**	**85**	**6**	**39**
	Total Silver in concentrates and in doré	**koz**	**338**	**270**	**295**	**378**	**355**	**1,298**	**1,576**	**(18)**	**5**

Metals and minerals

PRODUCTION FROM OWN SOURCES – COPPER ASSETS[1] CONTINUED

			Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	**2020**	2019	Change 2020 vs 2019 %	Change Q4 20 vs Q4 19 %
Australia (Mount Isa, Ernest Henry, Townsville, Cobar)											
Mount Isa, Ernest Henry, Townsville, Cobar											
	Copper metal	kt	45.8	31.8	32.6	40.5	33.9	138.8	151.1	(8)	(26)
	Gold	koz	18	22	24	22	25	93	100	(7)	39
	Silver	koz	245	156	165	208	226	755	1,154	(35)	(8)
Mount Isa, Ernest Henry, Townsville – total production including third party feed											
	Copper metal	*kt*	*61.2*	*53.2*	*49.8*	*59.7*	*54.5*	*217.2*	*220.5*	*(1)*	*(11)*
	Gold	*koz*	*36*	*33*	*39*	*45*	*41*	*158*	*140*	*13*	*14*
	Silver	*koz*	*395*	*331*	*321*	*393*	*372*	*1,417*	*1,389*	*2*	*(6)*
Cobar	Copper in concentrates	kt	11.1	11.8	11.0	10.7	12.7	46.2	43.5	6	14
	Silver in concentrates	koz	119	117	126	129	144	516	461	12	21
	Total Copper metal	**kt**	**45.8**	**31.8**	**32.6**	**40.5**	**33.9**	**138.8**	**151.1**	**(8)**	**(26)**
	Total Copper in concentrates	**kt**	**11.1**	**11.8**	**11.0**	**10.7**	**12.7**	**46.2**	**43.5**	**6**	**14**
	Total Gold	**koz**	**18**	**22**	**24**	**22**	**25**	**93**	**100**	**(7)**	**39**
	Total Silver	**koz**	**364**	**273**	**291**	**337**	**370**	**1,271**	**1,615**	**(21)**	**2**
Total Copper department											
	Copper	**kt**	**320.2**	**266.9**	**272.4**	**315.8**	**295.1**	**1,150.2**	**1,241.2**	**(7)**	**(8)**
	Cobalt	**kt**	**10.7**	**5.3**	**7.2**	**6.4**	**5.0**	**23.9**	**42.2**	**(43)**	**(53)**
	Zinc	**kt**	**26.7**	**36.9**	**16.4**	**44.2**	**44.9**	**142.4**	**102.4**	**39**	**68**
	Gold	**koz**	**55**	**56**	**50**	**64**	**66**	**236**	**223**	**6**	**20**
	Silver	**koz**	**2,916**	**2,922**	**2,122**	**3,386**	**3,635**	**12,065**	**11,120**	**8**	**25**

Metals and minerals

PRODUCTION FROM OWN SOURCES – ZINC ASSETS[1]

			Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	**2020**	2019	Change 2020 vs 2019 %	Change Q4 20 vs Q4 19 %
Kazzinc											
	Zinc metal	**kt**	**38.5**	**43.3**	**41.6**	**43.9**	**38.7**	**167.5**	**172.5**	**(3)**	**1**
	Lead metal	**kt**	**4.2**	**5.5**	**6.8**	**5.7**	**7.6**	**25.6**	**31.6**	**(19)**	**81**
	Lead in concentrates	**kt**	**–**	**–**	**–**	**–**	**–**	**–**	**2.8**	**(100)**	**n.m.**
	Copper metal[6]	**kt**	**12.7**	**8.7**	**8.8**	**10.6**	**8.9**	**37.0**	**44.0**	**(16)**	**(30)**
	Gold	**koz**	**177**	**150**	**144**	**175**	**190**	**659**	**634**	**4**	**7**
	Silver	**koz**	**1,214**	**844**	**936**	**1,218**	**1,714**	**4,712**	**4,546**	**4**	**41**
	Silver in concentrates	**koz**	**–**	**–**	**–**	**–**	**–**	**–**	**92**	**(100)**	**n.m.**
Kazzinc – total production including third party feed											
	Zinc metal	*kt*	*76.3*	*75.0*	*73.9*	*74.1*	*75.2*	*298.2*	*293.3*	*2*	*(1)*
	Lead metal	*kt*	*29.8*	*29.8*	*35.2*	*29.9*	*30.1*	*125.0*	*129.0*	*(3)*	*1*
	Lead in concentrates	*kt*	*–*	*–*	*–*	*–*	*–*	*–*	*2.8*	*(100)*	*n.m.*
	Copper metal	*kt*	*19.9*	*14.9*	*14.2*	*16.9*	*14.7*	*60.7*	*65.1*	*(7)*	*(26)*
	Gold	*koz*	*263*	*197*	*218*	*256*	*294*	*965*	*962*	*–*	*12*
	Silver	*koz*	*6,056*	*4,704*	*5,406*	*5,631*	*6,399*	*22,140*	*23,129*	*(4)*	*6*
	Silver in concentrates	*koz*	*–*	*–*	*–*	*–*	*–*	*–*	*92*	*(100)*	*n.m.*
Australia (Mount Isa, McArthur River)											
Mount Isa	Zinc in concentrates	kt	75.3	85.2	89.5	91.3	88.2	354.2	326.4	9	17
	Lead in concentrates	kt	33.8	38.1	41.3	43.6	38.9	161.9	158.0	2	15
	Silver in concentrates	koz	1,108	1,341	1,637	1,517	1,295	5,790	5,518	5	17
McArthur River	Zinc in concentrates	kt	70.4	68.5	68.6	65.8	76.4	279.3	271.2	3	9
	Lead in concentrates	kt	16.0	14.6	14.1	11.2	15.0	54.9	55.3	(1)	(6)
	Silver in concentrates	koz	525	472	340	315	487	1,614	1,675	(4)	(7)
	Total Zinc in concentrates	**kt**	**145.7**	**153.7**	**158.1**	**157.1**	**164.6**	**633.5**	**597.6**	**6**	**13**
	Total Lead in concentrates	**kt**	**49.8**	**52.7**	**55.4**	**54.8**	**53.9**	**216.8**	**213.3**	**2**	**8**
	Total Silver in concentrates	**koz**	**1,633**	**1,813**	**1,977**	**1,832**	**1,782**	**7,404**	**7,193**	**3**	**9**
North America (Matagami, Kidd)											
Matagami	Zinc in concentrates	kt	10.6	14.5	11.8	12.4	13.5	52.2	43.8	19	27
	Copper in concentrates	kt	1.3	1.8	1.6	1.4	1.9	6.7	5.6	20	46
Kidd	Zinc in concentrates	kt	15.8	19.3	11.8	18.7	12.7	62.5	67.6	(8)	(20)
	Copper in concentrates	kt	9.6	8.1	5.3	11.1	9.5	34.0	33.5	1	(1)
	Silver in concentrates	koz	561	517	412	679	517	2,125	1,654	28	(8)
	Total Zinc in concentrates	**kt**	**26.4**	**33.8**	**23.6**	**31.1**	**26.2**	**114.7**	**111.4**	**3**	**(1)**
	Total Copper in concentrates	**kt**	**10.9**	**9.9**	**6.9**	**12.5**	**11.4**	**40.7**	**39.1**	**4**	**5**
	Total Silver in concentrates	**koz**	**561**	**517**	**412**	**679**	**517**	**2,125**	**1,654**	**28**	**(8)**

Metals and minerals

PRODUCTION FROM OWN SOURCES – ZINC ASSETS[1] CONTINUED

		Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	**2020**	2019	Change 2020 vs 2019 %	Change Q4 20 vs Q4 19 %
Other Zinc: South America (Argentina, Bolivia, Peru)[7]										
Zinc in concentrates	**kt**	**31.0**	**27.9**	**14.8**	**33.7**	**35.9**	**112.3**	**93.6**	**20**	**16**
Lead in concentrates	**kt**	**6.2**	**3.5**	**4.0**	**5.9**	**3.6**	**17.0**	**32.3**	**(47)**	**(42)**
Copper in concentrates	**kt**	**0.4**	**0.4**	**0.2**	**0.5**	**0.5**	**1.6**	**2.7**	**(41)**	**25**
Silver in concentrates	**koz**	**1,851**	**1,574**	**844**	**1,871**	**1,832**	**6,121**	**6,906**	**(11)**	**(1)**
Total Zinc department										
Zinc	**kt**	**241.6**	**258.7**	**238.1**	**265.8**	**265.4**	**1,028.0**	**975.1**	**5**	**10**
Lead	**kt**	**60.2**	**61.7**	**66.2**	**66.4**	**65.1**	**259.4**	**280.0**	**(7)**	**8**
Copper	**kt**	**24.0**	**19.0**	**15.9**	**23.6**	**20.8**	**79.3**	**85.8**	**(8)**	**(13)**
Gold	**koz**	**177**	**150**	**144**	**175**	**190**	**659**	**634**	**4**	**7**
Silver	**koz**	**5,259**	**4,748**	**4,169**	**5,600**	**5,845**	**20,362**	**20,391**	**–**	**11**

Metals and minerals

PRODUCTION FROM OWN SOURCES – NICKEL ASSETS[1]

			Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	**2020**	2019	Change 2020 vs 2019 %	Change Q4 20 vs Q4 19 %
Integrated Nickel Operations (Sudbury, Raglan, Nikkelverk)											
	Nickel metal	**kt**	**14.9**	**14.5**	**13.1**	**13.8**	**15.1**	**56.5**	**59.8**	**(6)**	**1**
	Nickel in concentrates	**kt**	**0.1**	**0.1**	**0.1**	**–**	**0.2**	**0.4**	**0.5**	**(20)**	**100**
	Copper metal	**kt**	**4.7**	**3.4**	**2.9**	**3.4**	**3.8**	**13.5**	**15.8**	**(15)**	**(19)**
	Copper in concentrates	**kt**	**6.5**	**4.0**	**3.6**	**3.8**	**3.7**	**15.1**	**28.4**	**(47)**	**(43)**
	Cobalt metal	**kt**	**0.1**	**0.1**	**0.1**	**0.2**	**0.2**	**0.6**	**0.7**	**(14)**	**100**
	Gold	**koz**	**8**	**5**	**6**	**5**	**5**	**21**	**29**	**(28)**	**(38)**
	Silver	**koz**	**110**	**108**	**116**	**49**	**66**	**339**	**507**	**(33)**	**(40)**
	Platinum	**koz**	**3**	**12**	**12**	**6**	**10**	**40**	**51**	**(22)**	**233**
	Palladium	**koz**	**25**	**28**	**29**	**21**	**23**	**101**	**112**	**(10)**	**(8)**
	Rhodium	**koz**	**1**	**1**	**1**	**1**	**1**	**4**	**4**	**–**	**–**
	Nickel metal	*kt*	*23.4*	*22.4*	*21.3*	*23.9*	*23.5*	*91.1*	*92.1*	*(1)*	*–*
	Nickel in concentrates	*kt*	*0.2*	*0.1*	*0.1*	*0.1*	*0.1*	*0.4*	*0.6*	*(33)*	*(50)*
	Copper metal	*kt*	*6.3*	*5.1*	*4.6*	*5.3*	*5.5*	*20.5*	*22.0*	*(7)*	*(13)*
	Copper in concentrates	*kt*	*7.7*	*4.9*	*4.8*	*5.0*	*2.9*	*17.6*	*32.8*	*(46)*	*(62)*
	Cobalt metal	*kt*	*1.2*	*0.9*	*1.0*	*1.3*	*1.2*	*4.4*	*4.4*	*–*	*–*
	Gold	*koz*	*11*	*9*	*9*	*10*	*8*	*36*	*43*	*(16)*	*(27)*
	Silver	*koz*	*162*	*174*	*200*	*82*	*89*	*545*	*749*	*(27)*	*(45)*
	Platinum	*koz*	*19*	*21*	*22*	*13*	*16*	*72*	*84*	*(14)*	*(16)*
	Palladium	*koz*	*53*	*69*	*73*	*48*	*48*	*238*	*228*	*4*	*(9)*
	Rhodium	*koz*	*1*	*1*	*1*	*2*	*1*	*5*	*5*	*–*	*–*
Murrin Murrin											
	Total Nickel metal	**kt**	**9.7**	**7.6**	**10.2**	**9.5**	**9.1**	**36.4**	**36.6**	**(1)**	**(6)**
	Total Cobalt metal	**kt**	**1.1**	**0.7**	**0.9**	**0.7**	**0.6**	**2.9**	**3.4**	**(15)**	**(45)**
Murrin Murrin – total production including third party feed											
	Total Nickel metal	*kt*	*10.6*	*8.6*	*11.5*	*10.9*	*9.8*	*40.8*	*40.7*	*–*	*(8)*
	Total Cobalt metal	*kt*	*1.1*	*0.8*	*0.9*	*0.9*	*0.7*	*3.3*	*3.7*	*(11)*	*(36)*
Koniambo	**Nickel in ferronickel**	**kt**	**6.5**	**6.0**	**3.6**	**3.3**	**4.0**	**16.9**	**23.7**	**(29)**	**(38)**
Total Nickel department											
	Nickel	**kt**	**31.2**	**28.2**	**27.0**	**26.6**	**28.4**	**110.2**	**120.6**	**(9)**	**(9)**
	Copper	**kt**	**11.2**	**7.4**	**6.5**	**7.2**	**7.5**	**28.6**	**44.2**	**(35)**	**(33)**
	Cobalt	**kt**	**1.2**	**0.8**	**1.0**	**0.9**	**0.8**	**3.5**	**4.1**	**(15)**	**(33)**
	Gold	**koz**	**8**	**5**	**6**	**5**	**5**	**21**	**29**	**(28)**	**(38)**
	Silver	**koz**	**110**	**108**	**116**	**49**	**66**	**339**	**507**	**(33)**	**(40)**
	Platinum	**koz**	**3**	**12**	**12**	**6**	**10**	**40**	**51**	**(22)**	**233**
	Palladium	**koz**	**25**	**28**	**29**	**21**	**23**	**101**	**112**	**(10)**	**(8)**
	Rhodium	**koz**	**1**	**1**	**1**	**1**	**1**	**4**	**4**	**–**	**–**

Metals and minerals

PRODUCTION FROM OWN SOURCES – FERROALLOYS ASSETS[1]

		Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	**2020**	2019	Change 2020 vs 2019 %	Change Q4 20 vs Q4 19 %
Ferrochrome[8]	kt	408	388	78	185	378	1,029	1,438	(28)	(7)
Vanadium pentoxide	mlb	4.4	4.2	4.1	5.3	5.9	19.5	20.2	(3)	34

TOTAL PRODUCTION – CUSTOM METALLURGICAL ASSETS[1]

		Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	**2020**	2019	Change 2020 vs 2019 %	Change Q4 20 vs Q4 19 %
Copper (Altonorte, Pasar, Horne, CCR)										
Copper metal	kt	109.0	123.0	124.1	119.5	116.0	482.6	432.9	11	6
Copper anode	kt	132.3	127.4	102.8	125.5	134.4	490.1	510.7	(4)	2
Zinc (Portovesme, San Juan de Nieva, Nordenham, Northfleet)										
Zinc metal	kt	204.6	195.9	195.6	192.1	203.6	787.2	805.7	(2)	–
Lead metal	kt	50.6	44.6	54.7	52.9	45.8	198.0	190.5	4	(9)

Energy products

PRODUCTION FROM OWN SOURCES – COAL ASSETS[1]

		Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	**2020**	2019	Change 2020 vs 2019 %	Change Q4 20 vs Q4 19 %
Australian coking coal	mt	3.1	1.8	1.9	1.9	2.0	7.6	9.2	(17)	(35)
Australian semi-soft coal	mt	1.3	1.6	1.0	1.0	1.0	4.6	6.4	(28)	(23)
Australian thermal coal (export)	mt	16.4	14.5	14.9	13.5	12.8	55.7	64.2	(13)	(22)
Australian thermal coal (domestic)	mt	2.4	2.0	1.7	1.2	1.5	6.4	8.6	(26)	(38)
South African thermal coal (export)	mt	2.9	3.7	3.5	4.3	3.3	14.8	13.0	14	14
South African thermal coal (domestic)	mt	2.8	2.5	2.5	2.4	1.8	9.2	13.9	(34)	(36)
Prodeco	mt	4.3	3.8	–	–	–	3.8	15.6	(76)	(100)
Cerrejón[9]	mt	2.3	2.0	0.7	1.1	0.3	4.1	8.6	(52)	(87)
Total Coal department	**mt**	**35.5**	**31.9**	**26.2**	**25.4**	**22.7**	**106.2**	**139.5**	**(24)**	**(36)**

OIL ASSETS

		Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	**2020**	2019	Change 2020 vs 2019 %	Change Q4 20 vs Q4 19 %
Glencore entitlement interest basis										
Equatorial Guinea	kbbl	597	522	569	524	345	1,960	1,895	3	(42)
Chad	kbbl	1,106	1,083	29	–	–	1,112	3,371	(67)	(100)
Cameroon	kbbl	177	201	208	224	239	872	252	246	35
Total Oil department	**kbbl**	**1,880**	**1,806**	**806**	**748**	**584**	**3,944**	**5,518**	**(29)**	**(69)**
Gross basis										
Equatorial Guinea	kbbl	2,906	3,080	2,810	2,674	1,871	10,435	9,236	13	(36)
Chad	kbbl	1,511	1,481	40	–	–	1,521	4,608	(67)	(100)
Cameroon	kbbl	514	582	603	650	693	2,528	730	246	35
Total Oil department	**kbbl**	**4,931**	**5,143**	**3,453**	**3,324**	**2,564**	**14,484**	**14,574**	**(1)**	**(48)**

1 Controlled industrial assets and joint ventures only. Production is on a 100% basis except for joint ventures, where the Group's attributable share of production is included.
2 Cobalt contained in concentrates and hydroxides.
3 The Group's pro-rata share of Collahuasi production (44%).
4 Reported from Q4 2020 given higher gold price and production, with resulting increased materiality. Comparatives updated accordingly.
5 The Group's pro-rata share of Antamina production (33.75%).
6 Copper metal includes copper contained in copper concentrates and blister.
7 South American production excludes Volcan Compania Minera.
8 The Group's attributable 79.5% share of the Glencore-Merafe Chrome Venture.
9 The Group's pro-rata share of Cerrejón production (33.3%).

FULL YEAR 2021 PRODUCTION GUIDANCE

		Actual FY 2018	Actual FY 2019	**Actual FY 2020**	**Guidance FY 2021**
Copper	kt	1,454	1,371	**1,258**	**1,220 ± 30** [1]
Cobalt	kt	42.2	46.3	**27.4**	**35 ± 2**
Zinc	kt	1,068	1,078	**1,170**	**1,250 ± 30** [2]
Nickel	kt	124	121	**110**	**117 ± 5**
Ferrochrome	kt	1,580	1,438	**1,029**	**1,400 ± 30**
Coal	mt	129	140	**106**	**113 ± 4**

1 Excludes Mopani.
2 Excludes Volcan.

Important notice concerning this document including forward looking statements

This document contains statements that are, or may be deemed to be, “forward looking statements” which are prospective in nature. These forward looking statements may be identified by the use of forward looking terminology, or the negative thereof such as “outlook”, "plans", "expects" or "does not expect", "is expected", "continues", "assumes", "is subject to", "budget", "scheduled", "estimates", "aims", "forecasts", "risks", "intends", "positioned", "predicts", "anticipates" or "does not anticipate", or "believes", or variations of such words or comparable terminology and phrases or statements that certain actions, events or results "may", "could", "should", “shall”, "would", "might" or "will" be taken, occur or be achieved. Forward-looking statements are not based on historical facts, but rather on current predictions, expectations, beliefs, opinions, plans, objectives, goals, intentions and projections about future events, results of operations, prospects, financial condition and discussions of strategy.

By their nature, forward-looking statements involve known and unknown risks and uncertainties, many of which are beyond Glencore’s control. Forward looking statements are not guarantees of future performance and may and often do differ materially from actual results. Important factors that could cause these uncertainties include, but are not limited to, those disclosed in the last published annual report and half-year report, both of which are freely available on Glencore’s website.

For example, our future revenues from our assets, projects or mines will be based, in part, on the market price of the commodity products produced, which may vary significantly from current levels. These may materially affect the timing and feasibility of particular developments. Other factors include (without limitation) the ability to produce and transport products profitably, demand for our products, changes to the assumptions regarding the recoverable value of our tangible and intangible assets, the effect of foreign currency exchange rates on market prices and operating costs, and actions by governmental authorities, such as changes in taxation or regulation, and political uncertainty.

Neither Glencore nor any of its associates or directors, officers or advisers, provides any representation, assurance or guarantee that the occurrence of the events expressed or implied in any forward-looking statements in this document will actually occur. You are cautioned not to place undue reliance on these forward-looking statements which only speak as of the date of this document.

Except as required by applicable regulations or by law, Glencore is not under any obligation and Glencore and its affiliates expressly disclaim any intention, obligation or undertaking, to update or revise any forward looking statements, whether as a result of new information, future events or otherwise. This document shall not, under any circumstances, create any implication that there has been no change in the business or affairs of Glencore since the date of this document or that the information contained herein is correct as at any time subsequent to its date.

No statement in this document is intended as a profit forecast or a profit estimate and past performance cannot be relied on as a guide to future performance. This document does not constitute or form part of any offer or invitation to sell or issue, or any solicitation of any offer to purchase or subscribe for any securities.

The companies in which Glencore plc directly and indirectly has an interest are separate and distinct legal entities. In this document, “Glencore”, “Glencore group” and “Group” are used for convenience only where references are made to Glencore plc and its subsidiaries in general. These collective expressions are used for ease of reference only and do not imply any other relationship between the companies. Likewise, the words “we”, “us” and “our” are also used to refer collectively to members of the Group or to those who work for them. These expressions are also used where no useful purpose is served by identifying the particular company or companies.