AngloAmerican

YEAR END FINANCIAL REPORT

for the year ended 31 December 2022

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23 February 2023

Anglo American Preliminary Results 2022

Portfolio quality, diversification and growth support underlying EBITDA of $14.5 billion

Financial highlights for the year ended 31 December 2022

- Underlying EBITDA* of $14.5 billion
- Profit attributable to equity shareholders of $4.5 billion
- Net debt* of $6.9 billion (<0.5 x underlying EBITDA): cash generation offset by investment in value-adding growth
- Woodsmith impaired by $1.7 billion due to extended development schedule and budget, designed to deliver maximum returns over long life of asset
- Quellaveco commissioned on time and on budget: multi-decade copper operation ramping up
- $0.9 billion final dividend, equal to $0.74 per share, consistent with our 40% payout policy.

Duncan Wanblad, Chief Executive of Anglo American, said: "Anglo American offers a differentiated investment proposition of portfolio quality, diversification and growth, positioning us strongly for the structurally attractive long term dynamics. Our unwavering focus is on driving consistent performance across our operations – which starts with the safety and health of our employees – and progress towards our full suite of sustainability ambitions, including our 2040 carbon neutral operations commitment.

"Safety always comes first as we strive to reach zero harm for every one of our people, every single day. While we continue to make progress on our long term safety journey and further develop our safety processes and procedures, we were deeply saddened to lose two colleagues at our managed operations during the year. We will not rest until zero harm is achieved and sustained across our business.

"We continued to feel the effects of dislocations in the global economy on our business in 2022 – in energy, and across supply chains and labour markets. Extreme weather has disrupted the lives of so many, with exceptional rainfall also setting back several of our operations, while the energy crisis caused policymakers to react to mitigate sharply higher inflation. With that backdrop, we built momentum during the year with our focus on regaining operational stability and targeted incremental performance improvement.

"Underlying EBITDA of $14.5 billion, a 30% decrease compared with the record achieved in 2021, reflects inflationary headwinds and higher energy prices combined with lower production volumes which, together, lifted our production costs amid dampened prices for many of our products. We delivered a return on capital employed of 30% – above our targeted 15% through-the-cycle return – and a mining EBITDA margin of 47%. Our commitment to capital discipline and to a strong and flexible balance sheet is paramount to remain resilient to the external environment and retain optionality for value-adding growth. Net debt increasing to $6.9 billion, or less than 0.5 x underlying EBITDA, reflects the growth investments we are making in line with our belief in the strong long term fundamentals. Our $0.9 billion final dividend of $0.74 per share is in line with our 40% payout policy.

"The fundamental demand picture for future-enabling metals and minerals – particularly those that are responsibly sourced with traceable provenance – is ever more compelling. Our new Quellaveco copper operation in Peru increases our global production base by 10%[(1)] and is the cornerstone of our value-adding growth potential of 25%[(2)] over the next decade, with further optionality beyond, from copper to crop nutrients. As most of the world's major economies accelerate their decarbonisation efforts and as the global population increases and continues to urbanise, we aim to keep growing the value of our business into that demand."

Year ended US$ million, unless otherwise stated	31 December 2022	31 December 2021	Change
Revenue	35,118	41,554	(15) %
Underlying EBITDA*	14,495	20,634	(30) %
Mining EBITDA margin*	47 %	56 %	
Attributable free cash flow*	1,585	7,803	(80) %
Profit attributable to equity shareholders of the Company	4,514	8,562	(47) %
Basic underlying earnings per share* ($)	4.97	7.22	(31) %
Basic earnings per share ($)	3.72	6.93	(46) %
Final dividend per share ($)	0.74	1.18	(37) %
Interim dividend per share ($)	1.24	1.71	(27) %
Additional returns per share ($)	—	2.10	n/a
Total dividend and buyback per share ($)	1.98	4.99	(60) %
Group attributable ROCE*	30 %	43 %	

See page 2 for footnotes.Terms with this symbol * are defined as Alternative Performance Measures (APMs). For more information, refer to page 86.

Sustainability performance

Key sustainability performance indicators[3]

Anglo American tracks its strategic progress using KPIs that are based on our seven pillars of value: safety and health, environment, socio-political, people, production, cost, and financial. In addition to the financial performance set out above and our operational performance on pages 7–40, our performance for the first four pillars is set out below:

Pillar of value	Metric	31 December 2022	31 December 2021[4]	Target	Target achieved
Safety and health	Work-related fatal injuries[5]	2	2	Zero	Not achieved
	Total recordable injury frequency rate per million hours[5]	2.19	2.24	Year-on-year reduction	On track
	New cases of occupational disease	5	16	Year-on-year reduction	On track
	Employees potentially exposed to noise over 85 dBA[6][7]	23,179	30,832	Year-on-year reduction	On track
	Employees potentially exposed to inhalable hazards over the occupational exposure limit [6][7]	317	1,796	5% reduction year-on-year	On track
Environment	Energy consumption (million GJ)[7]	83	84	Improve energy efficiency by 30% by 2030	On track
	GHG emissions - Scopes 1 & 2 (Mt CO_2e)[7]	13.3	14.5	Reduce absolute GHG emissions by 30% by 2030	On track
	Fresh water withdrawals (ML)[7][8]	35,910	36,888	Reduce fresh water abstraction in water scarce areas by 50% by 2030	On track
	Level 4-5 environmental incidents[7]	0	0	Zero	On track
Socio-political	Social Way 3.0 implementation[9]	66 %	49 %	Full implementation of the Social Way 3.0 by end 2022	Behind schedule
	Local procurement spend ($bn)[10]	13.6	10.0		
	Taxes and royalties ($m)[11]	5,893	7,134		
	Number of jobs supported off site[12]	114,534	104,860		
People	Women in management	32 %	31 %	To achieve 33% by 2023	On track
	Women in the workforce	24 %	23 %		
	Voluntary labour turnover	3.6 %	3.5 %	< 5%	On track

(1) Copper equivalent volume growth from 2022 baseline, pre the commissioning of Quellaveco.

(2) Copper equivalent production basis. Calculated including the equity share of De Beers' production and using long term consensus parameters. It is normalised to reflect the demerger of the South Africa thermal coal operations and the sale of our interest in Cerrejón. Future production levels are indicative and subject to final approval.

(3) Sustainability performance indicators for the year ended 31 December 2022, and the comparative period, are not externally assured, unless otherwise stated.

(4) 2021 data includes Thermal Coal South Africa until the date of the Thungela demerger on 4 June 2021, unless otherwise stated.

(5) Safety data is externally assured. The work-related fatal injuries figure presented for 2021 has been restated to reflect the death of an employee in April 2022, following a fall-related injury in November 2021. While the Group's TRIFR improved year-on-year, it has not yet decreased below the rate

experienced in 2020. The focused safety interventions in the second half of 2022 did, however, result in a significant improvement in our injury rates, with a H2 2022 TRIFR of 2.00.

(6) Reflects the number of employees who work in environments where there is potential for exposure above the exposure limit. All employees working in such environments are issued with protective equipment to prevent occupational illness.

(7) Energy, GHG emissions, occupational exposure, fresh water withdrawals and Level 4–5 environmental incidents data is externally assured. Energy, GHG emissions, fresh water withdrawals and occupational exposure data for 2021 excludes Thermal Coal South Africa.

(8) Water metric and data have been revised in line with our fresh water definition.

(9) While sites are assessed annually against all requirements applicable to their context, for consistency during the transition period, the metric reflects performance against the Social Way foundational requirements. For further information on progress, see page 5.

(10) Local procurement spend relates to spend within the country where an operation is located. The basis of calculation reflects the Group's financial accounting consolidation, i.e. 100% of subsidiaries and a proportionate share of joint operations, based on Anglo American's shareholding.

(11) Taxes and royalties include all taxes and royalties borne and taxes collected by the Group. This includes corporate income taxes, withholding taxes, mining taxes and royalties, employee taxes and social security contributions and other taxes, levies and duties directly incurred by the Group, as well as taxes incurred by other parties (e.g. customers and employees) but collected and paid by the Group on their behalf. Figures disclosed are based on cash remitted, net of entities consolidated for accounting purposes, plus a proportionate share, based on the percentage shareholding, of joint operations. Taxes borne and collected by equity accounted associates and joint ventures are not included.

(12) Jobs supported since 2018, in line with the Sustainable Mining Plan Livelihoods stretch goal.

Safety

Anglo American's most important priority is always safety – keeping our colleagues safe and well. We believe everybody, everywhere should return home each and every day. 'Always safe' is our safety vision and safety is our number one value.

In 2022, we continued to implement our safety strategy through targeted tactics, and by investing in systems, standards and people. We enabled this through digital innovation and advanced systems, informing and eliminating and minimising risk wherever possible as we seek to be an innovative safety leader.

While we continue to make progress on our long term safety journey, we were deeply saddened to lose two colleagues at our managed operations during the year – at our Steelmaking Coal business in Australia and at a De Beers operation in Canada, as well as the loss of a colleague from a complication following an injury sustained in our PGMs business in 2021. We also lost one colleague at an non-managed PGMs joint operation in South Africa. As well as thoroughly and rigorously investigating each of these tragic incidents and sharing learnings internally, we are committed to also sharing those learnings across the industry so that action can be taken to help prevent repeats and achieve our 'Always safe' vision on a sustainable basis.

We are unconditional about safety, and we will not rest until zero harm is achieved and sustained across our business. We have shown it can be done for long stretches of time and now we must make it permanent. Everyone is empowered to be a leader in safety and has a role to play in delivering an injury-free and fatality-free workplace.

Our total recordable injury frequency rate (TRIFR) improved by 2% to 2.19 (2021: 2.24), reflecting the urgent safety reset and calls to action completed across the Group in the second half of the year, in response to the fatal incidents and the deterioration in overall safety performance in the first half. We remain absolutely committed to working towards a step-change in the reduction of injuries.

Safety is often the first topic discussed in meetings across the Group, from operations to our corporate offices. We continually focus on improving our safety performance by strengthening our culture, including ensuring our workforce feels safe to speak up about concerns related to safety, and making specific safety interventions when we see deficiencies in our operations.

During 2022, our areas of focus included Chief Executive safety summits with senior leaders from across the business units; observing and actively monitoring mandatory critical controls for common catastrophic and fatal risks; sharing of lessons learned and actions taken from incidents across the organisation; safety stand-downs (voluntary events to pause production and talk with employees and contractors about safety); employee-engagement sessions; and enhanced reporting and progress tracking of safety-improvement initiatives.

We also held Contractor Safety Engagement Summits between senior Anglo American leaders and key suppliers around the world.

Health

Our health focus remains on helping keep our people protected from Covid-19, while sustaining our work to continuously improve our key health measures. We continued to work to prevent the spread of Covid-19 among our employees and in our host communities, primarily through testing and providing access to vaccines and boosters as part of our WeCare programme. This approach provides three phases of support — Prevention, Response and Recovery – relating to physical health, mental health, living with dignity, and community response interventions.

Alongside the continued deployment of testing, we also focused on vaccine access. We worked in close partnership with national and local governments around the world to help deliver vaccinations to our employees, contractors and host communities. We have mobilised resources to manage 'long Covid', where people continue to feel symptoms of the disease for weeks or even months after its typical course.

In 2022, there were 5 reported new cases of occupational disease, all related to noise exposure (2021:16). Reducing exposure to noise, which remains our single greatest occupational health risk, is a significant challenge. While all our employees are issued with and trained in the use of PPE, there are still as many as 23,000 employees in the workplace where noise levels can exceed applicable exposure levels, rending the proper use of PPE necessary as a mitigation mechanism. The identification and monitoring of critical noise controls allow us to analyse the effectiveness of our controls and develop additional measures. The comprehensive roll-out of diesel particulate filters across our PGMs business contributed to the reduction in employees exposed to inhalable hazards.

In 2022, we focused on the implementation of our Health and Well-being strategy in line with the World Health Organization (WHO) principles, covering employee health, in accordance with our global approach to quality of life.

We understand there is a continuum between the workplace and home and host communities. We are committed to dedicating the resources required to apply evidence-based interventions, including emerging digital solutions, aimed at reducing risks associated with occupational diseases, as well as with unhealthy lifestyles, including smoking and poor diet.

Our many years of work with employees and host communities on HIV/AIDS and TB, and over nearly three years on Covid-19, have positioned us to extend our learnings from managing communicable diseases to non-communicable diseases, a major focus in 2022.

The launch of our digital health strategy is driven by the concept of virtual care and our ability to use mobile data devices and a growing range of applications to help individuals harness their own health information.

People

Tightly linked to our safety imperative and our Values, we strive to create a workplace that places people even more at its heart. People are central to everything we do, and each individual has expectations of us. Workforce engagement is a priority for every leader at Anglo American and we aim to create safe, inclusive and diverse workplaces that encourage high performance and innovative thinking. We have zero tolerance for any form of bullying, harassment or victimisation and we know there is no room for complacency when it comes to culture in any organisation. To that end, we have extensive training, systems and processes in place to keep improving both physical and psychological safety. We will continue to embed and launch initiatives that will allow us to realise our vision of a truly inclusive workplace where every employee can reach their full potential.

We also continue to make further progress to reach our gender representation goal of 33% female representation by the end of 2023 at all management levels, across the business. We have set a similar target for 33% of our Group Management Committee and those reporting to the committee to be women by the end of 2023. The proportion of women at this level was in line with the prior year at 29%. At the end of 2022, and across Anglo American as a whole, 24% of our employees were women.

Living with Dignity – building a safe and inclusive culture

Building a safe and inclusive culture has been a focus for us for a number of years and this is constant work for any company or society. We are committed to listening to our people and other stakeholders that are close to our business every day.

We have long understood the role of our business in society, and we believe that this extends beyond our own mine gates. We launched our Living with Dignity programme in 2019, founded on the belief that everyone has the right to dignity – in our homes, schools, at work and everywhere in between. Through this programme, Anglo American is working collaboratively with our partners in government and civil society to build sustainable partnerships aimed at providing direct employee and community support to combat gender-based and domestic violence.

We continue to build on this important work and we have now established our Living with Dignity Hub in South Africa that brings together our policies and its mandates to provide ongoing and committed support to our employees, contractors and their families. The hub handles all formal complaints of sexual harassment and gender-based violence and bullying, harassment and victimisation across our South African footprint and is overseen by an independent Ambassador to ensure we stand by our policies and remain committed to amplifying our efforts.

Environment

Our Sustainable Mining Plan includes commitments to be a leader in environmental stewardship. By 2030, we aim to reduce GHG emissions (Scopes 1 and 2) by 30%; improve energy efficiency by 30%; achieve a 50% reduction in fresh water abstraction in water scarce areas; and deliver net-positive impacts in biodiversity wherever we operate.

Our environmental performance continues to improve. In 2022, we saw no Level 5 environmental incidents at our managed operations, for the tenth consecutive year, and no Level 4 incidents. There was, unfortunately, one Level 3 incident reported in 2022, at our Polokwane PGMs smelter, related to water discharge following a period of significant storm water. The discharge did not result in any environmental toxic impact. A full investigations was carried out and lessons learned across both PGMs and the wider Anglo American Group. We launched a ‘no repeats’ challenge last year to help us learn from low level incidents and prevent repeats of a similar nature across the business, which has led to improvements in controls, specifically helping to prevent significant incidents.

Both energy consumption and GHG emissions decreased in the year and we remain committed to improving energy efficiency by 30% and reducing absolute GHG emissions by 30%, by 2030. We have a target to be carbon neutral across our operations by 2040, and an ambition to halve our Scope 3 emissions, also by 2040. We are making encouraging progress. In 2020, around one third of the electricity Anglo American used globally was drawn from renewables. Having secured 100% renewable electricity supply across our operations in South America from 2023, and for our Steelmaking Coal operations in Australia from 2025, we expect to be drawing approximately 60% of our global grid supply from renewables from 2025.

As part of the our ambition to reduce our Scope 3 emissions by 50% by 2040, we are focusing on hard-to-abate sectors such as steel – from which most of our value chain emissions derive. We are joining forces with steelmakers in Europe and Asia to research efficient feed materials – capitalising on the premium physical and chemical qualities of our minerals, including iron ore pellets and lump iron ore. These premium products are suited for use in the direct reduced iron (DRI) process, a technically proven and significantly less carbon intensive steel production method.

Examples of this approach include the memorandum of understanding (MOU) announced in July, between Anglo American and Nippon Steel Corporation, where the two companies will research ways to optimise premium lump ore produced by Anglo American’s mines to decrease emissions via the traditional blast furnace (BF) steelmaking process; and the MOU announced in October, between Anglo American and its longstanding customer Thyssenkrupp Steel, to collaborate on developing new pathways for the decarbonisation of steelmaking.

Socio-political

In 2022, we continued working to strengthen and broaden our social performance competencies through embedding the Social Way 3.0 (launched in 2020) across the organisation. As part of the implementation process, each site and function has established cross-functional Social Performance Management Committees.

Over 2,000 people across the business have participated in Social Way training sessions since 2020. This includes orientation sessions for leaders, completing Social Way Foundation Training, as well as cross-functional Social Way Foundation Training for non-social performance teams, at all sites, business units and relevant functions.

At the end of 2022, 66% of Social Way 3.0 foundational requirements were implemented. While we did not meet our ambitious goal of implementation of the Social Way 3.0 at all sites by the end of 2022, we continued to make significant progress and recognise the very much higher standards (the highest that we are aware of across our industry) required of this third version of our social management system. The programme is critical to underpinning many of our ambitious 2030 Sustainable Mining Plan targets, demonstrating our commitment to partnering with host communities and governments.

The success of our business drives tax revenues for host communities, in addition to significant royalty and mining tax payments made regardless of our profitability, and our broader economic contribution to other stakeholders. Total taxes and royalties borne and taxes collected amounted to $5.9 billion, a 17% decrease compared with 2021.

Anglo American has committed to support three off site jobs by 2025, and five off site jobs by 2030 for every on site job. Since the launch our Sustainable Mining Plan, 114,534 off site jobs have been supported through socio-economic development programmes, including local procurement, enterprise and supplier development initiatives, training, mentoring and capacity development, loan funding to small businesses, agriculture programmes, and collaborative regional development initiatives.

In June, we signed a $100 million 10-year sustainability-linked loan agreement with the International Finance Corporation. The specific goals tied to the loan agreement are aimed at supporting community development in rural communities close to our operations across South Africa, including by promoting the creation of jobs, as well as improving the quality of education for more than 73,000 students.

In September, we issued our first sustainability-linked bond, including performance targets to reduce greenhouse gas emissions and fresh water abstraction, and to support job creation in host communities. This €745 million bond is the first instrument issued following the publication of Anglo American's Sustainability Financing Framework and bond investors will be entitled to a higher final coupon payment should the company not meet the targets.

Sustainable Mining Plan – update in progress

We launched Anglo American's Sustainable Mining Plan in 2018, setting out three sustainability pillars and a number of medium and longer term stretch goals for each, guided by our Purpose and supported by six critical foundations that underpin how we do business. The three pillars of Healthy Environment, Thriving Communities, and Trusted Corporate Leader encapsulate the holistic realities of what it means to be a socially responsible and ultimately sustainable business. We continue to make good progress towards our 2025 and 2030 goals, as laid out in the table on page 2, in addition to progress towards our 2040 carbon neutral operations target that we added in 2020.

Our Sustainable Mining Plan is designed to be a living plan and we will continue to evolve it to ensure it stays relevant and suitably stretching, in tune with our employees' and stakeholders' ambitions for our business. We are currently exploring a number of areas that we feel would benefit from being incorporated into the Sustainable Mining Plan and will update the plan when we have developed these options more fully.

Operational and financial review of Group results for the year ended 31 December 2022

Operational performance

The impact of adverse weather and planned lower grades at many of our operations contributed to a 2% production decrease on a copper equivalent basis[(1)]. Extreme rainfall in Brazil, South Africa and Australia affected iron ore production at Minas-Rio and Kumba, steelmaking coal production at Capcoal and Dawson, and nickel production at Barro Alto. First copper concentrate production from our newly commissioned Quellaveco copper mine in Peru more than offset lower production at our copper operations in Chile that were due to planned lower grades at Los Bronces and Collahuasi. Lower grades also impacted production at Mogalakwena (PGMs) and Barro Alto (Nickel). The planned end of mining at the Grasstree steelmaking coal operation was partially offset by the ramp-up of the replacement Aquila longwall. De Beers increased production in line with continued strong demand for rough diamonds.

De Beers' rough diamond production increased by 7% to 34.6 million carats (2021: 32.3 million carats), reflecting strong operational performance and higher planned levels of production to meet continued strong demand for rough diamonds, particularly in the first half of the year.

Total copper production of 664,500 tonnes increased by 3% (2021: 647,200 tonnes). Copper Chile's production of 562,200 tonnes was 13% lower than the prior year (2021: 647,200 tonnes), principally driven by Los Bronces, where production decreased by 17% to 270,900 tonnes (2021: 327,700 tonnes) due to planned lower grades, coupled with unfavourable ore characteristics and unplanned stoppages. Planned lower grades at Collahuasi resulted in a 9% decrease in attributable production to 251,100 tonnes (2021: 277,200 tonnes). Copper Peru (Quellaveco) delivered 102,300 tonnes of production, reflecting the ongoing ramp-up of the newly commissioned mine in July 2022.

Nickel production decreased by 5% to 39,800 tonnes (2021: 41,700 tonnes), primarily due to lower ore grades as a result of licensing delays, as well as the impact of unplanned maintenance and heavy rainfall.

Total PGM production decreased by 6% to 4,024,000 ounces (2021: 4,298,700 ounces), principally due to lower grade at Mogalakwena and the impact of planned infrastructure closures at Amandelbult, partially offset by increased production from Mototolo and Unki.

Iron ore production decreased by 7% to 59.3 Mt (2021: 63.8 Mt). At Kumba, production decreased by 8% to 37.7 Mt (2021: 40.9 Mt), reflecting the impact of high rainfall across Kumba's operating footprint and a safety intervention at Kolomela, as well as equipment reliability and the impact of third-party logistics constraints at both mines. Minas-Rio production decreased by 6% to 21.6 Mt (2021: 22.9 Mt) due to more challenging ore feed characteristics, lower mining equipment availability and heavy rainfall.

Steelmaking coal production was in line with the prior year at 15.0 Mt (2021: 14.9 Mt), with all three underground longwalls operating in the second half of 2022. The planned end of mining at the Grasstree operation in January 2022 was partially offset by the ramp-up of the replacement Aquila longwall, which began operations in February and fully ramped up in June. Production was also impacted by tight labour markets and record unseasonal rainfall at the open pit operations.

Manganese ore production was in line with the prior period at 3.7 Mt (2021: 3.7 Mt).

Group copper equivalent unit costs[(1)] increased by 15% in US dollar terms, largely due to lower production volumes and inflationary pressures, particularly diesel, partially offset by favourable foreign exchange.

(1) Copper equivalent production and unit cost is normalised to reflect the demerger of the South Africa thermal coal operations and the sale of our shareholding in Cerrejón.

Financial performance

Anglo American's profit attributable to equity shareholders decreased to $4.5 billion (2021: $8.6 billion). Underlying earnings were $6.0 billion (2021: $8.9 billion), while operating profit was $9.2 billion (2021: $17.6 billion).

Underlying EBITDA*

Group underlying EBITDA decreased by $6.1 billion to $14.5 billion (2021: $20.6 billion) due to a decrease in the price for the Group's basket of products, lower sales volumes and higher input costs across the Group. As a result, the Group Mining EBITDA margin* of 47% was lower than the prior year (2021: 56%). A reconciliation of 'Profit before net finance costs and tax', the closest equivalent IFRS measure to underlying EBITDA, is provided within note 3 to the Condensed financial statements.

Underlying EBITDA* by segment

$ million	Year ended 31 December 2022	Year ended 31 December 2021
De Beers	**1,417**	1,100
Copper	**2,182**	4,011
Nickel	**381**	320
PGMs	**4,417**	7,099
Iron Ore	**3,455**	6,871
Steelmaking Coal	**2,749**	962
Manganese	**378**	315
Crop Nutrients	**(44)**	(41)
Corporate and other	**(440)**	(3)
Total	**14,495**	20,634

Underlying EBITDA* reconciliation for the year ended 31 December 2021 to year ended 31 December 2022

The reconciliation of underlying EBITDA from $20.6 billion in 2021 to $14.5 billion in 2022 shows the major controllable factors (e.g. cost and volume), as well as those outside of management control (e.g. price, foreign exchange and inflation), that drive the Group's performance.

$ billion	
2021 underlying EBITDA*	**20.6**
Price	**(2.2)**
Foreign exchange	**1.1**
Inflation	**(0.9)**
Net cost and volume	**(3.3)**
Other	**(0.8)**
2022 underlying EBITDA*	**14.5**

Price

Average market prices for the Group's basket of products decreased by 6% compared to 2021, reducing underlying EBITDA by $2.2 billion. Realised prices decreased for iron ore (29%), copper (15%) and the PGMs basket (8%) – primarily driven by rhodium, which decreased by 20%. These were partly offset by steelmaking coal prices, where the weighted average price increased by 52%, and De Beers, where the realised price increased by 35%.

Foreign exchange

The favourable foreign exchange impact on underlying EBITDA of $1.1 billion reflected weaker local currencies in many of our countries of operation, principally the South African rand.

Inflation

The Group's weighted average CPI for the year was 8%, compared with 5% in 2021, as inflation increased in all regions. The impact of CPI inflation on costs reduced underlying EBITDA by $0.9 billion.

Net cost and volume

The net impact of cost and volume was a $3.3 billion reduction in underlying EBITDA, driven by lower PGM sales from planned lower refined volumes following the higher than normal work-in-progress inventory in 2021, and the impact of the Polokwane smelter rebuild in the second half of 2022; lower copper sales from the Chile operations owing to planned lower grades at all sites, coupled with unfavourable ore characteristics and unplanned stoppages at Los Bronces; lower sales volumes at Kumba owing to third-party logistics constraints; and lower sales volumes at Minas-Rio due to challenging ore characteristics, lower mining equipment availability and heavy rainfall. In addition to these volume impacts, inflationary pressures (other than CPI) contributed to an increase in costs across the Group. This was partly offset by the start of copper concentrate sales volumes in September 2022, and the ongoing ramp-up of the newly commissioned Quellaveco mine.

Other

The $0.8 billion unfavourable movement in underlying EBITDA from other factors was driven by the demerger and sale of thermal coal assets, resulting in an EBITDA reduction of $0.2 billion. Also included are increases in environmental restoration provisions of $0.2 billion at the copper business in Chile and $0.1 billion at De Beers, and the impact of lower sales volumes and cost pressures at our associates and joint operations.

Underlying earnings*

Group underlying earnings decreased to $6.0 billion (2021: $8.9 billion), driven by the lower underlying EBITDA, partly offset by a corresponding decrease in income tax expense and earnings attributable to non-controlling interests.

Reconciliation from underlying EBITDA* to underlying earnings*

$ million	Year ended 31 December 2022	Year ended 31 December 2021
Underlying EBITDA*	14,495	20,634
Depreciation and amortisation	(2,532)	(2,844)
Net finance costs and income tax expense	(4,307)	(5,783)
Non-controlling interests	(1,620)	(3,082)
Underlying earnings*	**6,036**	8,925

Depreciation and amortisation

Depreciation and amortisation decreased by 11% to $2.5 billion (2021: $2.8 billion), reflecting the lower cost base of Steelmaking Coal assets due to the impairment recognised in 2021, foreign currency exchange impacts and the demerger and sale of thermal coal assets in the prior year.

Net finance costs and income tax expense

Net finance costs, before special items and remeasurements, were in line with the prior year at $0.3 billion (2021: $0.3 billion).

The underlying effective tax rate was 34.0% (2021: 31.4%). The underlying effective tax rate was impacted by the relative levels of profits arising in the Group's operating jurisdictions. The tax charge for the period, before special items and remeasurements, was $3.6 billion (2021: $5.3 billion). Over the longer term, the underlying effective tax rate is expected to be in the range of 33% to 37%.

Non-controlling interests

The share of underlying earnings attributable to non-controlling interests of $1.6 billion (2021: $3.1 billion) principally relates to minority shareholdings in Kumba (Iron Ore), PGMs and Copper.

Special items and remeasurements

Special items and remeasurements (after tax and non-controlling interests) are a net charge of $1.5 billion (2021: net charge of $0.4 billion), principally relating to impairments after tax and non-controlling interests of $1.7 billion recognised in Crop Nutrients, and $0.1 billion recognised in Kumba, partially offset by an impairment reversal after tax of $0.3 billion at Steelmaking Coal.

Full details of the special items and remeasurements recorded are included in note 9 to the Condensed financial statements.

Net debt*

$ million	2022	2021
Opening net debt* at 1 January	**(3,842)**	(5,530)
Underlying EBITDA* from subsidiaries and joint operations	**13,370**	19,808
Working capital movements	**(2,102)**	1,059
Other cash flows from operations	**621**	(279)
Cash flows from operations	**11,889**	20,588
Capital repayments of lease obligations	**(266)**	(336)
Cash tax paid	**(2,726)**	(4,341)
Dividends from associates, joint ventures and financial asset investments	**602**	236
Net interest[1]	**(253)**	(245)
Dividends paid to non-controlling interests	**(1,794)**	(2,838)
Sustaining capital expenditure[2]	**(4,143)**	(3,437)
Sustaining attributable free cash flow*	**3,309**	9,627
Growth capital expenditure and other[2]	**(1,724)**	(1,824)
Attributable free cash flow*	**1,585**	7,803
Dividends to Anglo American plc shareholders	**(3,549)**	(4,047)
Disposals	**564**	63
Foreign exchange and fair value movements	**(238)**	(227)
Other net debt movements[3]	**(1,438)**	(1,904)
Total movement in net debt*	**(3,076)**	1,688
Closing net debt* at 31 December	**(6,918)**	(3,842)

(1) Includes cash outflows of $14 million (2021: inflows of $101 million), relating to interest receipts on derivatives hedging net debt, which are included in cash flows from derivatives related to financing activities.

(2) Following an amendment to IAS16 Proceeds before intended use, operating cash flows relating to sustaining and growth capital expenditure are no longer capitalised. For further details, refer to note 2 of the Condensed Financial Statements. Included within sustaining capital expenditure for the year ended 31 December 2021 is $8 million of capitalised operating cash flows relating to life-extension projects. 'Growth capital expenditure and other' includes $129 million (2021: $68 million) of expenditure on non-current intangible assets and $4 million of capitalised operating cash flows relating to growth projects for the year ended 31 December 2021.

(3) Includes the purchase of shares under the 2021 buyback of $186 million; the purchase of shares for other purposes (including for employee share schemes) of $341 million; Mitsubishi's share of Quellaveco capital expenditure of $446 million; other movements in lease liabilities (excluding variable vessel leases) decreasing net debt by $33 million; and contingent and deferred consideration paid in respect of acquisitions completed in previous years of $165 million. 2021 includes the purchase of shares under a buyback of $814 million; the purchase of shares for other purposes (including for employee share schemes) of $270 million; Mitsubishi's share of Quellaveco capital expenditure of $530 million; other movements in lease liabilities (excluding variable vessel leases) increasing net debt by $340 million; dividends received from Cerrejón of $240 million; and contingent and deferred consideration paid in respect of acquisitions completed in previous years of $117 million.

Net debt (including related derivatives) of $6.9 billion has increased by $3.1 billion since 31 December 2021, driven by working capital cash outflows of $2.1 billion primarily due to inventory builds. The Group generated sustaining attributable free cash inflows of $3.3 billion, used in part to fund growth capital expenditure of $1.6 billion and dividends paid to Anglo American plc shareholders of $3.5 billion. Net debt at 31 December 2022 represented gearing (net debt to total capital) of 17% (2021: 10%).

Cash flow

Cash flows from operations

Cash flows from operations decreased to $11.9 billion (2021: $20.6 billion), reflecting a reduction in underlying EBITDA from subsidiaries and joint operations, and a working capital build of $2.1 billion (2021: release of $1.1 billion). The inventory increase of $1.8 billion was driven by a delay in the rebuild of the Polokwane smelter and an increase in purchase of concentrate at PGMs, as well as an increase at De Beers and in finished products at Copper and Kumba. An increase in receivables of $0.4 billion was largely due to the start of copper concentrate sales in September 2022, following the ongoing ramp-up of operations at Quellaveco (Copper Peru). Payables are broadly flat, with the ramp-up of operations at Quellaveco being offset by the settlement of provisional price adjustments within Iron Ore.

Capital expenditure*

$ million	Year ended 31 December 2022	Year ended 31 December 2021
Stay-in-business	**2,558**	2,068
Development and stripping	**1,010**	904
Life-extension projects	**582**	474
Proceeds from disposal of property, plant and equipment	**(7)**	(17)
Sustaining capital	**4,143**	3,429
Growth projects	**1,595**	1,752
Total	**5,738**	5,181
Capitalised operating cash flows	**—**	12
Total capital expenditure	**5,738**	5,193

Capital expenditure increased to $5.7 billion (2021: $5.2 billion), owing to deferred expenditure from 2021, and a planned increase in investment programmes.

Sustaining capital expenditure increased to $4.1 billion (2021: $3.4 billion), largely driven by the Collahuasi desalination plant in Chile, deferred expenditure from 2021, and capitalised waste stripping at Quellaveco being classified as sustaining capital expenditure from July 2022 as the project commenced the ramp-up of operations.

Growth capital expenditure was $1.6 billion (2021: $1.8 billion), mostly driven by the Quellaveco project, which delivered first production of copper concentrate in July 2022, and Woodsmith.

Attributable free cash flow*

The Group's attributable free cash flow decreased to $1.6 billion (2021: $7.8 billion) due to lower cash flows from operations of $11.9 billion (2021: $20.6 billion) and higher capital expenditure of $5.7 billion (2021: $5.2 billion). This was partially offset by decreased tax payments of $2.7 billion (2021: $4.3 billion) and a reduction in dividends paid to non-controlling interests of $1.8 billion (2021: $2.8 billion).

Shareholder returns

In line with the Group's established dividend policy to pay out 40% of underlying earnings, the Board has proposed a final dividend of $0.74 per share (2021: $1.18 ordinary dividend per share and $0.50 special dividend per share), equivalent to $0.9 billion (2021: $2.1 billion including special dividend).

Disposals

On 11 January 2022, the Group completed the sale of its 33.3% shareholding in Cerrejón to Glencore plc for a total cash consideration of approximately $294 million – of which $50 million was received in January, after adjustment for dividends received in 2021. This sale represents the final stage of Anglo American's previously announced responsible transition away from thermal coal operations.

On 25 March 2022, the Group announced the sale of its remaining 8.0% shareholding in Thungela Resources Limited, realising gross proceeds of R1,672 million (approximately $115 million). Anglo American's Marketing business continues to support Thungela in the sale and marketing of its products, and sales and purchases under the offtake agreement will continue to be reported on a net basis, together with the Group's other third-party trading activities.

Anglo American Platinum, together with its joint venture partner Atlatsa Resources Corporation, concluded the disposal of the Bokoni mine to African Rainbow Minerals in September 2022.

In addition, there were cash receipts principally relating to the settlement of deferred consideration balances on the sale of the Rustenburg operations (PGMs) that was completed in November 2016.

Balance sheet

Net assets decreased by $0.7 billion to $34.0 billion (2021: $34.8 billion), reflecting dividend payments, additional shareholder returns to Company shareholders and non-controlling interests, partially offset by the profit in the period.

Attributable ROCE*

Attributable ROCE decreased to 30% (2021: 43%). Attributable underlying EBIT decreased to $9.7 billion (2021: $13.5 billion), reflecting the impact of higher input costs, unfavourable sales volumes and lower realised prices achieved for the Group's products. Average attributable capital employed has increased to $32.0 billion (2021: $31.4 billion), primarily due to growth capital expenditure, largely at Quellaveco (Copper).

Liquidity and funding

Group liquidity stands at $16.1 billion (2021: $17.1 billion), comprising $8.4 billion of cash and cash equivalents (2021: $9.1 billion) and $7.7 billion of undrawn committed facilities (2021: $8.0 billion).

During 2022, the Group issued $2.0 billion of bond debt. In March 2022, the Group issued $500 million 3.875% Senior Notes due 2029, and $750 million 4.750% Senior Notes due 2052 and in September 2022, its first €745 million 4.75% sustainability-linked bond due 2032.

The weighted average maturity on the Group's bonds increased to 7.7 years (2021: 6.2 years).

The Group has an undrawn $4.7 billion revolving credit facility due to mature in March 2025.

The Group received an upgrade to BBB+ (stable outlook) in November 2022 from S&P Global Ratings.

Portfolio upgrade

Anglo American continues to evolve its portfolio of competitive, world class assets towards those future-enabling products that are fundamental to enabling a low carbon economy and that cater to major global consumer demand trends. Aligned to this strategy, we delivered the newly commissioned Quellaveco copper mine in Peru in July 2022, with commercial operations starting in September. The operation continues to ramp up and is expected to reach nameplate capacity around mid-2023.

The Group also entered into the below agreements in the second half of 2022:

On 14 September 2022, Anglo American plc issued its first sustainability-linked bond, including performance targets to reduce greenhouse gas emissions and fresh water abstraction, and to support job creation in host communities. This €745 million bond is the first instrument issued following the publication of Anglo American's Sustainability Financing Framework and bond investors will be entitled to a higher final coupon payment should the company not meet specific sustainability targets.

On 4 October 2022, Anglo American in partnership with EDF Renewables announced their agreement to form a new jointly owned company, Envusa Energy, to develop a regional renewable energy ecosystem (RREE) in South Africa. As part of the agreement, Envusa Energy is launching a mature pipeline of more than 600 MW of wind and solar projects in South Africa – a major first step towards the development of an ecosystem that is expected to generate 3–5 GW of renewable energy by 2030.

On 16 November 2022, Anglo American agreed terms for a 10-year partnership with Stanwell Corporation, the Queensland Government-owned provider of electricity and energy solutions, to source the supply of 100% renewable electricity for its operations in Australia from 2025, supporting Anglo American's progress towards carbon neutral operations by 2040.

In November 2022, we signed an agreement with Aguas Pacífico, a Chilean water desalination and solutions provider, to secure desalinated water for our Los Bronces copper mine. In this first phase, the desalination plant will supply up to 500 litres per second of desalinated water to the mine from 2025, via a pipeline from the plant to a water-reception pool at our Las Tórtolas operation. This desalinated water will supply more than 45% of Los Bronces' needs while also providing clean water to approximately 20,000 people in the communities of Colina and Til Til, local to the operation.

On 24 November 2022, Anglo American signed a memorandum of understanding with Aurubis AG (Aurubis) – a global provider of non-ferrous metals and one of the world's largest copper recyclers – to develop a copper product offering that responds to increasing expectations for future-enabling metals that are sustainably sourced and supplied. The objective of the collaboration is to provide assurance around the way copper is mined, processed, transported and brought to market.

In addition, on 7 December 2022, Anglo American signed a binding agreement to combine Anglo American's nuGen™ Zero Emissions Haulage Solution (ZEHS) with First Mode Holding Inc. (First Mode), the specialist engineering technology company that partnered with Anglo American to develop the nuGen™ ZEHS. The combination is expected to accelerate the development and deployment of the ZEHS technology across Anglo American's mine haul truck fleet, while exploring commercial opportunities for ZEHS across other industries that rely on heavy duty forms of transport. The transaction was completed on 5 January 2023.

Growth projects (metrics presented on a 100% basis unless otherwise indicated)

Progress and current expectations in respect of our key growth projects are as follows:

Operation	Scope	Capex $bn	Remaining capex $bn	First production	Progress
Copper					
Quellaveco	New copper mine in Moquegua, Peru producing c.300 ktpa copper equivalent (100% basis, 180 ktpa copper equivalent our share) over the first 10 years.	c.2.8 (Anglo American 60% share)	c.0.1 (Anglo American 60% share)	2022	Construction began in 2018. First production of concentrate in July 2022 and the start of commercial operations in September 2022. Ramp-up of the process plant is ongoing with full nameplate capacity expected around mid-2023. Refer to the Technology projects table below for Coarse Particle Recovery at
Collahuasi	At Collahuasi, the independently managed joint operation (Copper), the implementation of the approved fifth ball mill is progressing to plan with ramp up expected to commence in Q4 2023. Additional debottlenecking options to further increase production remain under study and are expected to add 20-50 ktpa (44% basis) in the medium term. Further expansions are in early-stage study to increase plant capacity beyond 210 ktpd,	Fifth ball mill c.0.1 (44% basis)	Additional expansion studies ongoing. Subject to permitting and approvals	2023	Environmental approval (EIA) was obtained in December 2021, enabling expansion of the processing capacity up to 210 ktpd, and the construction of a desalination plant and related infrastructure to provide a sustainable alternative water source. The fifth ball mill project (first stage of the expansion) is progressing according to plan. The expected start-up is during Q4 2023.
Diamonds					
Marine Namibia	New diamond recovery vessel, adding 0.5 Mctpa (100% basis) of some of the highest value diamonds in the portfolio.	c.0.2 (Anglo American 50% share)	0	2022	Construction began in 2019. The vessel is now contributing to marine production, having been successfully commissioned ahead of schedule and below budget in Q1 2022.
Crop Nutrients					

Operation	Scope	Capex $bn	Remaining capex $bn	First production	Progress
Woodsmith	New polyhalite (natural mineral fertiliser) mine being developed in Yorkshire, UK. Expected to produce POLY4 – a premium quality, low carbon fertiliser suitable for organic use. Studies remain ongoing but the indicative design capacity is currently expected to be c.13 Mtpa.	Subject to development timeline review	Subject to development timeline review	Subject to development timeline review	Significant changes have been made to the scope, design and approach to execution of the project. These changes will allow future optionality for a larger operating footprint, to be delivered in a phased approach in step with market development, and optimise the value of the asset for the long term. These changes are expected to result in an extended project and ramp up schedule, with first product to market expected to be available in 2027, and higher capital expenditure than envisaged at the time of acquisition. The critical path construction activities of shaft sinking and tunnel boring continue to progress well and, as we continue to develop the revised plan, additional studies will focus on optimisation of the mine development, materials transport and handling facilities, to support the phased approach.
Iron Ore					
Sishen	Implementation of Ultra High Dense Media Separation (UHDMS) technology at Kumba’s Sishen operation will enable an increase in premium product production and the beneficiation of lower grade run-of-mine (between 40% Fe and 48% Fe). In addition, the project contributes an additional 3–4 years to Sishen’s life of asset to 2039.	Under review	Under review	Under review	Project plan under review.
PGMs					

Operation	Scope	Capex $bn	Remaining capex $bn	First production	Progress
Mogalakwena	Evaluating various options to expand PGM production of the mine through technology development and deployment and the optimal mine plan to deliver feed to the concentrators.	Number of options being considered	Not yet approved	Under review	The Future of Mogalakwena work continues to make good progress in the six workstreams.

Life-extension projects (metrics presented on a 100% basis unless otherwise indicated)

Progress and current expectations in respect of our key life-extension projects are as follows:

Operation	Scope	Capex $bn	Remaining capex $bn	Expected first production	Progress
Diamonds					
Venetia	4 Mctpa underground replacement for the existing open pit. The project is expected to add an estimated 88 million carats from approximately 132 million tonnes of material[1] and extend the life of the mine to 2047.	2.1	1.0	2023	The mining of the Venetia open pit was completed in December 2022, and the mine will transition to underground mining operations in 2023.
Jwaneng	9 Mctpa replacement (100% basis) for Cuts 7 and 8. The Cut-9 expansion of Jwaneng will extend the life of the mine to 2036 and is expected to yield approximately 59 million carats of rough diamonds from approximately 49 million tonnes of	0.3 (Anglo American 19.2% share)	0.2 (Anglo American 19.2% share)	2027	Project progressing on schedule.
Steelmaking Coal					
Aquila	3.5 Mtpa (70% basis), 7 year replacement for the Grasstree operation which has reached the end of life. Aquila is a longwall operation leveraging the existing Grasstree infrastructure and producing high quality hard coking coal	0.2 (Anglo American 70% share)	0	2022	Development work began in September 2019 and first longwall production began in February 2022.
Iron Ore					
Kolomela	4 Mtpa high grade iron ore replacement project. The development of a new pit, Kapstevel South, and associated infrastructure at Kolomela to help sustain output of c.12 Mtpa and extend the remaining life of mine to 2034.	0.4	0.2	2024	Approved in July 2020. Pit establishment and waste stripping commenced in 2021, with first ore expected in 2024.
PGMs					
Mototolo/ Der Brochen	The development of the project leverages the existing Mototolo infrastructure, enabling mining to extend into the adjacent and down-dip Der Brochen resource to extend the life of the asset beyond 30 years.	0.2	0.2	2024	Approved in December 2021. Execution commenced in Q1 2022. First production expected in 2024.

(1) Refer to Anglo American plc Ore Reserves and Mineral Resources Report 2022 for additional information.

Technology projects[1]

The Group plans to continue investing c. $0.2–0.5 billion per year on projects to support the FutureSmart Mining™ programme and the delivery of Anglo American's Sustainable Mining Plan targets, particularly those that relate to safety, energy, emissions and water, including the following innovative technology projects (metrics presented on a 100% basis unless otherwise indicated):

Initiative	Scope	Progress
Copper, PGMs, and Nickel		
Bulk ore sorting (BOS)	Deliver improved feed grade to plants through early rejection of waste, resulting in energy, water and cost savings.	– Mogalakwena (PGMs) North Concentrator (~70% of complex feed) and Los Bronces (Copper) Confluencia Plant (c.65% of complex feed) units operational with workplans under way to support business as usual. – Barro Alto (Nickel) in-pit unit will recommence in H1 2023, after the upgrade is completed, resulting in improved future sorting performance. Additional in-pit unit under technical evaluation.
Copper, PGMs, and Iron Ore		
Coarse particle recovery (CPR)	Innovative flotation process allows material to be ground to a larger particle size, rejecting coarse gangue and allowing water to release from coarser ore particles, improving energy efficiencies and water savings.	– El Soldado (Copper) CPR unit in operation. – Construction of full-scale system at Mogalakwena North concentrator (PGMs) complete. Slurry commissioning commenced in Dec 2022. – Constructing CPR at Quellaveco (Copper) to treat flotation tails, improving recoveries by c.3% over the life of mine. Commissioning expected in late 2023. – Feasibility work continues at Los Bronces (Copper) and
Copper and PGMs		
Hydraulic dewatered stacking (HDS)	Engineering of geotechnically stable tailings facilities that dry out in weeks, facilitating up to 85% water recovery.	– El Soldado (Copper) demonstration unit commissioned. The trial is still ongoing, with encouraging results, expected to continue to Q4 2023. – Assessing application to tailings expansion at Mogalakwena (PGMs) with benefits from water quality and quantity improvements. Brownfield trial starting in Q1 2023, after
Portfolio-wide		
nuGen™ Zero Emissions Haulage Solution (ZEHS)	Developing the world's largest hydrogen powered mining truck and providing critical supporting infrastructure such as refuelling, recharging, and facilitation of hydrogen production to decarbonise high power transport, using renewable energy.	– ZEHS hydrogen-powered mine haul truck at Mogalakwena (PGMs) is continuing operational testing – it has accessed the deepest parts of the mine, hauling 300 tonne loads of PGMs ore. – Binding agreement signed to combine First Mode and Anglo American's nuGen™ ZEHS to accelerate the transition of mining and other heavy industries towards zero emissions. In January 2023, completed deal to combine nuGen™ ZEHS with specialist engineering technology company First Mode (our partners in prototype development).

[1] Expenditure relating to technology projects is included within operating expenditure, or if it meets the accounting criteria for capitalisation, within Growth capital expenditure. Also includes capex on the regional renewable energy ecosystem in South Africa, which includes the Group's proportionate share of capex incurred by Envusa Energy.

Digital projects[1]

The Group plans to continue investing c. $0.1–0.2 billion per year on digital projects as part of the FutureSmart Mining™ programme (metrics presented on a 100% basis unless otherwise indicated):

Initiative	Scope	Progress
Diamonds, Copper, PGMs, Iron Ore and Steelmaking Coal		
Predictive Maintenance, VOXEL™ Asset Strategy & Reliability	Maintenance planning based on predictive analytics – resulting in improvements in safety, reliability and availability of critical assets.	– Full coverage of critical assets at Venetia, Jwaneng, and Gahcho Kué (Diamonds), Los Bronces (Copper), Mogalakwena, Amandelbult, Anglo Converter Plant, Rustenburg Base Metal Refinery and Polokwane Smelter (PGMs), Kolomela (Iron Ore) and Moranbah (Steelmaking Coal).
Copper, PGMs, and Iron Ore		
Rapid Resource Modelling, VOXEL™ Discovery & Geosciences	Enables consistent core logging, 3D implicit modelling, and statistical resource modelling as one integrated workflow in weeks vs years.	– Deployment at Mogalakwena (PGMs). – Deployments planned for Quellaveco (Copper) and Minas-Rio (Iron Ore) in 2023
Spatial Inventory Management, VOXEL™ Discovery & Geosciences	Builds a digital twin of material flow, providing access to accurate information about material within the mining operation and enabling additional value through increased	– Deployments at Los Bronces and Quellaveco (Copper), Mogalakwena (PGMs), Minas-Rio (Iron Ore) and Kolomela and Sishen (Iron Ore).
Copper, PGMs, Iron Ore, and Steelmaking Coal		
Process Performance Review, VOXEL™ Processing	Delivers automated support to improve the detection, prioritisation, and resolution of process issues.	– Deployments at Los Bronces (Copper), Mogalakwena (PGMs), Kolomela (Iron Ore) and Moranbah (Steelmaking Coal).
Diamonds, PGMs, Iron Ore, and Steelmaking Coal		
Digital Operational Planning, VOXEL™ Integrated Operations	Enables optimised operational plans across the mining value definition and management of models and data that then applies cutting edge simulation and elastic Cloud-based computing technology to deliver.	– Deployments at Venetia (De Beers), Mogalakwena, Amandelbult, Unki, Anglo Converter Plant, Polokwane, Waterval and Mortimer smelters (PGMs), Sishen and Kolomela (Iron Ore), and Moranbah and Grosvenor (Steelmaking Coal). – Deployments planned in early 2023 for Barro Alto and Codemin (Nickel), Minas-Rio (Iron Ore) and Aquila, Capcoal and Dawson (Steelmaking Coal).
Group-wide		
Advanced Process Control	Up to 40% improvement in process mainstream stability, up to 2% improvement in process recoveries, 4% reduction in Specific Energy Consumption, with associated productivity improvements.	– Delivered at Venetia and Benguela Gem (Diamonds), Los Bronces, El Soldado, Quellaveco and Chagres (Copper), Mogalakwena (PGMs), Minas-Rio and Kumba (Iron Ore), Moranbah, Capcoal and Dawson (Steelmaking Coal), and Barro Alto and Codemin (Nickel). – Reached 96.5% automation of automatable processes by the end of 2022, with an ambition for 100% of automatable processes within our plant flowsheets to be under Advanced Process Control by end 2024.

[1] Expenditure relating to digital programmes is included within underlying operating costs.

The Board

Changes during 2022 to the composition of the Board are set out below.

On 1 January 2022, Ian Tyler joined the Board as a non-executive director and member of the Audit and Remuneration committees.

On 19 April 2022, at the conclusion of the Company's Annual General Meeting:

- Duncan Wanblad joined the Board as chief executive.
- Mark Cutifani retired as chief executive and stepped down from the Board, after nine years in the role.
- Anne Stevens and Byron Grote stepped down from the Board as non-executive directors, having both served for nine years.
- Ian Tyler succeeded Anne Stevens as chair of the Remuneration Committee, and Hilary Maxson succeeded Byron Grote as chair of the Audit Committee.
- Ian Tyler succeeded Byron Grote as the Board's senior independent director.
- Marcelo Bastos succeeded Byron Grote as the designated non-executive director to chair the Anglo American Global Workforce Advisory Panel.

On 23 September 2022, Elisabeth Brinton stepped down from the Board as a non-executive director.

On 31 December 2022, Tony O'Neill stepped down from the Board and as technical director, following his decision to retire from the Group in June 2023.

The names of the directors at the date of this report and the skills and experience our Board members contribute to the long term sustainable success of Anglo American are set out on the Group's website:

www.angloamerican.com/about-us/leadership-team/board

Principal risks and uncertainties

Anglo American is exposed to a variety of risks and uncertainties which may have a financial, operational or reputational impact on the Group, and which may also have an impact on the achievement of social, economic and environmental objectives. The principal risks and uncertainties facing the Group relate to the following:

- Catastrophic and natural catastrophe risks
- Economic environment including product prices
- Cyber security
- Political
- Community and social relations
- Regulatory and permitting
- Operational performance
- Safety
- Climate change
- Pandemic
- Corruption
- Water
- Future demand

The Group is exposed to changes in the economic environment, including to tax rates and regimes, as with any other business. Details of any key risks and uncertainties specific to the period are covered in the Operations review section. Details of relevant tax matters are included in note 6 to the Condensed financial statements.

The principal risks and uncertainties facing the Group at the 2022 year end are set out in detail in the strategic report section of the Integrated Annual Report 2022 on the Group's website from 6 March 2023 www.angloamerican.com.

De Beers – Diamonds

Financial and operational metrics[1]

	Production volume	Sales volume	Price	Unit cost*	Group revenue*	Underlying EBITDA*	EBITDA margin*[6]	Underlying EBIT*	Capex*	ROCE*
	’000 cts	’000 cts[2]	$/ct[3]	$/ct[4]	$m[5]	$m		$m	$m	
De Beers	34,609	30,355	197	59	6,622	1,417	52 %	994	593	11 %
Prior year	*32,276*	*33,357*	*146*	*58*	*5,602*	*1,100*	*47 %*	*620*	*565*	*7 %*
Botswana	24,142	n/a	193	32	n/a	614	n/a	537	70	n/a
Prior year	*22,326*	—	*152*	*32*	—	*464*	—	*407*	*72*	—
Namibia	2,137	n/a	599	293	n/a	181	n/a	149	34	n/a
Prior year	*1,467*	—	*565*	*359*	—	*101*	—	*68*	*91*	—
South Africa	5,515	n/a	134	42	n/a	413	n/a	315	378	n/a
Prior year	*5,306*	—	*113*	*45*	—	*241*	—	*82*	*309*	—
Canada	2,815	n/a	100	50	n/a	(10)	n/a	(68)	48	n/a
Prior year	*3,177*	—	*62*	*44*	—	*68*	—	*4*	*42*	—
Trading	n/a	n/a	n/a	n/a	n/a	589	10 %	582	4	n/a
Prior year	—	—	—	—	—	*515*	*11 %*	*505*	*4*	—
Other[7]	n/a	n/a	n/a	n/a	n/a	(370)	n/a	(521)	59	n/a
Prior year	—	—	—	—	—	*(289)*	—	*(446)*	*47*	—

(1) Prepared on a consolidated accounting basis, except for production, which is stated on a 100% basis except for the Gahcho Kué joint operation in Canada, which is on an attributable 51% basis.

(2) Total sales volumes on a 100% basis were 33.7 million carats (2021: 36.3 million carats). Total sales volumes (100%) include De Beers Group’s joint arrangement partners’ 50% proportionate share of sales to entities outside De Beers Group from Diamond Trading Company Botswana and Namibia Diamond Trading Company.

(3) Pricing for the mining business units is based on 100% selling value post-aggregation of goods. Realised price includes the price impact of the sale of non-equity product and, as a result, is not directly comparable to the unit cost.

(4) Unit cost is based on consolidated production and operating costs, excluding depreciation and operating special items, divided by carats recovered.

(5) Includes rough diamond sales of $6.0 billion (2021: $4.9 billion).

(6) Total De Beers EBITDA margin shows mining EBITDA margin on an equity basis, which excludes the impact of non-mining activities, third-party sales, purchases, trading downstream and corporate.

(7) Other includes Element Six, brands and consumer markets, and corporate.

Markets

The first half of 2022 saw largely positive trading conditions throughout the diamond pipeline; the year started with retailers restocking following strong consumer demand for diamond jewellery sales over the 2021 holiday season. While the start of Russia’s invasion of Ukraine and the imposition of related formal sanctions, as well as self-sanctioning, on Russian diamonds created uncertainty in the sector, healthy consumer demand, particularly in the US, led to polished price growth and robust demand for rough diamonds in the first half of the year. De Beers’ focus on enhanced provenance assurance for its rough diamonds helped underpin solid demand.

By June, the global economic picture was more uncertain, owing to interest rate increases by advanced economies’ central banks to combat accelerating inflation. With a weaker economic outlook, consumer demand for diamond jewellery in the US softened in the second half of 2022, though it remained above pre-Covid-19 levels. Amid this economic uncertainty, retailers restocked more cautiously, causing midstream polished diamond inventories to build up through the second half of the year, putting downward pressure on polished prices and softening demand for rough diamonds. In China, the heightened Covid-19 restrictions from the second quarter onwards impacted diamond jewellery retail sales, resulting in negative demand growth for the year.

Financial and operational overview

Total revenue increased to $6.6 billion (2021: $5.6 billion), with rough diamond sales rising to $6.0 billion (2021: $4.9 billion), reflecting strong demand for rough diamonds, particularly in the first half of the year, with the midstream replenishing stocks following strong consumer demand over the 2021 holiday season. Rough diamond sales volumes totalled 30.4 million carats (2021: 33.4 million carats). The average realised price rose by 35% to $197/ct (2021: $146/ct), driven by growth in the rough price index, as well as selling a larger proportion of higher value rough diamonds in the first half of the year. The average rough price index increased by 23%, reflecting overall positive consumer demand for diamond jewellery, particularly in the first half of the year.

Underlying EBITDA increased by 29% to $1,417 million (2021: $1,100 million), reflecting overall positive consumer demand for diamond jewellery. Unit costs were broadly flat at $59/ct (2021: $58/ct), as rising inflation and higher input costs were offset by the benefits of higher production and favourable exchange rates.

Capital expenditure increased by 5% to $593 million (2021: $565 million), largely due to the Venetia underground project, which is expecting first production in 2023, and the continued execution of life-extension projects, including Jwaneng Cut-9 and at the Namibian land operations.

Operational performance

Mining

Rough diamond production increased by 7% to 34.6 million carats (2021: 32.3 million carats), reflecting strong operational performance and higher planned levels of production to meet continued strong demand for rough diamonds, particularly in the first half of the year.

In Botswana, production increased by 8% to 24.1 million carats (2021: 22.3 million carats), owing to strong plant performances at both Jwaneng and Orapa, as well as planned higher grade at Orapa.

Namibia production increased by 46% to 2.1 million carats (2021: 1.5 million carats), primarily due to the commissioning of the Benguela Gem diamond recovery vessel, which was delivered ahead of schedule and below budget, as well as the treatment of higher grade ore at the land operations.

South Africa production increased by 4% to 5.5 million carats (2021: 5.3 million carats), due to the treatment of higher grade ore from the final cut of the open pit at Venetia. The mining of the open pit was completed in December and the mine will transition to underground operations in 2023.

Production in Canada decreased by 11% to 2.8 million carats (2021: 3.2 million carats), due to the treatment of lower grade ore and the impact of tight labour markets.

Brands and consumer markets

Despite the near term economic uncertainty, De Beers Jewellers have continued to focus on developing their geographic footprint in China, with underlying demand for branded diamond jewellery expected to remain strong following the removal of Covid-19 related restrictions.

Operational and market outlook

Early indications are that the 2022 holiday season was robust, with diamond jewellery sales remaining above pre-Covid-19 levels, though below the record level seen in 2021. However, continued softening in global macro-economic conditions could see a contraction in consumer spending and demand for diamond jewellery, which may result in lower demand for rough diamonds in the near term. This may be partly mitigated by an increase in demand for diamond jewellery in China, following the removal of Covid-19 restrictions in late 2022.

De Beers continues to invest in its leading ability to provide source assurance for its diamonds at scale, underpinned by the Tracr™ blockchain platform. This proprietary technology provides an immutable record of a diamond's provenance, a key priority for consumers, underpinning confidence in natural diamonds.

De Beers considers that increased focus on diamond provenance by a number of US-based jewellery businesses and global brands has the potential to underpin continued demand for De Beers' rough diamonds in the medium and longer term. Consumer desire for natural diamonds remains robust in key consumer markets, and over the medium term the global supply of rough diamonds is expected to decline slightly owing to limited new discoveries, supporting the value growth potential for natural diamonds.

Production guidance for 2023 is 30–33 million carats (100% basis), subject to trading conditions.

2023 unit cost guidance is c.$80/ct.

Copper

Financial and operational metrics

	Production volume	Sales volume	Price	Unit cost*	Group revenue*	Underlying EBITDA*	Mining EBITDA margin*[2]	Underlying EBIT*	Capex*	ROCE*
	kt	kt[1]	c/lb[2]	c/lb[3]	$m[4]	$m		$m	$m	
Copper Total	664	641	385	154	5,599	2,182	39 %	1,595	2,031	16 %
Prior year	*647*	*641*	*453*	*120*	*6,433*	*4,011*	*62 %*	*3,428*	*1,773*	*39 %*
Copper Chile	562	563	386	157	4,991	1,952	40 %	1,387	1,217	32 %
Prior year	*647*	*641*	*453*	*120*	*6,433*	*4,011*	*62 %*	*3,428*	*996*	*81 %*
Los Bronces[5]	271	268	n/a	214	2,185	533	24 %	306	725	n/a
Prior year	*328*	*325*	—	*158*	*3,047*	*1,871*	*61 %*	*1,588*	*493*	—
Collahuasi[6]	251	256	n/a	87	2,180	1,512	69 %	1,259	419	n/a
Prior year	*277*	*273*	—	*61*	*2,641*	*2,188*	*83 %*	*1,970*	*365*	—
Other operations[7]	40	39	n/a	n/a	626	(93)	(9) %	(178)	73	n/a
Prior year	*42*	*43*	—	—	*745*	*(48)*	*(8) %*	*(130)*	*138*	—
Copper Peru (Quellaveco)[8]	102	78	379	136	608	230	38 %	208	814	2 %
Prior year	—	—	_	—	—	—	—	—	*777*	_

(1) Excludes 422 kt third-party sales (31 December 2021: 432 kt).
(2) Represents realised copper price and excludes impact of third-party sales.
(3) C1 unit cost includes by-product credits.
(4) Group revenue is shown after deduction of treatment and refining charges (TC/RCs).
(5) Figures on a 100% basis (Group's share: 50.1%).
(6) 44% share of Collahuasi production, sales and financials.
(7) Other operations form part of the results of Copper Chile. Production and sales are from El Soldado mine (figures on a 100% basis, Group's share 50.1%). Financials include El Soldado and Chagres (figures on a 100% basis, Group's share 50.1%), third-party trading, projects and corporate costs. In 2021, financials also included operational and capital expenditure related to Copper Peru.
(8) Figures on a 100% basis (Group's share: 60%). Included in capex is the project capex which represents the Group's share after deducting direct funding from non-controlling interests. In 2022, the Group's share of project capex was $633 million (on a 100% basis $1,055 million). In 2021, the Group's share was $777 million (on a 100% basis, was $1,295 million).

Financial and operational overview

Underlying EBITDA for Copper decreased by 46% to $2,182 million (2021: $4,011 million), driven by a 28% increase in unit costs and a 15% decrease in realised price, despite total sales being in line with the prior year.

Copper Chile

Underlying EBITDA decreased by 51% to $1,952 million (2021: $4,011 million), reflecting a 15% decrease in the realised price, lower production and the impact of inflation.

Copper production of 562,200 tonnes was 13% lower than the prior year (2021: 647,200 tonnes) due to planned lower grades at all sites, coupled with unfavourable ore characteristics and unplanned stoppages at Los Bronces. The impact of lower water availability, owing to the ongoing drought in Chile's central zone following record low levels of precipitation in 2021 and 2022, was partially offset by water management initiatives. Unit costs increased by 31% to 157 c/lb (2021: 120 c/lb), reflecting record levels of local inflation, lower production and higher input costs, particularly diesel and explosives, which were partly offset by the weaker Chilean peso and higher by-product credits.

Capital expenditure increased by 22% to $1,217 million (2021: $996 million), reflecting expenditure on the Collahuasi desalination project and the impact of Covid-19 related deferrals in previous years, partly offset by the weaker Chilean peso.

Copper Peru

Underlying EBITDA was $230 million as the project ramped up following the mid-year start of operations, with unit costs of 136 c/lb.

Capital expenditure was $0.8 billion. $0.6 billion relates to our share of project capex; the remainder primarily relates to development and stripping capex (100% basis).

Markets

	31 December 2022	31 December 2021
Average market price (c/lb)[1]	400	423
Average realised price (Copper Chile – c/lb)	386	453
Average realised price (Copper Peru – c/lb)	379	—

(1) Average LME price calculated from 26 September 2022 onwards, reflecting the commencement of sales for Copper Peru, was 362 c/lb.

The difference between the market price and Copper Chile's realised price is largely a function of provisional pricing adjustments, with 166,900 tonnes of copper provisionally priced at 379 c/lb at 31 December 2022 (31 December 2021: 162,361 tonnes provisionally priced at 442 c/lb), and the timing of sales across the period.

The average market price from 26 September 2022, the date of commencement of sales by Copper Peru, until the end of the year was 362 c/lb. Copper Peru's realised price is higher than this, reflecting the benefit of provisional pricing adjustments since shipments commenced, with 74,800 tonnes of copper provisionally priced at 380 c/lb at 31 December 2022.

The average LME copper price decreased by 5% as a result of fears of global recession, manufacturing supply chain disruptions, rising energy costs and weaker investor sentiment. The continuing impact of Russia's invasion of Ukraine, central bank interest rate rises and the effects of China's zero-Covid policy contributed to growing concerns around economic growth prospects. Copper's underlying fundamentals, however, remained attractive, as continued global decarbonisation efforts benefited the use of copper in applications and infrastructure associated with the energy transition. Reported stocks fell to historically low levels and supply disruptions continued to be a feature of the sector.

Operational performance

Copper Chile

Copper production of 562,200 tonnes was 13% lower than the prior year (2021: 647,200 tonnes).

At Los Bronces, production decreased by 17% to 270,900 tonnes (2021: 327,700 tonnes) due to lower planned grades (0.62% vs 0.70%) and lower ore processed (45.9 Mt vs 50.7 Mt) as a result of expected lower water availability, coupled with the impact of increased ore hardness and unplanned stoppages. The impact of reduced water availability, following the record low levels of precipitation in 2021 and 2022, was partially offset by initiatives to maximise water efficiency, including sourcing of external industrial water. C1 unit costs increased by 35% to 214 c/lb (2021: 158 c/lb), driven by high inflation, planned lower production and higher water management costs, partly offset by the weaker Chilean peso and higher by-product credits.

At Collahuasi, Anglo American's attributable share of copper production decreased by 9% to 251,100 tonnes (2021: 277,200 tonnes) due to planned lower grades (1.11% vs 1.25%) in accordance with the mine plan. C1 unit costs increased by 43% to 87 c/lb (2021: 61 c/lb), driven by high inflation and planned lower production, partly offset by the weaker Chilean peso and higher by-product credits.

Production at El Soldado decreased by 5% to 40,200 tonnes (2021: 42,300 tonnes) due to planned lower grades (0.65% vs 0.73%). C1 unit costs increased by 27% to 262 c/lb (2021: 206 c/lb), driven by high inflation and lower production, partly offset by the weaker Chilean peso.

Chile´s central zone continues to face severe drought conditions. While the rain and snowfall deficit decreased during the second half of 2022, the outlook for 2023 remains very dry and these conditions place pressure on water availability. An agreement to secure desalinated water supply for Los Bronces from 2025 was completed in the fourth quarter of 2022. This is the first step in an integrated plan to eliminate the use of fresh water at the Los Bronces operation. In the interim, various management initiatives to improve water efficiency and secure alternative sources of water continue to mitigate the impact on production.

Copper Peru

The world class Quellaveco copper mine in Peru was delivered on time and on budget during 2022 – a major achievement for the Group. First production of copper concentrate was announced on 12 July 2022, with concentrate shipments commencing at the end of September. The second processing line started up in September, with regulatory clearances received in early December.

Quellaveco produced 102,300 tonnes at a C1 unit cost of 136 c/lb, reflecting the operational ramp-up.

The delivery of the project has taken place against an extremely challenging backdrop through more than two years of pandemic-related disruption. Despite this, Quellaveco is producing copper in line with the original construction schedule and less than four years after project approval. The final total capex estimate is $5.5 billion and is in line with the 2020 budget to accommodate Covid-19 requirements. The Group’s share of the final total capex is $2.8 billion.

With the mine operational, focus is now on safely ramping up the processing plant to nameplate capacity, receiving the required regulatory clearances for the molybdenum plant and completing the construction and commissioning of the coarse particle recovery (CPR) plant. We are also working closely with government and local communities on the safe and responsible demobilisation of the project workforce by the middle of 2023.

Operational outlook

Copper Chile

Production guidance for Chile for 2023 is 530,000–580,000 tonnes, subject to water availability.

C1 unit cost guidance for 2023 is c.190 c/lb.

There is limited near term production impact from the rejection of the environmental permit application for the Los Bronces Integrated Project in early 2022. Anglo American is continuing to participate in the appeals process to make available any additional information required, as the merits of the project are re-evaluated by a Committee of Ministers. Anglo American remains hopeful that the positive impact this project will have on the local area, including an improvement to air quality, as well as a major long term inward investment for Chile, will be recognised to enable urgent critical-path mine planning activities to get under way.

Copper Peru

Production guidance for Peru for 2023 is 310,000–350,000 tonnes.

C1 unit cost guidance for 2023 is c.100 c/lb., subject to any socio-political effects and full ramp-up.

Project capital expenditure guidance for 2023 is c.$0.2 billion (100% basis), of which the Group’s share is c.$0.1 billion.

Quellaveco expects to deliver around 300,000 tonnes per annum of copper equivalent production on average in its first 10 years of operation.

Nickel

Financial and operational metrics

	Production volume	Sales volume	Price	Unit cost*	Group revenue*	Underlying EBITDA*	Mining EBITDA margin*	Underlying EBIT*	Capex*	ROCE*
	t	t	$/lb[1]	c/lb[2]	$m	$m		$m	$m	
Nickel	39,800	39,000	10.26	513	858	381	44 %	317	79	24 %
Prior year	*41,700*	*42,100*	*7.73*	*377*	*710*	*320*	*45 %*	*261*	*29*	*21 %*

(1) Realised price.

(2) C1 unit cost.

Financial and operational overview

Underlying EBITDA increased by 19% to $381 million (2021: $320 million), reflecting higher realised prices, partially offset by higher unit costs and lower sales volumes. C1 unit costs increased by 36% to 513 c/lb (2021: 377 c/lb) as a result of high input cost inflation, particularly on consumables, lower production volumes and the stronger Brazilian real.

Capital expenditure increased to $79 million (2021: $29 million), primarily due to planned higher expenditure on productivity initiatives, such as bulk ore sorting.

Markets

	31 December 2022	31 December 2021
Average market price ($/lb)	**11.61**	8.39
Average realised price ($/lb)	**10.26**	7.73

Differences between the market price (which is LME-based) and our realised price (the ferronickel price) are due to the discounts (or premiums) to the LME price, which depend on market conditions, supplier products and consumer preferences.

The average LME nickel price of $11.61/lb was 38% higher (2021: $8.39/lb). Global nickel consumption grew year on year, with the fourth quarter seeing the highest level of consumption as China began to recover from earlier Covid-19 related industrial stoppages. Batteries were the main driver of demand growth, as the production of electric vehicles continued to accelerate. Global refined nickel production also increased in the year; however, the nickel price was further supported by the decision of some purchasers to avoid Russian-sourced metal, following the invasion of Ukraine.

Operational performance

Nickel production decreased by 5% to 39,800 tonnes (2021: 41,700 tonnes), primarily due to lower ore grades as a result of licensing delays, as well as the impact of unplanned maintenance and heavy rainfall. Sales volumes were further impacted by logistics constraints, primarily in the container freight sector.

Operational outlook

Production guidance for 2023 is 38,000–40,000 tonnes.

C1 unit cost guidance for 2023 is c.515 c/lb.

Platinum Group Metals

Financial and operational metrics

	Production volume PGMs	Sales volume PGMs	Basket price	Unit cost*	Group revenue*	Underlying EBITDA*	Mining EBITDA margin*[5]	Underlying EBIT*	Capex*	ROCE*
	koz[1]	koz[2]	$/PGM oz[3]	$/PGM oz[4]	$m	$m		$m	$m	
PGMs	4,024	3,861	2,551	937	10,096	4,417	54 %	4,052	1,017	86 %
Prior year	*4,299*	*5,214*	*2,761*	*868*	*14,502*	*7,099*	*62 %*	*6,753*	*894*	*140 %*
Mogalakwena	1,026	1,010	2,451	826	2,466	1,548	63 %	1,380	394	n/a
Prior year	*1,215*	*1,479*	*2,563*	*694*	*3,787*	*2,611*	*69 %*	*2,471*	*435*	—
Amandelbult	713	700	2,883	1,127	2,010	1,036	52 %	982	74	n/a
Prior year	*773*	*907*	*3,122*	*1,127*	*2,817*	*1,633*	*58 %*	*1,571*	*81*	—
Other operations[6]	911	842	2,615	928	2,270	1,033	46 %	922	549	n/a
Prior year	*871*	*1,056*	*2,935*	*899*	*3,081*	*1,717*	*56 %*	*1,601*	*378*	—
Processing and trading[7]	1,375	1,309	n/a	n/a	3,350	800	24 %	768	n/a	n/a
Prior year	*1,440*	*1,772*	—	—	*4,817*	*1,138*	*24 %*	*1,110*	—	—

(1) Production reflects own-mined production and purchase of metal in concentrate. PGM volumes consists of 5E metals and gold.
(2) Sales volumes exclude the sale of refined metal purchased from third parties and toll material. PGM volumes consists of 5E metals and gold.
(3) Average US$ realised basket price, based on sold ounces (own-mined and purchased concentrate). Excludes the impact of the sale of refined metal purchased from third parties.
(4) Total cash operating costs (includes on-mine, smelting and refining costs only) per own-mined PGM ounce of production.
(5) The total PGMs mining EBITDA margin excludes the impact of the sale of refined metal purchased from third parties, purchase of concentrate and tolling.
(6) Includes Unki, Mototolo and PGMs' share of joint operations (Kroondal and Modikwa). Other operations margin includes unallocated market development, care and maintenance, and corporate costs.
(7) Purchase of concentrate from joint operations, associates and third parties for processing into refined metals, tolling and trading activities.

Financial and operational overview

Underlying EBITDA decreased to $4,417 million (2021: $7,099 million), primarily reflecting lower sales volumes as the prior year benefited from the processing of higher than normal work-in-progress inventory following the ACP Phase A rebuild, as well as the impact of the Polokwane smelter rebuild in the second half of 2022. Underlying EBITDA was also affected by an 8% decrease in the basket price to $2,551/PGM ounce (2021: $2,761/PGM ounce), as well as higher unit costs. Unit costs increased by 8% to $937/PGM ounce (31 December 2021: $868/PGM ounce), impacted by high input cost inflation and lower production, partly offset by the weaker South African rand.

Capital expenditure increased by 14% to $1,017 million (2021: $894 million), driven by the impact of Covid-19 related deferrals in 2021.

Markets

	31 December 2022	31 December 2021
Average platinum market price ($/oz)	**961**	1,086
Average palladium market price ($/oz)	**2,111**	2,388
Average rhodium market price ($/oz)	**15,465**	20,109
Realised basket price ($/PGM oz)	**2,551**	2,761

The average realised PGM basket price decreased by 8% to $2,551 per PGM ounce (2021: $2,761 per PGM ounce), reflecting lower market prices. PGM prices surged in early 2022 owing to supply concerns following Russia's invasion of Ukraine, but soon fell back when no trade sanctions were levied on Russian metal. The price decline was exacerbated by growing fears of another poor year for automotive production due to renewed Chinese Covid-19 lockdowns. Sentiment improved in the second half as restrictions eased in China, leading to a sharp recovery in global automotive production, underpinned by an improvement in manufacturing supply chains. The recovery in automotive production resulted in a rally in palladium and rhodium prices; however, platinum prices continued to struggle as tighter US monetary policy pushed the US dollar to multi-decade highs. By the end of the year, the situation had reversed, with palladium and rhodium prices decreasing on fears of a global slowdown, while platinum prices rallied as the US dollar retreated.

The palladium price was particularly volatile, reaching a new all-time high of almost $3,340 per ounce in March 2022, reflecting the importance of Russian supply, albeit the metal started and ended the year below $2,000 per ounce. Platinum prices also peaked in March but the late rally meant it increased by 11% over the year. Strong by-product prices and differences in the timing and mix of metals sold cushioned the impact of lower PGM prices on the realised basket price.

Operational performance

Total PGM production decreased by 6% to 4,024,000 ounces (2021: 4,298,700 ounces), principally due to lower grade at Mogalakwena and the impact of planned infrastructure closures at Amandelbult, partially offset by increased production from Mototolo and Unki.

Own-mined production

PGM production from own-managed mines (Mogalakwena, Amandelbult, Unki and Mototolo) and equity share of joint operations decreased by 7% to 2,649,200 ounces (2021: 2,858,300 ounces).

Mogalakwena PGM production decreased by 16% to 1,026,200 ounces (2021: 1,214,600 ounces), largely as a result of lower grades as well as the impact of Eskom load-shedding.

Amandelbult PGM production decreased by 8% to 712,500 ounces (2021: 773,200 ounces) as a result of the planned mining infrastructure closures and the closure of the Merensky Concentrator, as well as the impact of Eskom load-shedding.

Production from other operations increased by 5% to 910,500 ounces (2021: 870,500 ounces), reflecting the benefit of concentrator debottlenecking projects at Unki and Mototolo, as well as higher grades due to improved ground conditions at Mototolo, offsetting lower production from Kroondal as a consequence of planned infrastructure closures.

Purchase of concentrate

Purchase of concentrate decreased by 5% to 1,374,800 ounces (2021: 1,440,400 ounces), driven by lower third-party receipts as well as the impact of lower production at Kroondal.

Refined production and sales volumes

Refined PGM production (excluding toll-treated metal) decreased by 25% to 3,831,100 ounces (2021: 5,138,400 ounces) as the first half of 2021 benefited from the processing of higher than normal work-in-progress inventory following the ACP Phase A rebuild in the fourth quarter of 2020. The second half of 2022 was impacted by the planned structural rebuild of the Polokwane smelter – a process that was extended by approximately two months following the receipt of materials found to be sub-standard as identified through our quality assurance processes.

PGM sales volumes decreased by 26% to 3,861,300 ounces (2021: 5,214,400 ounces), in line with refined production.

Operational outlook

PGM metal in concentrate production guidance for 2023 is 3.6–4.0 million ounces, with own-mined output accounting for c.65%. Refined PGM production guidance for 2023 is 3.6–4.0 million ounces, subject to the impact of Eskom load-shedding.

Unit cost guidance for 2023 is c.$1,025/PGM ounce.

Iron Ore

Financial and operational metrics

	Production volume	Sales volume	Price	Unit cost*	Group revenue*	Underlying EBITDA*	Mining EBITDA margin*	Underlying EBIT*	Capex*	ROCE*
	Mt[(1)]	Mt[(1)]	$/t[(2)]	$/t[(3)]	$m	$m		$m	$m	
Iron Ore Total	59.3	58.0	111	38	7,534	3,455	45 %	2,962	834	28 %
Prior year	*63.8*	*63.3*	*157*	*33*	*11,104*	*6,871*	*62 %*	*6,359*	*628*	*62 %*
Kumba Iron Ore[(4)]	37.7	36.7	113	40	4,580	2,211	48 %	1,894	674	66 %
Prior year	*40.9*	*40.3*	*161*	*39*	*6,958*	*4,311*	*62 %*	*3,960*	*417*	*140 %*
Iron Ore Brazil (Minas-Rio)	21.6	21.3	108	35	2,954	1,244	41 %	1,068	160	18 %
Prior year	*22.9*	*23.0*	*150*	*24*	*4,146*	*2,560*	*61 %*	*2,399*	*211*	*42 %*

(1) Production and sales volumes are reported as wet metric tonnes. Product is shipped with c.1.6% moisture from Kumba and c.9% moisture from Minas-Rio.

(2) Prices for Kumba Iron Ore are the average realised export basket price (FOB Saldanha) (wet basis). Prices for Minas-Rio are the average realised export basket price (FOB Brazil) (wet basis). Prices for total iron ore are a blended average.

(3) Unit costs are reported on an FOB wet basis. Unit costs for total iron ore are a blended average.

(4) Sales volumes and realised price differ to Kumba's stand-alone reported results due to sales to other Group companies.

Financial and operational overview

Underlying EBITDA for Iron Ore decreased by 50% to $3,455 million (2021: $6,871 million), due to a 29% decrease in the realised iron ore price, lower sales volumes and higher unit costs.

Kumba

Underlying EBITDA decreased by 49% to $2,211 million (2021: $4,311 million), driven by a lower average realised price of $113/tonne (2021: $161/tonne) and lower sales volumes. Unit costs increased by 3% to $40/tonne (2021: $39/tonne), due to lower production volumes and high input cost inflation, partially offset by the weaker South African rand.

Production decreased by 8% to 37.7Mt (2021: 40.9Mt), largely as a result of high rainfall and a safety intervention at Kolomela, as well as equipment reliability. The impact of third-party logistics constraints, including industrial action at Transnet (the third-party rail and port operator) also contributed to the decrease in production, as well as a 9% decrease in sales volumes to 36.7Mt (2021: 40.3Mt). Total finished goods inventory increased to 7.8 Mt (2021: 6.1 Mt), with most of the inventory being at the mines.

Capital expenditure increased by 62% to $674 million (2021: $417 million), reflecting planned higher sustaining capital spend and higher expansion capital spend at the Kapstevel South pit, as good progress was made on the life-extension project at Kolomela. This was partially offset by the weaker South African rand. Additional complexities related to the ultra high dense media separation (UHDMS) technology growth project at Sishen have necessitated a review of the project plan.

Within special items and remeasurements, an impairment of $313 million (before tax and non-controlling interest) was recognised at Kolomela following revisions to the production and cost profile in the latest life of asset plan.

Minas-Rio

Underlying EBITDA decreased by 51% to $1,244 million (2021: $2,560 million), reflecting the lower average realised price of $108/tonne (2021: $150/tonne), lower sales volumes and higher unit costs. Unit costs increased by 46% to $35/tonne (2021: $24/tonne), reflecting higher input costs, principally in consumables and electricity, lower production volumes, increased maintenance costs and the impact of the stronger Brazilian real.

Capital expenditure was 24% lower at $160 million (2021: $211 million), reflecting the impact of timing differences.

Markets

	31 December 2022	31 December 2021
Average market price (Platts 62% Fe CFR China – $/tonne)	**120**	160
Average market price (MB 66% Fe Concentrate CFR – $/tonne)	**145**	185
Average realised price (Kumba export – $/tonne) (FOB wet basis)	**113**	161
Average realised price (Minas-Rio – $/tonne) (FOB wet basis)	**108**	150

Kumba’s FOB realised price of $113/wet metric tonne was 13% higher than the equivalent Platts 62% Fe FOB Saldanha market price (adjusted for moisture) of $100/wet metric tonne. This reflects the premium for the higher iron content at 63.8% and relatively high proportion (approximately 67%) of lump that the product portfolio attracts, in particular because higher quality Fe product helps steel mills reduce emissions.

Minas-Rio’s pellet feed product is also higher grade (with iron content of 67% and lower impurities) than the reference product used for the Platts 62% Fe CFR China index. The Metal Bulletin (MB) 66 index, therefore, is used when referring to Minas-Rio product. The Minas-Rio realised price of $108/wet metric tonne was in line with the equivalent MB 66 FOB Brazil index (adjusted for moisture) of $108/wet metric tonne, which reflects that the premium for our high quality product was offset by the impact of provisionally priced volumes.

Operational performance

Kumba

Production decreased by 8% to 37.7 Mt (2021: 40.9 Mt), reflecting the impact of high rainfall across Kumba’s operating footprint and a safety intervention at Kolomela, as well as equipment reliability and the impact of third-party logistics constraints at both mines. The constraints have led to a significant build-up of iron ore stockpiles at both mines, which necessitated a decrease in production given the lack of available storage space. Production at Sishen decreased by 4% to 27.0 Mt (2021: 28.0 Mt) and at Kolomela by 17% to 10.7 Mt (2021: 12.8 Mt).

Minas-Rio

Production decreased by 6% to 21.6 Mt (2021: 22.9 Mt) due to more challenging ore characteristics, lower mining equipment availability and heavy rainfall.

Operational outlook

Kumba

Production guidance for 2023 is 35–37 Mt, subject to third-party rail and port performance.

2023 unit cost guidance is c.$44/tonne.

Minas-Rio

Production guidance for 2023 is 22–24 Mt.

2023 unit cost guidance is c.$32/tonne.

Steelmaking Coal

Financial and operational metrics

	Production volume	Sales volume	Price	Unit cost*	Group revenue*	Underlying EBITDA*	Mining EBITDA margin*	Underlying EBIT*	Capex*	ROCE*
	Mt[1]	Mt[2]	$/t[3]	$/t[4]	$m	$m		$m	$m	
Steelmaking Coal	15.0	14.7	304	107	5,034	2,749	55 %	2,369	648	85 %
Prior year	*14.9*	*14.1*	*200*	*105*	*2,899*	*962*	*33 %*	*450*	*649*	*15 %*

(1) Production volumes are saleable tonnes, excluding thermal coal production of 1.6 Mt (2021: 1.7 Mt). Includes production relating to processing of third-party product.

(2) Sales volumes exclude thermal coal sales of 1.7 Mt (2021: 2.1 Mt). 2022 includes 0.3 Mt of steelmaking coal mined by third parties and processed by Anglo American.

(3) Realised price is the weighted average hard coking coal and PCI sales price achieved at managed operations.

(4) FOB cost per tonne, excluding royalties and study costs.

Financial and operational overview

Underlying EBITDA increased to $2,749 million (2021: $962 million), driven by a 52% increase in the weighted average realised price for steelmaking coal and higher sales volumes. This was partially offset by a 2% increase in unit costs to $107/tonne (2021: $105/tonne), reflecting higher inflation and the impact of tight labour markets. Also included is $250 million for the finalisation of the Grosvenor gas ignition claim by the Group's self-insurance entity that was received in the first half of the year, as well as a further $93 million insurance receipt in December for the overpressure event claim at Moranbah.

Capital expenditure was flat at $648 million (2021: $649 million), with higher development-related spend across all three underground mines largely offset by lower life-extension expenditure following the completion of the Aquila project, where longwall production began in February 2022.

Within special items and remeasurements, impairment reversals of $211 million and $217 million (before tax) were recognised at Moranbah-Grosvenor and Dawson respectively. The reversal at Moranbah-Grosvenor represents a partial reversal of previous impairments, with improvements in the macro-economic environment partially offset by a revised production profile and deferral of the expansion project. The majority of the Dawson reversal is arising from value expected to be generated in the short term.

Markets

	31 December 2022	31 December 2021
Average benchmark price – hard coking coal ($/tonne)[1]	**364**	226
Average benchmark price – PCI ($/tonne)[1]	**331**	164
Average realised price – hard coking coal ($/tonne)[2]	**310**	211
Average realised price – PCI ($/tonne)[2]	**271**	138

(1) Represents average spot prices.

(2) Realised price is the sales price achieved at managed operations.

Average realised prices differ from the average market prices due to differences in material grade and timing of shipments. Hard coking coal (HCC) price realisation decreased to 85% of average benchmark price (2021: 93%), driven by a higher volume of premium HCC being produced and sold in the second half of 2022 when the benchmark price was lower.

The average benchmark price for Australian HCC reached a record high of $364/tonne (2021: $226/tonne). In the first half of 2022, steelmaking coal prices rose on Queensland supply challenges and buyers' anxiety around the effects of sanctions on Russian supply. The daily spot index rallied to record multiple highs and eventually peaked at $671/tonne in March 2022. In the second half of the year, HCC prices remained at elevated levels due to ongoing supply challenges in Australia and Canada, despite a significant decline in demand from global steelmakers and coke merchants.

Operational performance

Production was broadly flat at 15.0 Mt (2021: 14.9 Mt), with all three underground longwalls operating in the second half of 2022. The planned end of mining at the Grasstree operation in January 2022 was partially offset by the ramp-up of the replacement Aquila longwall, which began operations in February 2022, and fully ramped up in June.

At Grosvenor, longwall operations restarted in February 2022 following regulatory approval, while longwall mining restarted at Moranbah in the next planned longwall panel in May 2022, following a fatal incident in March 2022, and an extended longwall move. Both these longwall operations have continued to ramp up during the second half of the year under the new operating protocols and regulatory environment – a learning process that will continue through 2023.

Production was also impacted by tight labour markets and record unseasonal rainfall at the open pit operations.

Operational outlook

Export steelmaking coal production guidance for 2023 is 16–19 Mt.

Unit cost guidance for 2023 is c.$105/tonne.

Manganese

Financial and operational metrics

	Production volume	Sales volume	Group revenue*	Underlying EBITDA*	Mining EBITDA margin*	Underlying EBIT*	Capex*	ROCE*
	Mt	Mt	$m	$m		$m	$m	
Manganese	3.7	3.6	840	378	45 %	312	n/a	138 %
Prior year	*3.7*	*3.7*	*768*	*315*	*41 %*	*250*	—	*104 %*

Financial and operational overview

Manganese (Samancor)

Underlying EBITDA increased by 20% to $378 million (2021: $315 million), benefiting from a stronger average realised manganese ore price, partially offset by a 4% decrease in manganese ore sales volumes and by increased freight and operating costs.

The average benchmark price for manganese ore (Metal Bulletin 44% manganese ore CIF China) increased by 16% to $6.06/dmtu (2021: $5.21/dmtu). Prices increased strongly in the first half of the year, but were on a declining trend through much of the second half. Prices regained some ground during December, ending the year at $5.13/dmtu.

Operational performance

Attributable manganese ore production was flat at 3.7 Mt (2021: 3.7 Mt).

Crop Nutrients

Financial and operational metrics

	Production volume	Sales volume	Group revenue*	Underlying EBITDA*	Mining EBITDA margin*	Underlying EBIT*	Capex*	ROCE*
			$m	$m		$m	$m	
Crop Nutrients	n/a	n/a	254	(44)	n/a	(45)	522	n/a
Prior year	—	—	*114*	*(41)*	—	*(42)*	*530*	—
Woodsmith project	n/a	n/a	n/a	n/a	n/a	n/a	522	n/a
Prior year	—	—	—	—	—	*n/a*	*530*	—
Other[1]	n/a	n/a	254	(44)	n/a	(45)	n/a	n/a
Prior year	—	—	*114*	*(41)*	—	*(42)*	—	—

[1] Other comprises projects and corporate costs as well as the share in associate results from The Cibra Group, a fertiliser distributor based in Brazil.

Crop Nutrients

Anglo American is developing the Woodsmith project in the north east of England to access the world's largest known deposit of polyhalite, a natural mineral fertiliser product containing potassium, sulphur, magnesium and calcium – four of the six nutrients that every plant needs to grow.

The Woodsmith project is located on the North Yorkshire coast, just south of Whitby, where polyhalite ore will be extracted via 1.6 km deep mine shafts and transported to Teesside via an underground conveyor belt in a 37 km tunnel, thereby minimising any environmental impact on the surface. It will then be granulated at a materials handling facility to produce a low carbon fertiliser – known as POLY4 – that will then be exported from our port facility, where we have priority access, to a network of customers around the world. POLY4 will enable farmers to enhance their crop yield, increase crop quality and improve soil structure with one core product.

Progress update

Woodsmith project

Throughout 2022, we continued with the detailed design reviews and non-critical path studies, following which a number of areas were modified to align with Anglo American's standards and optimise value for the long term. Progress has continued to plan on the core project infrastructure, with capital expenditure of $522 million in 2022.

During the year, as part of the construction review, contracts were awarded for the shaft sinking operations, programme management services and construction management to ensure the project can be executed in line with Anglo American's stringent requirements.

With the award of these contracts and other infrastructure improvements, activities at the deep shafts have progressed well during 2022. The service shaft is now more than 360 metres deep, while shaft sinking began 120 metres below the surface for the production shaft in January 2023, as planned.

Three intermediate shafts will provide both ventilation and additional access to the mineral transport system (MTS) tunnel. The Lockwood Beck intermediate access shaft was successfully completed in 2022 and is fully lined and connected to the tunnel. Work on the MTS shaft at the mine head progressed through 2022 and is 85% complete, and the excavation at the final intermediate access shaft at the Ladycross site commenced in early 2023.

Following a planned maintenance pause in mid-2022 to refurbish the tunnel boring machine and allow the connection with the Lockwood Beck shaft, the mineral transport tunnel is now past the 21 km point and is more than 56% complete, progressing at rates not seen since the start of the tunnelling activities.

As noted in a number of market updates throughout 2022, we are enhancing the project's configuration – including the capacity of the shafts and other infrastructure to accommodate higher production volumes and more efficient and scalable mining methods over time – to ensure we deliver maximum commercial returns from Woodsmith over the expected multi-decade asset life. These project team proposals, endorsed by the Board at the end of the year, indicate an extension of the development schedule and the capital budget, compared to what was previously anticipated.

In light of these changes, we now expect first product to market in 2027, with an annual capital investment of around $1.0 billion. We also expect design capacity to increase from c.10 Mtpa to c.13 Mtpa, subject to studies and approval. $0.8 billion is approved for 2023, with the bulk of initial spend on the shaft sinking and tunnel boring activities. As usual in developing underground mines, the schedule will largely be determined by the ground conditions encountered as sinking activities progress.

We believe that the changes we have made to the project have had a materially positive impact on the project's long term attractiveness and prospects. However, for accounting purposes at this early stage of the project's development, we have recognised an impairment of $1.7 billion to the carrying value of the asset within special items and remeasurements, reflecting the extension of the development schedule and capital budget.

Market development – POLY4

The ongoing focus of the market development activities is to develop and implement detailed sales and marketing strategies for each region and to support customers with their own market development activities to further promote POLY4 to the end users of the product – farmers.

The number of commercial scale on-farm demonstrations has accelerated, with more than 1,500 now complete and hundreds more in progress. The demonstrations continue to validate the extent of improvements that our product can deliver to farmers in terms of crop yield and quality. In addition, studies show POLY4 enhances soil health through resilience to compaction, erosion and run-off, as well as improve nutrient availability to crops and fertiliser nutrient use efficiency.

POLY4 offers farmers a solution to agricultural efficiency and sustainability challenges through its naturally low chloride multi-nutrient composition, its suitability for organic use and low carbon profile, with a carbon footprint up to 85% lower compared to conventional fertilisers, and with little waste generated in its production.

Corporate and Other

Financial metrics

	Production volume	Sales volume	Price	Unit cost*	Group revenue*	Underlying EBITDA*	Underlying EBIT*	Capex*
	Mt[1]	Mt[2]	$/t[3]	$/t[4]	$m	$m	$m	$m
Segment	n/a	n/a	n/a	n/a	554	(440)	(593)	14
Prior year	—	—	—	—	*1,126*	*(3)*	*(289)*	*125*
Exploration	n/a	n/a	n/a	n/a	n/a	(155)	(162)	2
Prior year	—	—	—	—	—	*(128)*	*(132)*	—
Corporate activities and unallocated costs[5]	n/a	n/a	n/a	n/a	554	(285)	(431)	12
Prior year	—	—	—	—	*354*	*(63)*	*(270)*	*44*
Thermal Coal – South Africa[6]	—	—	—	—	—	—	—	—
Prior year	*5.7*	*5.3*	*77*	*46*	*553*	*101*	*70*	*81*
Thermal Coal – Colombia[7]	—	—	—	—	—	—	—	—
Prior year	*3.6*	*3.4*	*65*	*34*	*219*	*87*	*43*	—

(1) Production volumes are saleable tonnes. South African production volumes include export primary production, secondary production sold into export markets, production sold domestically at export parity pricing and excludes other domestic production of 5.6 Mt in 2021.

(2) South African sales volumes include export primary production, secondary production sold into export markets and production sold domestically at export parity pricing and exclude domestic sales of 5.3 Mt in 2021 and third-party sales of 6.4 Mt in 2021.

(3) Thermal Coal – South Africa realised price is the weighted average export thermal coal price achieved. Excludes third-party sales from locations other than Richards Bay.

(4) Thermal Coal – South Africa FOB cost per saleable tonne from the trade operations, excluding royalties and study costs.

(5) Revenue within Corporate activities and unallocated costs primarily relates to third-party shipping activities, as well as the Marketing business' energy solution's activities.

(6) Thermal Coal – South Africa mining activity included in prior year until the demerger on 4 June 2021.

(7) Thermal Coal – Colombia represents the Group's attributable share from its 33.3% shareholding in Cerrejón and reflects earnings and volumes from the first half of 2021 only, before the agreement was entered into.

Financial overview

Exploration

Exploration's underlying EBITDA loss was $155 million (2021: $128 million loss), driven by the recovery in activity from the Covid-19 disruptions in 2021 that affected greenfield base metals exploration and near-mine iron ore exploration.

Corporate activities and unallocated costs

Underlying EBITDA was a $285 million loss (2021: $63 million loss), driven primarily by the finalisation of the Grosvenor gas ignition claim and the Moranbah overpressure event claim by the Group's self-insurance entity, which resulted in an expense in Corporate activities that was offset within the underlying EBITDA of Steelmaking Coal.

Guidance summary

Production and unit costs

	Unit costs 2023F	Production volumes			
		Units	2023F	2024F	2025F
Diamonds[1]	c.$80/ct	Mct	30–33	29–32	32–35
Copper[2]	c.156 c/lb	kt	840–930	910–1,000	840–930
Nickel[3]	c.515 c/lb	kt	38–40	39–41	37–39
PGMs – metal in concentrate[4]	c.$1,025/PGM ounce	Moz	3.6–4.0	3.6–4.0	3.5–3.9
Platinum		Moz	1.6–1.8	1.6–1.8	1.6–1.8
Palladium		Moz	1.2–1.3	1.2–1.3	1.1–1.2
Other		Moz	0.8–0.9	0.8–0.9	0.8–0.9
PGMs – refined[5]		Moz	3.6–4.0	3.6–4.0	3.3–3.7
Iron ore[6]	c.$39/tonne	Mt	57–61	61–65	64–68
Steelmaking Coal[7]	c.$105/tonne	Mt	16–19	20–22	20–22

Note: Unit costs exclude royalties, depreciation and include direct support costs only. FX rates used for 2023 unit costs: ~17 ZAR:USD, ~1.5 AUD:USD, ~5.3 BRL:USD, ~900 CLP:USD, ~3.8 PEN:USD.

(1) Unit cost is based on De Beers' share of production. Production on a 100% basis except for the Gahcho Kué joint operation, which is on an attributable 51% basis, subject to trading conditions. Venetia continues to transition to underground operations, first production is expected in 2023. Step-up in 2023 unit cost is primarily driven by change in production mix, as Venetia transitions to underground operations and delivers a lower carat profile during ramp-up.

(2) Copper business unit only. On a contained-metal basis. Total copper is the sum of Chile and Peru. Unit cost total is a weighted average based on the mid-point of production guidance. 2023 Chile: 530–580kt; Peru 310–350kt. 2024 Chile: 550–600kt; Peru: 360–400kt. 2025 Chile: 530–580kt; Peru 310–350kt. Production in Chile is subject to water availability, and in Peru is subject to any socio-political effects and full ramp-up. Chile 2023 unit cost is c.190 c/lb. Peru 2023 unit cost is c.100 c/lb.

(3) Nickel operations in Brazil only. The Group also produces approximately 20 kt of nickel on an annual basis as a co-product from the PGM operations. Nickel production is impacted by declining grades. Bulk ore sorting unit benefits 2024, and 2025 is impacted by a maintenance shutdown.

(4) Unit cost is per own-mined 5E + gold PGMs metal in concentrate ounce. Production is 5E + gold produced metal in concentrate ounces. Includes own-mined production (~65%) and purchased concentrate volumes (~35%). Metal in concentrate production is impacted by lower grade and recoveries at Mogalakwena, planned infrastructure closures and lower volumes from Amandelbult. Kroondal switches to a tolling arrangement upon our exit from the operation, expected in 2024. Lower volumes in 2025 reflect the transition of the Siyanda POC agreement to tolling.

(5) 5E + gold produced refined ounces. Includes own-mined production and purchased concentrate volumes. Refined production is subject to the impact of Eskom load-shedding. Kroondal switches to a tolling arrangement upon our exit from the operation, expected in 2024. Lower volumes in 2025 reflect the transition of the Siyanda POC agreement to tolling.

(6) Wet basis. Total iron ore is the sum of Kumba and Minas-Rio. Unit cost total is a weighted average based on the mid-point of production guidance. 2023 Kumba: 35–37Mt (production is impacted by high levels of on-mine inventory); Minas-Rio: 22–24Mt. 2024 Kumba: 37–39Mt (subject to UHDMS plant coming online); Minas-Rio: 24–26Mt. 2025 Kumba: 39–41Mt; Minas-Rio: 25–27Mt. Kumba production is subject to the third-party rail and port performance. Kumba 2023 unit cost is c.$44/tonne. Minas-Rio 2023 unit cost is c.$32/tonne.

(7) Steelmaking Coal FOB/tonne unit cost comprises managed operations and excludes royalties and study costs. Production excludes thermal coal by-product from Australia.

Capital expenditure[1]

	2023F	2024F	2025F
Growth	~$1.8bn *Includes ~$0.8bn Woodsmith capex and ~$0.3bn South African regional renewable energy ecosystem and nuGen™ capex*	~$1.0bn *Includes ~$0.3bn South African regional renewable energy ecosystem and nuGen™ capex*	~$1.0bn *Includes ~$0.3bn South African regional renewable energy ecosystem and nuGen™ capex*
Sustaining	$4.2-4.7bn *Reflects $3.1-3.6bn baseline, ~$0.7bn lifex projects and ~$0.4bn Collahuasi desalination plant[2]*	$4.5-5.0bn *Reflects $3.5-4.0bn baseline, $0.7bn lifex projects and ~$0.3bn Collahuasi desalination plant[2]*	$4.0-4.5bn *Reflects $3.2-3.7bn baseline, ~$0.5bn lifex projects and ~$0.3bn Collahuasi desalination plant[2]*
Total	$6.0-6.5bn	$5.5–6.0bn	$5.0–5.5bn

Further details on Anglo American's high quality growth and life-extension projects, including details of the associated volumes benefit, are disclosed on pages 14–17.

Long term sustaining capital expenditure is expected to be $3.0-3.5 billion per annum[3], excluding life-extension projects.

Other guidance

- 2023 depreciation: $3.3–3.5 billion
- 2023 effective tax rate: 35–37%[4]
- Long term effective tax rate: 33–37%[4]
- Dividend payout ratio: 40% of underlying earnings
- Net debt:EBITDA: <1.5x at the bottom of the cycle.

(1) Cash expenditure on property, plant and equipment including related derivatives, net of proceeds from disposal of property, plant and equipment and includes direct funding for capital expenditure from non-controlling interests. Shown excluding capitalised operating cash flows. Consequently, for Quellaveco, growth capex reflects attributable share. Guidance includes unapproved projects and is, therefore, subject to progress of the project studies and unapproved Woodsmith capex of ~$1 bn per annum is excluded after 2023. Refer to the 2022 results presentation slides 43–52 for further detail on the breakdown of the capex guidance at project level.

(2) Attributable share of capex. Collahuasi desalination capex shown includes related infrastructure.

(3) Long term sustaining capex guidance is shown on a 2022 real basis.

(4) Effective tax rate is highly dependent on a number of factors, including the mix of profits and any corporate tax reforms impacting the countries where we operate, and may vary from the guided ranges.

For further information, please contact:

Media

UK

James Wyatt-Tilby
james.wyatt-tilby@angloamerican.com
Tel: +44 (0)20 7968 8759

Marcelo Esquivel
marcelo.esquivel@angloamerican.com
Tel: +44 (0)20 7968 8891

Rebecca Meeson-Frizelle
rebecca.meeson-frizelle@angloamerican.com
Tel: +44 (0)20 7968 1374

South Africa

Nevashnee Naicker
nevashnee.naicker@angloamerican.com
Tel: +27 (0)11 638 3189

Sibusiso Tshabalala
sibusiso.tshabalala@angloamerican.com
Tel: +27 (0)11 638 2175

Investors

UK

Paul Galloway
paul.galloway@angloamerican.com
Tel: +44 (0)20 7968 8718

Emma Waterworth
emma.waterworth@angloamerican.com
Tel: +44 (0)20 7968 8574

Michelle Jarman
michelle.jarman@angloamerican.com
Tel: +44 (0)20 7968 1494

Notes to editors:
Anglo American is a leading global mining company and our products are the essential ingredients in almost every aspect of modern life. Our portfolio of world-class competitive operations, with a broad range of future development options, provides many of the future-enabling metals and minerals for a cleaner, greener, more sustainable world and that meet the fast growing every day demands of billions of consumers. With our people at the heart of our business, we use innovative practices and the latest technologies to discover new resources and to mine, process, move and market our products to our customers – safely and sustainably.

As a responsible producer of diamonds (through De Beers), copper, platinum group metals, premium quality iron ore and steelmaking coal, and nickel – with crop nutrients in development – we are committed to being carbon neutral across our operations by 2040. More broadly, our Sustainable Mining Plan commits us to a series of stretching goals to ensure we work towards a healthy environment, creating thriving communities and building trust as a corporate leader. We work together with our business partners and diverse stakeholders to unlock enduring value from precious natural resources for the benefit of the communities and countries in which we operate, for society as a whole, and for our shareholders. Anglo American is re-imagining mining to improve people's lives.

www.angloamerican.com

Webcast of presentation:
A live webcast of the results presentation, starting at 9.00am UK time on 23 February 2023, can be accessed through the Anglo American website at www.angloamerican.com

Note: Throughout this results announcement, '$' denotes United States dollars and 'cents' refers to United States cents. Tonnes are metric tons, 'Mt' denotes million tonnes and 'kt' denotes thousand tonnes, unless otherwise stated.

The Company has a primary listing on the Main Market of the London Stock Exchange and secondary listings on the Johannesburg Stock Exchange, the Botswana Stock Exchange, the Namibia Stock Exchange and the SIX Swiss Exchange.

Group terminology
In this document, references to “Anglo American”, the “Anglo American Group”, the “Group”, “we”, “us”, and “our” are to refer to either Anglo American plc and its subsidiaries and/or those who work for them generally, or where it is not necessary to refer to a particular entity, entities or persons. The use of those generic terms herein is for convenience only, and is in no way indicative of how the Anglo American Group or any entity within it is structured, managed or controlled. Anglo American subsidiaries, and their management, are responsible for their own day-to-day operations, including but not limited to securing and maintaining all relevant licences and permits, operational adaptation and implementation of Group policies, management, training and any applicable local grievance mechanisms. Anglo American produces group-wide policies and procedures to ensure best uniform practices and standardisation across the Anglo American Group but is not responsible for the day to day implementation of such policies. Such policies and procedures constitute prescribed minimum standards only. Group operating subsidiaries are responsible for adapting those policies and procedures to reflect local conditions where appropriate, and for implementation, oversight and monitoring within their specific businesses.

Forward-looking statements and third-party information:
This document includes forward-looking statements. All statements other than statements of historical facts included in this document, including, without limitation, those regarding Anglo American’s financial position, business, acquisition and divestment strategy, dividend policy, plans and objectives of management for future operations, prospects and projects (including development plans and objectives relating to Anglo American’s products, production forecasts and Ore Reserve and Mineral Resource positions) and sustainability performance related (including environmental, social and governance) goals, ambitions, targets, visions, milestones and aspirations, are forward-looking statements. By their nature, such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Anglo American or industry results to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements.

Such forward-looking statements are based on numerous assumptions regarding Anglo American’s present and future business strategies and the environment in which Anglo American will operate in the future. Important factors that could cause Anglo American’s actual results, performance or achievements to differ materially from those in the forward-looking statements include, among others, levels of actual production during any period, levels of global demand and commodity market prices, unanticipated downturns in business relationships with customers or their purchases from Anglo American, mineral resource exploration and project development capabilities and delivery, recovery rates and other operational capabilities, safety, health or environmental incidents, the effects of global pandemics and outbreaks of infectious diseases, the impact of attacks from third parties on our information systems, natural catastrophes or adverse geological conditions, climate change and extreme weather events, the outcome of litigation or regulatory proceedings, the availability of mining and processing equipment, the ability to obtain key inputs in a timely manner, the ability to produce and transport products profitably, the availability of necessary infrastructure (including transportation) services, the development, efficacy and adoption of new or competing technology, challenges in realising resource estimates or discovering new economic mineralisation, the impact of foreign currency exchange rates on market prices and operating costs, the availability of sufficient credit, liquidity and counterparty risks, the effects of inflation, terrorism, war, conflict, political or civil unrest, uncertainty, tensions and disputes and economic and financial conditions around the world, evolving societal and stakeholder requirements and expectations, shortages of skilled employees, unexpected difficulties relating to acquisitions or divestitures, competitive pressures and the actions of competitors, activities by courts, regulators and governmental authorities such as in relation to permitting or forcing closure of mines and ceasing of operations or maintenance of Anglo American’s assets and changes in taxation or safety, health, environmental or other types of regulation in the countries where Anglo American operates, conflicts over land and resource ownership rights and such other risk factors identified in Anglo American’s most recent Annual Report. Forward-looking statements should, therefore, be construed in light of such risk factors and undue reliance should not be placed on forward-looking statements. These forward-looking statements speak only as of the date of this document. Anglo American expressly disclaims any obligation or undertaking (except as required by applicable law, the City Code on Takeovers and Mergers, the UK Listing Rules, the Disclosure and Transparency Rules of the Financial Conduct Authority, the Listings Requirements of the securities exchange of the JSE Limited in South Africa, the SIX Swiss Exchange, the Botswana Stock Exchange and the Namibian Stock Exchange and any other applicable regulations) to release publicly any updates or revisions to any forward-looking statement contained herein to reflect any change in Anglo American’s expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

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Anglo American plc
17 Charterhouse Street London EC1N 6RA United Kingdom
Registered office as above. Incorporated in England and Wales under the Companies Act 1985.
Registered Number: 3564138 Legal Entity Identifier: 549300S9XF92D1X8ME43

CONDENSED FINANCIAL STATEMENTS

for the year ended 31 December 2022

Contents

Consolidated income statement

for the year ended 31 December 2022

US$ million	Note	2022 Before special items and remeasurements	2022 Special items and remeasurements (note 9)	2022 Total	2021 Before special items and remeasurements	2021 Special items and remeasurements (note 9)	2021 Total
Revenue	3	35,127	(9)	35,118	41,547	7	41,554
Operating costs		(24,203)	(1,672)	(25,875)	(24,454)	492	(23,962)
Operating profit	3	10,924	(1,681)	9,243	17,093	499	17,592
Non-operating special items	9	—	(77)	(77)	—	(207)	(207)
Net income from associates and joint ventures	3 12	641	—	641	460	174	634
Profit before net finance costs and tax		11,565	(1,758)	9,807	17,553	466	18,019
Investment income		214	—	214	139	—	139
Interest expense		(515)	—	(515)	(434)	(116)	(550)
Other net financing (losses)/gains		(41)	15	(26)	18	3	21
Net finance costs	5	(342)	15	(327)	(277)	(113)	(390)
Profit before tax		11,223	(1,743)	9,480	17,276	353	17,629
Income tax expense	6	(3,570)	114	(3,456)	(5,271)	(659)	(5,930)
Profit for the financial year		7,653	(1,629)	6,024	12,005	(306)	11,699
Attributable to:							
Non-controlling interests	15	1,617	(107)	1,510	3,080	57	3,137
Equity shareholders of the Company		6,036	(1,522)	4,514	8,925	(363)	8,562
Earnings per share (US$)							
Basic	4	4.97	(1.25)	3.72	7.22	(0.29)	6.93
Diluted	4	4.92	(1.24)	3.68	7.13	(0.29)	6.84

Consolidated statement of comprehensive income

for the year ended 31 December 2022

US$ million	2022	2021
Profit for the financial year	6,024	11,699
Items that will not be reclassified to the income statement (net of tax)		
Remeasurement of net retirement benefit obligation	(207)	91
Net revaluation gain/(loss) on equity investments	20	(10)
Items that have been or may subsequently be reclassified to the income statement (net of tax)		
Net exchange differences:		
Net loss (including associates and joint ventures)	(1,153)	(1,330)
Cumulative loss transferred to the income statement on disposal of foreign operations	—	363
Revaluation of cash flow hedges:		
Net revaluation loss	(80)	—
Other comprehensive loss for the financial year (net of tax)	(1,420)	(886)
Total comprehensive income for the financial year (net of tax)	4,604	10,813
Attributable to:		
Non-controlling interests	1,285	2,870
Equity shareholders of the Company	3,319	7,943

Consolidated balance sheet

as at 31 December 2022

US$ million	Note	2022	2021
ASSETS			
Non-current assets			
Intangible assets		2,828	3,002
Property, plant and equipment		41,125	39,501
Environmental rehabilitation trusts		107	113
Investments in associates and joint ventures	12	1,056	1,021
Financial asset investments		390	340
Inventories		809	583
Trade and other receivables		440	870
Deferred tax assets		198	532
Derivative financial assets		49	256
Pension asset surplus and other non-current assets		469	794
Total non-current assets		47,471	47,012
Current assets			
Inventories		6,598	5,228
Trade and other receivables		4,483	4,309
Current tax assets		201	104
Derivative financial assets		204	187
Current financial asset investments		38	29
Cash and cash equivalents	13	8,412	9,066
Total current assets		19,936	18,923
Assets classified as held for sale	18	—	50
Total assets		67,407	65,985
LIABILITIES			
Current liabilities			
Trade and other payables		(7,380)	(7,930)
Short term borrowings	13 14	(1,420)	(1,235)
Provisions for liabilities and charges		(684)	(579)
Current tax liabilities		(569)	(627)
Derivative financial liabilities		(441)	(212)
Total current liabilities		(10,494)	(10,583)
Non-current liabilities			
Trade and other payables		(249)	(318)
Medium and long term borrowings	13 14	(12,945)	(11,621)
Royalty liability		(510)	(382)
Retirement benefit obligations		(510)	(502)
Deferred tax liabilities		(5,178)	(4,865)
Derivative financial liabilities		(888)	(317)
Provisions for liabilities and charges		(2,609)	(2,627)
Total non-current liabilities		(22,889)	(20,632)
Total liabilities		(33,383)	(31,215)
Net assets		34,024	34,770
EQUITY			
Called-up share capital		734	737
Share premium account		2,558	2,558
Own shares		(6,272)	(6,141)
Other reserves		(12,070)	(11,045)
Retained earnings		42,411	41,716
Equity attributable to equity shareholders of the Company		27,361	27,825
Non-controlling interests	15	6,663	6,945
Total equity		34,024	34,770

The Condensed financial statements of Anglo American plc, registered number 03564138, were approved by the Board of directors on 22 February 2023 and signed on its behalf by:

Duncan Wanblad
Chief Executive

Stephen Pearce
Finance Director

Consolidated cash flow statement

for the year ended 31 December 2022

US$ million	Note	2022	2021
Cash flows from operating activities			
Profit before tax		9,480	17,629
Net finance costs including financing special items and remeasurements	5	327	390
Net income from associates and joint ventures	12	(641)	(634)
Non-operating special items	9	77	207
Operating profit		9,243	17,592
Revenue and operating special items and remeasurements	9	1,681	(499)
Cash element of special items		(12)	(18)
Depreciation and amortisation		2,446	2,715
Share-based payment charges		215	189
Increase/(decrease) in provisions and net retirement benefit obligations		250	(303)
(Increase)/decrease in inventories		(1,776)	328
Increase in operating receivables		(374)	(637)
Increase in operating payables		48	1,368
Other adjustments		168	(147)
Cash flows from operations		11,889	20,588
Dividends from associates and joint ventures	12	602	475
Dividends from financial asset investments		—	1
Income tax paid		(2,726)	(4,341)
Net cash inflows from operating activities		9,765	16,723
Cash flows from investing activities			
Expenditure on property, plant and equipment	11	(6,191)	(5,732)
Cash flows used in derivatives related to capital expenditure	11	—	(8)
Proceeds from disposal of property, plant and equipment	11	7	17
Investments in associates and joint ventures		(37)	(35)
Expenditure on intangible assets		(129)	(68)
Net (issuance)/redemption of financial asset investments		(142)	29
Interest received and other investment income		181	87
Net cash inflow on disposals	19	564	63
Other investing activities		(70)	89
Net cash used in investing activities		(5,817)	(5,558)
Cash flows from financing activities			
Interest paid		(420)	(433)
Cash flows (used in)/from derivatives related to financing activities	13	(1)	95
Dividends paid to Company shareholders	7	(3,549)	(4,047)
Dividends paid to non-controlling interests	15	(1,794)	(2,838)
Proceeds from issuance of bonds		1,963	996
Proceeds from other borrowings		1,537	972
Capital repayment of lease obligations		(266)	(336)
Repayments of bonds and borrowings		(1,098)	(2,554)
Purchase of shares by Group companies		(527)	(1,084)
Other financing activities		(213)	(127)
Net cash used in financing activities		(4,368)	(9,356)
Net (decrease)/increase in cash and cash equivalents		(420)	1,809
Cash and cash equivalents at start of year	13	9,057	7,508
Cash movements in the year		(420)	1,809
Effects of changes in foreign exchange rates		(237)	(260)
Cash and cash equivalents at end of year	13	8,400	9,057

Consolidated statement of changes in equity

for the year ended 31 December 2022

US$ million	Total share capital[1]	Own shares[2]	Retained earnings	Cumulative translation adjustment reserve	Other reserves[3]	Total equity attributable to equity shareholders of the Company	Non-controlling interests	Total equity
At 1 January 2021	5,107	(6,107)	37,192	(11,004)	636	25,824	6,942	32,766
Profit for the year	—	—	8,562	—	—	8,562	3,137	11,699
Other comprehensive income/(loss)	—	—	81	(692)	(8)	(619)	(267)	(886)
Dividends	—	—	(4,047)	—	—	(4,047)	(2,837)	(6,884)
Equity settled share-based payment schemes	—	(71)	(10)	—	15	(66)	3	(63)
Shares cancelled during the year	(12)	—	—	—	12	—	—	—
Share buyback	—	—	(1,000)	—	—	(1,000)	—	(1,000)
Change in ownership	—	—	(73)	—	—	(73)	89	16
In specie return of capital relating to Thungela demerger (note 19)	(1,800)	—	1,081	—	—	(719)	(106)	(825)
Other	—	37	(70)	—	(4)	(37)	(16)	(53)
At 31 December 2021	3,295	(6,141)	41,716	(11,696)	651	27,825	6,945	34,770
Profit for the year	—	—	4,514	—	—	4,514	1,510	6,024
Other comprehensive loss	—	—	(183)	(963)	(49)	(1,195)	(225)	(1,420)
Dividends	—	—	(3,549)	—	—	(3,549)	(1,566)	(5,115)
Equity settled share-based payment schemes	—	(130)	(59)	—	1	(188)	(1)	(189)
Shares cancelled during the year	(3)	—	—	—	3	—	—	—
Other	—	(1)	(28)	—	(17)	(46)	—	(46)
At 31 December 2022	3,292	(6,272)	42,411	(12,659)	589	27,361	6,663	34,024

(1) Includes share capital and share premium.

(2) Own shares comprise shares of Anglo American plc held by the Company, its subsidiaries and employee benefit trusts.

(3) Includes the share-based payment reserve, financial asset revaluation reserve, capital redemption reserve, legal reserve and other reserves.

Notes to the Condensed financial statements

1. Basis of preparation

Basis of preparation

The Condensed financial statements for the year ended 31 December 2022 do not constitute statutory accounts as defined in section 435 (1) and (2) of the Companies Act 2006. The results for the year to 31 December 2022 have been extracted from the 31 December 2022 audited Consolidated Financial Statements which have been approved by the Board of Directors. Statutory accounts for the year ended 31 December 2021 have been delivered to the Registrar of Companies and those for 2022 will be delivered following the Company's Annual General Meeting convened for 26 April 2023. The auditors have reported on these accounts; their reports were unqualified, did not include a reference to any matters to which the auditors drew attention by way of emphasis of matter and did not contain a statement under section 498 (2) or (3) of the Companies Act 2006.

Whilst the preliminary announcement (the Condensed financial statements) has been prepared in accordance with UK-adopted International Accounting Standards, with those parts of the Companies Act 2006 applicable to companies reporting under those standards and the requirements of the Listing Rules of the Financial Conduct Authority in the United Kingdom, these Condensed financial statements do not contain sufficient information to comply with UK-adopted International Accounting Standards. The Group will publish full financial statements that comply with UK-adopted International Accounting Standards in March 2023.

Going concern

The financial position of the Group, its cash flows, liquidity position and borrowing facilities are set out in the Group financial review on pages 8-12. The Group's net debt (including related hedges) at 31 December 2022 was $6.9 billion (2021: $3.8 billion), representing a gearing level of 17% (2021: 10%). The Group's liquidity position (defined as cash and undrawn committed facilities) of $16.1 billion at 31 December 2022 remains strong. Details of borrowings and facilities are set out in note14 and further analysis of net debt is set out in note 13.

The directors have considered the Group's cash flow forecasts for the period to the end of December 2024 under base and downside scenarios with reference to the Group's principal risks as set out on page 20 of these results. In the downside scenarios modelled (including price reductions of up to 30% against budget and operational incidents), the Group maintains sufficient liquidity throughout the period of assessment without the use of mitigating actions.

The Board is satisfied that the Group's forecasts and projections, taking account of reasonably possible changes in trading performance, show that the Group will be able to operate within the level of its current facilities for the period of at least 12 months from the date of approval of the financial statements. For this reason the Group continues to adopt the going concern basis in preparing its financial statements.

Alternative Performance Measures

When assessing and discussing the Group's reported financial performance, financial position and cash flows, management makes reference to Alternative Performance Measures (APMs) of historical or future financial performance, financial position or cash flows that are not defined or specified under International Financial Reporting Standards (IFRS). APMs should be considered in addition to, and not as a substitute for or as superior to, measures of financial performance, financial position or cash flows reported in accordance with IFRS. Further information on APMs is provided on page 86.

2. Changes in accounting policies, estimates and disclosures

The accounting policies applied are consistent with those adopted and disclosed in the Group financial statements for the year ended 31 December 2021 with the exception of the adoption of an amendment to IAS 16 *Proceeds before intended use*. New accounting pronouncements, principally minor amendments to existing standards, also became effective on 1 January 2022 and have been adopted by the Group. The adoption of these new accounting pronouncements has not had a significant impact on the accounting policies, methods of computation or presentation applied by the Group.

IAS 16 *Property, Plant and Equipment: Proceeds before intended use*

An amendment to IAS 16 *Proceeds before intended use* became effective for the Group from 1 January 2022.

The amendment prohibits an entity from deducting from the cost of an item of property, plant and equipment any proceeds received from selling items produced while the entity is preparing the asset for its intended use. The proceeds from selling these items, and the associated costs will be recognised in the income statement. IAS 2 *Inventories* should be applied in identifying and measuring the cost of these items.

The impact of this transition difference for the year ended 31 December 2021 is not considered material to the Group and hence comparative values have not been restated.

The Group's Quellaveco copper project is the most significant project impacted by the amendment to IAS 16 during 2022. All production and sales from Quellaveco in 2022 arose before commercial production is achieved, and as a result revenue of $608 million and associated costs of $289 million that would previously have been capitalised against project assets were recognised in the Consolidated income statement. The impact of adopting the amendment did not have a material impact on any other operation.

The Group has not early adopted any other amendment, standard or interpretation that has been issued but is not yet effective. It is expected that where applicable, these standards and amendments will be adopted on each respective effective date.

Financial performance

Profit attributable to equity shareholders decreased by 47% to $4,514 million (2021:$8,562 million). Underlying earnings decreased by 32% to $6,036 million (2021:$8,925 million).

The following disclosures provide further information about the drivers of the Group's financial performance in the year. This includes analysis of the respective contribution of the Group's reportable segments along with information about its operating cost base, net finance costs and tax. In addition, disclosure on earnings per share and the dividend is provided.

3. Financial performance by segment

Overview

The Group's operating segments are aligned to those business units that are evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance. Operating segments with similar economic characteristics are aggregated into reportable segments.

The Group aggregates the following operating segments into reportable segments:

- Kumba Iron Ore and Iron Ore Brazil are aggregated into Iron Ore
- Copper Chile and Copper Peru are aggregated into Copper.

Shipping revenue related to shipments of the Group's products is shown within the relevant operating segment. Revenue from other marketing and trading activities from shipping and energy solutions within the Marketing business is presented within the 'Corporate and other' segment, which also includes unallocated corporate costs and exploration costs. For the year ended 31 December 2021, the 'Corporate and other' segment also included the results of the Group's Thermal Coal (South Africa and Cerrejón) mining operations prior to their disposal.

During the year, the Metallurgical Coal reportable segment was renamed to Steelmaking Coal to more accurately reflect the end-use of our product as an essential ingredient in the production of steel.

The disclosures in this note include certain Alternative Performance Measures (APMs). For more information on the APMs used by the Group, including definitions, please refer to page 86.

Financial performance

3. Financial performance by segment continued

Segment results

US$ million	Group revenue	Underlying EBITDA	Depreciation and amortisation	Underlying EBIT	Net finance costs and income tax expense	Non-controlling interests	Underlying earnings
							2022
De Beers	6,622	1,417	(423)	994	(334)	(108)	552
Copper	5,599	2,182	(587)	1,595	(684)	(151)	760
Nickel	858	381	(64)	317	(58)	—	259
Platinum Group Metals	10,096	4,417	(365)	4,052	(1,132)	(654)	2,266
Iron Ore	7,534	3,455	(493)	2,962	(927)	(698)	1,337
Steelmaking Coal	5,034	2,749	(380)	2,369	(729)	—	1,640
Manganese	840	378	(66)	312	(161)	(3)	148
Crop Nutrients	254 [(1)]	(44)	(1)	(45)	(6)	—	(51)
Corporate and other	554	(440)	(153)	(593)	(276)	(6)	(875)
	37,391	14,495	(2,532)	11,963	(4,307) [(2)]	(1,620)	6,036
Less: associates and joint ventures	(2,264)	(1,125)	86	(1,039)	395	3	(641)
Subsidiaries and joint operations	35,127	13,370	(2,446)	10,924	(3,912)	(1,617)	5,395
Reconciliation:							
Net income from associates and joint ventures				641			641
Special items and remeasurements	(9)			(1,758)			(1,522)
Revenue	35,118						
Profit before net finance costs and tax				9,807			
Profit attributable to equity shareholders of the Company							4,514

See next page for footnotes.

Financial performance

3. Financial performance by segment continued

US$ million	Group revenue	Underlying EBITDA	Depreciation and amortisation	Underlying EBIT	Net finance costs and income tax expense	Non-controlling interests	Underlying earnings
							2021
De Beers	5,602	1,100	(480)	620	(214)	(61)	345
Copper	6,433	4,011	(583)	3,428	(1,337)	(572)	1,519
Nickel	710	320	(59)	261	18	—	279
Platinum Group Metals	14,502	7,099	(346)	6,753	(1,919)	(1,045)	3,789
Iron Ore	11,104	6,871	(512)	6,359	(1,717)	(1,411)	3,231
Steelmaking Coal	2,899	962	(512)	450	(150)	—	300
Manganese	768	315	(65)	250	(116)	(2)	132
Crop Nutrients	114 [1]	(41)	(1)	(42)	3	—	(39)
Corporate and other	1,126	(3)	(286)	(289)	(351)	9	(631)
	43,258	20,634	(2,844)	17,790	(5,783) [2]	(3,082)	8,925
Less: associates and joint ventures[3]	(1,711)	(826)	129	(697)	235	2	(460)
Subsidiaries and joint operations	41,547	19,808	(2,715)	17,093	(5,548)	(3,080)	8,465
Reconciliation:							
Net income from associates and joint ventures				634			634
Special items and remeasurements	7			292			(537)
Revenue	41,554						
Profit before net finance costs and tax				18,019			
Profit attributable to equity shareholders of the Company							8,562

(1) Group revenue in respect of Crop Nutrients relates to revenue from its associate, The Cibra Group, a fertiliser distributor based in Brazil.
(2) Comprises net finance costs of $358 million (2021: $290 million) and income tax expense of $3,949 million (2021: $5,493 million).
(3) Income from the Cerrejón associate arising after the agreement of the disposal transaction in June 2021 has been classified as a special item and is therefore excluded from Corporate and other Group revenue, underlying EBITDA, underlying EBIT and underlying earnings. See notes 9 and 12 for further detail.

The segment results are stated after elimination of inter-segment interest and dividends and include an allocation of corporate costs.

Further information

Group revenue by product

Segments predominantly derive revenue as follows – De Beers: rough and polished diamonds; Copper: copper; Platinum Group Metals: platinum group metals and nickel; Iron Ore: iron ore; Steelmaking Coal: steelmaking coal; Nickel: nickel; Manganese: manganese ore. Revenue reported within Corporate and other revenue includes the margin from the Group's marketing and trading activity in energy solutions and shipping within the Marketing business, inclusive of shipping services provided to third parties. In the year ended 31 December 2021, Corporate and other revenue also included thermal coal revenue from the South African thermal coal operations prior to the demerger and the Group's share of thermal coal revenue from its associate Cerrejón prior to 28 June 2021, after which, Cerrejón revenue was reported within special items.

Other revenue principally relates to iridium, gold, ruthenium and molybdenum. The revenue analysis below includes the Group's share of revenue in equity accounted associates and joint ventures excluding special items and remeasurements. See note 12.

Financial performance

3. Financial performance by segment continued

US$ million	2022 Revenue from contracts with customers	2022 Revenue from other sources	2022 Group revenue	2021 Revenue from contracts with customers	2021 Revenue from other sources	2021 Group revenue
Diamonds	6,608	14	6,622	5,590	12	5,602
Copper	5,247	(80)	5,167	5,751	365	6,116
Platinum	1,680	6	1,686	2,511	1	2,512
Palladium	2,542	6	2,548	3,854	6	3,860
Rhodium	4,066	21	4,087	6,328	49	6,377
Iron ore	6,597	(45)	6,552	9,838	215	10,053
Steelmaking coal	3,544	990	4,534	2,114	561	2,675
Thermal coal[(1)(2)]	495	188	683	707	294	1,001
Nickel	1,422	15	1,437	1,187	3	1,190
Manganese ore and alloys	—	840	840	—	768	768
Shipping	1,362	—	1,362	1,378	—	1,378
Other	1,484	389	1,873	1,507	219	1,726
	35,047	2,344	37,391	40,765	2,493	43,258
Reconciliation:						
Less: Revenue from associates and joint ventures	—	(2,264)	(2,264)	—	(1,711)	(1,711)
Special items and remeasurements	—	(9)	(9)	—	7	7
Revenue	35,047	71	35,118	40,765	789	41,554

(1) Group revenue and income from the Cerrejón associate arising after the agreement of the disposal transaction in June 2021 was classified as a special item and are therefore excluded from Group revenue, underlying EBITDA, underlying EBIT and underlying earnings from that date. The Cerrejón associate met the criteria to be classified as held for sale at 31 December 2021 in advance of the completion of the transaction on 11 January 2022.

(2) For the year ended 31 December 2022, thermal coal represents 2% of Group revenue and comprises sales volumes of 17.4Mt. These arise from transitional marketing support provided to Thungela Resources, purchases from other third parties included within the Marketing business' energy solutions activities, and secondary product sales from the Steelmaking Coal business.

Revenue from other sources for subsidiaries and joint operations of $71 million (2021: $789 million) includes net fair value gains relating to derivatives of $176 million (2021: net fair value losses of $64 million), net fair value losses relating to provisionally priced contracts of $96 million and revenue remeasurements loss of $9 million (2021: net fair value gains of $846 million and revenue remeasurements gain of $7 million). Derivative net gains/losses include both financial derivatives and the net margin arising on contracts for the physical sale and purchase of third-party material (third-party sales) where these contracts are accounted for as derivatives prior to settlement and are entered into to generate a trading margin.

Group revenue by destination

The Group's geographical analysis of segment revenue is allocated based on the customer's port of destination. Where the port of destination is not known, revenue is allocated based on the customer's country of domicile.

	2022		2021	
	US$ million	**%**	US$ million	%
China	8,965	24%	11,248	26%
India	2,798	7%	2,274	5%
Japan	5,542	15%	6,169	14%
Other Asia	6,944	18%	7,539	17%
South Africa	1,312	4%	1,428	3%
Other Africa	2,080	6%	1,664	4%
Brazil	986	3%	728	2%
Chile	811	2%	712	2%
Other South America	10	—	65	—
North America	1,160	3%	1,872	4%
Australia	309	1%	44	—
United Kingdom(1)	1,502	4%	3,144	7%
Other Europe	4,972	13%	6,371	16%
	37,391	100%	43,258	100%

(1) United Kingdom is Anglo American plc's country of domicile.

Financial performance

4. Earnings per share

Overview

The disclosures in this note include certain Alternative Performance Measures (APMs). For more information on the APMs used by the Group, including definitions, please refer to page 86.

US$	2022	2021
Earnings per share		
Basic	3.72	6.93
Diluted	3.68	6.84
Underlying earnings per share		
Basic	4.97	7.22
Diluted	4.92	7.13
Headline earnings per share		
Basic	4.98	7.00
Diluted	4.93	6.92

Further information

The calculation of basic and diluted earnings per share is based on the following data:

	Profit attributable to equity shareholders of the Company		Underlying earnings		Headline earnings	
	2022	2021	2022	2021	2022	2021
Earnings (US$ million)						
Basic and diluted earnings	4,514	8,562	6,036	8,925	6,050	8,654
Weighted average number of shares (million)						
Basic number of ordinary shares outstanding	1,215	1,236	1,215	1,236	1,215	1,236
Effect of dilutive potential ordinary shares	11	15	11	15	11	15
Diluted number of ordinary shares outstanding	1,226	1,251	1,226	1,251	1,226	1,251

The weighted average number of ordinary shares in issue is the weighted number of shares in issue throughout the year, and excludes shares held by employee benefit trusts and Anglo American plc shares held by Group companies. The weighted average number of shares has decreased since 2021, principally due to the share buyback announced in July 2021 and completed in February 2022. The diluted number of ordinary shares outstanding, including share options and awards, is calculated on the assumption of conversion of all potentially dilutive ordinary shares. In the year ended 31 December 2022 there were 342,939 (2021: 19,953) share options that were potentially dilutive but not included in the calculation of diluted earnings because they were anti-dilutive.

Financial performance

4. Earnings per share continued

Headline earnings, a Johannesburg Stock Exchange defined performance measure, is reconciled from profit attributable to equity shareholders of the Company as follows, and the reconciling items below are shown gross and net of tax and non-controlling interests:

	2022		2021	
US$ million	Gross	Net	Gross	Net
Profit attributable to equity shareholders of the Company		4,514		8,562
Special items and remeasurements		1,522		363
Underlying earnings for the financial year		6,036		8,925
Revenue remeasurements	(9)	(14)	7	14
Operating remeasurements	(80)	(72)	(106)	(111)
Non-operating special items – charges relating to BEE transactions	(10)	(9)	—	—
Non-operating special items – remeasurement of deferred consideration	(111)	(73)	453	306
Non-operating special items – disposals	(3)	(4)	(16)	(32)
Financing special items and remeasurements	15	15	(113)	(113)
Tax special items and remeasurements	—	126	—	(317)
Associates' and joint ventures' special items and remeasurements	—	—	—	(10)
Other reconciling items	63	45	10	(8)
Headline earnings for the financial year		6,050		8,654

Other reconciling items principally relate to adjustments to former operations and disposals of property, plant and equipment (2021: relate to adjustments to former operations and disposals of property, plant and equipment).

Financial performance

5. Net finance costs

US$ million	2022	2021
Investment income		
Interest income from cash and cash equivalents	173	79
Interest income from associates and joint ventures	6	7
Other interest income	16	42
Net interest income on defined benefit arrangements	20	10
Dividend income from financial asset investments	—	1
	215	139
Less: Interest income capitalised	(1)	—
Investment income	214	139
Interest expense		
Interest and other finance expense	(721)	(497)
Lease liability interest expense	(42)	(40)
Net interest cost on defined benefit arrangements	(45)	(40)
Unwinding of discount relating to provisions and other liabilities	(86)	(64)
	(894)	(641)
Less: Interest expense capitalised	379	207
Interest expense before special items and remeasurements	(515)	(434)
Financing special items	—	(116)
Interest expense	(515)	(550)
Other net financing (losses)/gains		
Net foreign exchange gains	105	167
Other net fair value losses	(146)	(149)
Other net financing (losses)/gains before special items and remeasurements	(41)	18
Financing remeasurements	15	3
Other net financing (losses)/gains	(26)	21
Net finance costs	(327)	(390)

Further information

Interest income recognised on financial assets at amortised cost is $96 million (2021: $83 million) and interest expense recognised on financial liabilities at amortised cost is $302 million (2021: $275 million).

Included in other net fair value losses is $47 million (2021: $142 million) in respect of fair value losses on the revaluation of deferred consideration balances relating to the Mototolo acquisition. Revaluation of deferred consideration balances are classified as special items and remeasurements only when the original gain or loss on disposal or acquisition has been classified as a special item.

Financial performance

6. Income tax expense

Overview

	2022		
	Profit before tax US$ million	Tax charge US$ million	Effective tax rate
Calculation of effective tax rate (statutory basis)	9,480	(3,456)	36.5%
Adjusted for:			
Special items and remeasurements	1,743	(114)	
Associates' and joint ventures' tax and non-controlling interests	382	(379)	
Calculation of underlying effective tax rate	11,605	(3,949)	34.0%

The underlying effective tax rate was 34.0% for the year ended 31 December 2022. This is higher than the underlying effective tax rate of 31.4% for the year ended 31 December 2021. The underlying effective tax rate in 2022 was mainly impacted by the relative level of profits arising in the Group's operating jurisdictions.

Uncertainty and changes to tax regimes can materialise in any country in which we operate and the Group has no control over political acts, actions of regulators, or changes in local tax regimes. Global and local economic and social conditions can have a significant influence on governments' policy decisions and these have the potential to change tax and other political risks faced by the Group.

In line with our published Tax Strategy, the Group actively monitors tax developments at a national level, as well as global themes and international policy trends, on a continuous basis, and has active engagement strategies with governments, regulators and other stakeholders within the countries in which the Group operates, or plans to operate, as well as at an international level. This includes global tax reforms such as those being agreed through the OECD's Digitalisation of the Economy Project which seeks to reallocate taxing rights for large profitable groups ('Pillar 1') and implement a minimum effective tax rate of 15% on profits of large multinational groups in each country in which they operate ('Pillar 2'). In December 2022, EU Member States reached an agreement requiring implementation of Pillar 2 legislation into the local law of all Member States by the end of 2023. The Group is engaging with policymakers in efforts to ensure that the stated policy objectives are met and that the Group is well placed to comply when the rules are in force. On 20 July 2022, HM Treasury as an early adopter, released draft Pillar 2 legislation that would commence from periods beginning on or after 31 December 2023. The Group continues to review this draft legislation to understand the potential impact on the Group.

The Group assesses portfolio capital investments against political risks and avoids or minimises exposure to jurisdictions with unacceptable risk levels.

The disclosures in this note include certain Alternative Performance Measures (APMs). For more information on the APMs used by the Group, including definitions, please refer to page 86.

a) Analysis of charge for the year

US$ million	2022	2021
United Kingdom corporation tax	106	126
South Africa tax	1,409	2,795
Other overseas tax	1,128	1,605
Prior year adjustments	(80)	22
Current tax	2,563	4,548
Deferred tax	1,007	723
Income tax expense before special items and remeasurements	3,570	5,271
Special items and remeasurements tax	(114)	659
Income tax expense	3,456	5,930

Current tax includes royalties which meet the definition of income tax and are in addition to royalties recorded in operating costs.

Financial performance

6. Income tax expense continued

b) Factors affecting tax charge for the year

The reconciling items between the statutory corporation tax rate and the income tax expense are:

US$ million	2022	2021
Profit before tax	9,480	17,629
Less: Net income from associates and joint ventures	(641)	(634)
Profit before tax (excluding associates and joint ventures)	8,839	16,995
Tax calculated at United Kingdom corporation tax rate of 19.0%	1,679	3,229
Tax effects of:		
Items non-deductible/taxable for tax purposes	(2)	49
Temporary difference adjustments	360	98
Special items and remeasurements		
Functional currency remeasurements (note 9)	(72)	349
Taxable income on intercompany loan write-off	298	—
Utilisation of losses and other temporary differences not previously recognised against intercompany loan write-off income	(298)	—
Other special items and other remeasurements	289	276
Other adjustments		
Dividend withholding taxes	104	300
Effect of differences between local and United Kingdom tax rates	1,176	1,582
Prior year adjustments to current tax	(80)	22
Other adjustments	2	25
Income tax expense	3,456	5,930

The special items and remeasurements reconciling charge of $217 million (2021: charge of $625 million) relates to the net tax impact of total special items and remeasurements before tax calculated at the United Kingdom corporation tax rate less the associated tax recorded against these items and tax special items and remeasurements.

Included within dividend withholding taxes for the year ended 31 December 2022 is a credit of $67 million (2021: $31 million) due to a reassessment of future dividend distributions.

Associates' and joint ventures' tax included within Net income from associates and joint ventures for the year ended 31 December 2022 is a charge of $379 million (2021: $232 million). Excluding special items and remeasurements, this remains a charge of $379 million (2021: $222 million).

Financial performance

7. Dividends

	2022	2021
Proposed final ordinary dividend per share (US cents)	74	118
Proposed final ordinary dividend (US$ million)	905	1,444
Proposed final special dividend per share (US cents)	—	50
Proposed final special dividend (US$ million)	—	612

These financial statements do not reflect the proposed final ordinary dividend as it is still subject to shareholder approval.

Dividends paid during the year are as follows:

US$ million	2022	2021
Final ordinary dividend for 2021 – 118 US cents per ordinary share (2020: 72 US cents per ordinary share)	1,440	907
Final special dividend for 2021 – 50 US cents per ordinary share (2020: nil)	612	—
Interim ordinary dividend for 2022 – 124 US cents per ordinary share (2021: 171 US cents per ordinary share)	1,497	2,140
Interim special dividend for 2022 – nil (2021: 80 US cents per ordinary share)	—	1,000
	3,549	4,047

As at the dividend record date, there are forecasted to be 1,222,809,154 (2021: 1,223,693,614) dividend bearing shares in issue.

Significant items

8. Significant accounting matters

The critical judgements and sources of estimation uncertainty affecting the results for the year ended 31 December 2022 relate to the assessment of impairment and impairment reversal indicators, the estimation of cash flow projections for impairment testing and Quellaveco ramp up and commercial production. Further information about these matters are provided below and in the Group's Integrated Annual Report for the year ended 31 December 2022:

Impairment and impairment reversals of assets

i) Critical accounting judgements
The Group assesses at each reporting date whether there are any indicators that its assets and cash generating units (CGUs) may be impaired. Operating and economic assumptions which could affect the valuation of assets using discounted cash flows, including those that could be impacted by the Group's current and emerging principal risks such as climate change, are updated regularly as part of the Group's planning and forecasting processes. Judgement is therefore required to determine whether the updates represent significant changes in the service potential of an asset or CGU, and are therefore indicators of impairment or impairment reversal. The judgement also takes into account the Group's long term economic forecasts, market consensus and sensitivity analysis of the discounted cash flow models used to value the Group's assets.

Assets (other than goodwill) that have been previously impaired must be assessed for indicators of both impairment and impairment reversal. Such assets are generally carried on the balance sheet at a value close to their recoverable amount at the last assessment. Therefore in principle any change to operational plans or assumptions or economic parameters could result in further impairment or impairment reversal if an indicator is identified. Significant operating assets which have amounts potentially eligible for future reversal as at 31 December 2022 include Minas-Rio (Iron Ore); Capcoal, Moranbah-Grosvenor (Steelmaking Coal) and Barro Alto (Nickel). These assets have a combined carrying value of $10.5 billion within property, plant and equipment as at 31 December 2022, of which the most significant individual asset is Minas-Rio, which has a carrying value of $6.7 billion.

ii) Cash flow projections for impairment testing
Expected future cash flows used in discounted cash flow models are inherently uncertain and could materially change over time. They are significantly affected by a number of factors including Ore Reserves and Mineral Resources, together with economic factors such as commodity prices, exchange rates, discount rates and estimates of production costs and future capital expenditure. Where discounted cash flow models based on management's assumptions are used, the resulting fair value measurements are considered to be at level 3 in the fair value hierarchy, as defined in IFRS 13 *Fair Value Measurement*, as they depend to a significant extent on unobservable valuation inputs.

Cash flow projections are based on financial budgets and Life of Asset Plans or, for non-mine assets, an equivalent appropriate long term forecast, incorporating key assumptions as detailed below:

– Ore Reserves and Mineral Resources
  Ore Reserves and, where considered appropriate, Mineral Resources are incorporated in projected cash flows, based on Ore Reserves and Mineral Resources statements and exploration and evaluation work undertaken by appropriately qualified persons. Mineral Resources are included where management has a high degree of confidence in their economic extraction, despite additional evaluation still being required prior to meeting the required confidence to convert to Ore Reserves.

– Commodity and product prices

Significant items

8. Significant accounting matters continued

Commodity and product prices are based on latest internal forecasts, benchmarked with external sources of information such as the range of available analyst forecasts and for the short term, spot prices where applicable. In estimating the forecast cash flows, management also takes into account the expected realised price from existing contractual arrangements.

– Foreign exchange rates
Foreign exchange rates are based on latest internal forecasts, benchmarked with external sources of information for relevant countries of operation or directly from external forecasts.

– Discount rates
Cash flow projections used in fair value less costs of disposal impairment models are discounted based on real post-tax discount rates, assessed annually. Adjustments to the rates are made for any risks that are not reflected in the underlying cash flows, including the risk profile of the individual asset and country risk.

– Operating costs, capital expenditure and other operating factors
Operating costs and capital expenditure are based on the most recently approved financial budgets. Cash flow projections beyond the budget period are based on Life of Asset Plans, as applicable, and internal management forecasts. Cost assumptions incorporate management experience and expectations, as well as the nature and location of the operation and the risks associated therewith (for example, the grade of Ore Reserves varying significantly over time and unforeseen operational issues). Underlying input cost assumptions are consistent with related output price assumptions. Other operating factors, such as the timelines of granting licences and permits, are based on management's best estimate of the outcome of uncertain future events at the balance sheet date. For further information refer to the unaudited Ore Reserves and Mineral Resources Report 2022.

Where an asset has potential for future development through capital investment, to which a market participant would attribute value, and the costs and economic benefits can be estimated reliably, this development is included in the recoverable amount (with appropriate risk adjustments).

– Climate change
Climate change may have various impacts for the Group. These include the risks and opportunities relating to the demand for the Group's commodities as a result of the transition to a low carbon economy, and physical risks caused by climate change such as the inability to obtain or sustain the level of water security needed to support operations (see principal risk 12 in respect of water, page 20). The Group has incorporated carbon pricing when preparing discounted cash flow valuations. Short term carbon prices are incorporated based on currently enacted legislation (where relevant) or the latest internal views of what a market participant would assess, formed with reference to external forecasts. Longer term carbon prices are based on the latest internal views. Separate carbon prices are used for each region in which the Group operates. These carbon prices are used both as an input into our commodity price forecasts and in our forecast carbon cost for each operation. These internal prices range between \$10 and \$60 per tonne (2022 real basis) by 2030. Carbon costs are based on the forecast carbon price per tonne/CO_2e, multiplied by estimated Scope 1 and 2 emissions for the relevant operation.

The cost and benefits of achieving the Group's emissions reduction ambitions and targets and the implementation of projects to mitigate physical climate risk are included when the Group has a high degree of confidence that a project is technically feasible and it is included in the Life of Asset Plan, which typically aligns with the related capital project being internally approved. This is consistent with the approach taken for other key assumptions such as the inclusion of Ore Reserves and Mineral Resources and forecasted operating costs and capital expenditures as outlined above.

Significant items

8. Significant accounting matters continued

The Group has assessed the strategic and financial resilience of its portfolio under 1.5°C, 2°C and 3°C scenarios. Further disclosure about these scenarios, aligned to the Task Force on Climate-Related Financial Disclosures (TCFD) requirements, is provided in the Group's 2022 Climate Change Report. These specific scenarios are not used as an input to asset valuations for financial reporting purposes as no single scenario is representative of management's best estimate of the likely assumptions that would be used by a market participant when valuing the Group's assets. When constructing a scenario that assumes global temperature increases are contained to a certain level, many judgements and assumptions are needed, including in relation to the nature and speed of technological deployment and the evolution of public policy. Depending on the judgements and assumptions made there is therefore a wide range of possible transition impacts for each level of warming and scenarios may therefore not be comparable between companies.

The Group has not performed a full assessment of the implications of any resilience scenario on asset valuations used for financial reporting purposes, although we would anticipate that prices for the majority of the Group's commodities would be higher than existing forecasts in the short and medium term under a 1.5°C or 2°C scenario, driven by growing investment in infrastructure associated with the transition to a low carbon economy while carbon prices are also likely to be higher than existing forecasts. In the longer term the more rapid decarbonisation of the steel value chain under a 1.5°C or 2°C scenario through higher steel recycling rates and technological change would be expected to lead to lower benchmark prices for both iron ore and steelmaking coal, although we anticipate that for iron ore this may largely be offset by higher product premiums for the Group's high quality lump and pellet-feed products given these are particularly well-suited to less carbon intensive steelmaking technologies. The valuation of the Group's steelmaking coal assets is less sensitive to changes in the long term price than other operations given the remaining asset lives.

iii) Key sources of estimation uncertainty

For assets where indicators of impairment or impairment reversal are identified, the Group performs impairment reviews to assess the recoverable amount of its operating assets principally with reference to fair value less costs of disposal, assessed using discounted cash flow models. Goodwill is tested for impairment annually, or when events or changes in circumstances indicate that it may be impaired. Mining operations are large, complex assets requiring significant technical and financial resources to operate. Their value may be sensitive to a range of characteristics unique to each asset and hence there is often a risk that future changes to key assumptions may lead to a material change in the carrying value of assets within the next year. Management applies judgement in determining the assumptions that are considered to be reasonable and consistent with those that would be applied by market participants All assumptions are made from the perspective of a hypothetical informed market participant (as required by IFRS 13 *Fair Value Measurement*). As a result, these assumptions may differ from the Group's own internal forecasts.

De Beers goodwill
The valuation of De Beers has been assessed as at 31 December 2022 and the recoverable amount was considered to exceed the carrying value by $1.9 billion. The valuation, based on discounted cash flows using a discount rate of 7.5% (2021: 7.0%), is sensitive to input assumptions particularly in relation to the foreign exchange assumption for producer currencies against the USD (affecting the cost of production in USD terms) and the future price growth for diamonds. In addition, the valuation assumes that material contractual arrangements, including our relationship with the Government of Republic of Botswana, continue without material amendment.

The foreign exchange assumption in respect of the producer currency rates against the USD are sourced from an external provider. In the short term to medium term, we assume the Southern African producer currencies depreciate by between 1.4% and 2.1% per annum against the USD compared to the FY22 actual rates. Thereafter the rates are assumed to depreciate by the inflation differential between producer economies and the US.

Significant items

8. Significant accounting matters continued

The two primary factors impacting price growth are expected consumer demand growth and changes in global supply. Expected consumer demand growth (in USD terms) is driven predominantly by: local currency GDP growth expectations in the primary markets in which diamonds are sold; foreign exchange movements against the US dollar in the end consumer markets; and the desirability of diamonds. Desirability includes all aspects of buying behaviour such as competition for share of wallet from other luxury products including experiential holidays, hardline and softline goods, new technology and jewellery products such as those containing other precious stones or laboratory-grown diamonds.

The real GDP growth assumption in USD is 3.4% over the next five years including 3.8% over the first three years which is sourced from an external provider and is weighted by the key markets in which we operate including the US, China, India, Japan, Gulf Region and Eurozone. Over the long term, consumer demand is expected to grow at least in line with inflation.

The external foreign exchange short term to medium term forecast is of annual US dollar depreciation against the Chinese Renminbi, Japanese Yen, Euro and Indian Rupee of 1.4%, 5.2%, 3.4% and 0.9% respectively for the medium term compared to FY22 actual average rates. The consumer demand forecast has assumed that the laboratory-grown diamond jewellery sector will continue to grow as it builds from a relatively small base. However, the forecast is for the laboratory-grown diamond jewellery market size to stabilise by 2028. Changes in total global supply are driven primarily by the output anticipated from new projects and assumes a continued supply contraction over the long term.

The valuation remains sensitive to consumer demand growth which could result in both upside and downside risk. For example, a reduction in the weighted GDP growth rates, a strengthening of the US dollar against consumer country currencies or an increase in substitution by laboratory-grown diamonds in certain categories would suppress consumer demand growth. These factors have a range of possible impacts that may not occur independently of each other. A range of alternative scenarios have been considered in determining whether there is a reasonably possible change in the forecast for foreign exchange rates in producer countries in conjunction with a reasonably possible change in consumer demand growth, which would result in the recoverable amount equating to the carrying amount.

A 5% strengthening of the producer currencies against our assumed USD in conjunction with a 0.7 percentage point underperformance in our mid to long term consumer demand growth expectation would result in the recoverable amount equating to the carrying amount. This reduction in the consumer demand growth might be brought about through either a 30% one off appreciation of the USD against consumer countries' currencies or a reduction in long term real GDP growth assumptions by 0.7 percentage points, with other valuation assumptions remaining the same. Our assessment is that with other assumptions remaining the same, no reasonably possible change in global supply would result in the recoverable amount equating to the carrying amount.

Steelmaking coal

The Moranbah-Grosvenor, Capcoal and Dawson CGUs within the Steelmaking Coal segment have previously been impaired by $0.4 billion, $0.2 billion and $0.2 billion (pre-tax) respectively. Improvements in the economic environment and the current market conditions were considered to be triggers for impairment reversal and valuation models were therefore completed for these CGUs based on discounted cash flows using a discount rate of 6.7%. Carbon pricing has been incorporated into the valuations based on the methodology outlined above. In addition to the base case valuation, alternative scenarios have been considered to assess the impact of changes in key assumptions, principally price and foreign exchange forecasts, including the potential impact and timing of the transition towards a low carbon economy on the steelmaking coal price. The Moranbah-Grosvenor and Capcoal valuations are sensitive to input assumptions, particularly in relation to future steelmaking coal prices and foreign exchange rates.

Significant items

8. Significant accounting matters continued

The valuations as at 31 December 2022 result in a partial impairment reversal at Moranbah-Grosvenor of $0.2 billion ($0.1 billion after tax) against property, plant and equipment to bring the carrying value to $2.4 billion. No change to the carrying value of $0.7 billion has resulted at Capcoal. The models use forecast steelmaking coal prices that fall within the analyst range through the model. The long term hard coking coal price in the model from 2032 onwards falls within the third quartile of the analyst price range of $161/tonne to $175/tonne (2022 real basis). The nominal foreign exchange rate in the model from 2027 onwards falls within the analyst range of 0.72 AUD/$ to 0.81 AUD/$.

For Moranbah-Grosvenor, if the future steelmaking coal prices were decreased by 5% with all other valuation assumptions remaining the same, this would result in a decrease to the valuation of $0.5 billion. A 5% appreciation of the Australian dollar compared to the valuation assumptions across the forecasted period would result in a decrease to the valuation of $0.4 billion.

For Capcoal, if the future steelmaking coal prices were decreased by 5% with all other valuation assumptions remaining the same, this would result in a decrease to the valuation of $0.2 billion. A 5% appreciation of the Australian dollar compared to the valuation assumptions across the forecasted period would result in a decrease to the valuation of $0.2 billion.

For the Dawson CGU, an impairment reversal of $0.2 billion ($0.2 billion after tax) has been recognised against property, plant and equipment bringing the carrying value to $0.3 billion. The majority of the value for the CGU is generated in the short term and the valuation is not considered to be a significant accounting matter as no reasonably possible change in assumptions would materially change the carrying value.

Kolomela (Iron Ore)
At 31 December 2022, following revisions to the forecast production and cost profile in the latest Life of Asset Plan, the valuation of the Kolomela mine was assessed and an impairment of $0.3 billion ($0.1 billion after tax and non-controlling interest) was recorded against property, plant and equipment to bring the carrying value in line with the recoverable amount of $0.7 billion, calculated using a discount rate of 8.8%.

The latest valuation is inherently sensitive to changes in economic and operational assumptions. The model uses forecast iron ore prices that fall within the analyst range throughout the model. The price in the model from 2027 onwards falls within the second quartile of the analyst price range of $70/tonne to $82/tonne (Platts 62% CFR reference basis, 2022 real basis). The model uses a forecast for the average South African rand to US dollar nominal exchange rate which falls within the analyst range of 15 ZAR/$ to 20 ZAR/$.

Sensitivities have been considered to assess the impact of changes in key assumptions, principally price and foreign exchange forecasts. If the future iron ore prices were reduced by 10% from 2023 onwards with all other valuation assumptions remaining the same, this would result in an incremental impairment of $0.5 billion. A 10% appreciation of the South African rand compared to the valuation assumptions would result in an incremental impairment of $0.4 billion.

Woodsmith (Crop Nutrients)
The Group acquired the Woodsmith polyhalite project in March 2020. As required by IFRS 3 *Business Combinations*, the identifiable assets and liabilities acquired were recognised at their fair value, of which the most significant item was property, plant and equipment with a fair value of $974 million, principally relating to the Woodsmith mine which is currently under construction. Following the acquisition, the Group has continued to fund critical construction activities while conducting a design and scoping review to ensure the project meets the Group's high safety and operating standards as well as optimising commercial value given the long life of the mine. The design and scoping review is ongoing but recent project team proposals, endorsed by the Board at the end of the year, indicate there will be changes to the configuration of the project that will incur higher future capital expenditure and result in a longer construction schedule with first product expected to be brought to market in 2027. These items were identified as an indicator of impairment and the carrying value of the related assets was

Significant items

8. Significant accounting matters continued

assessed as at 31 December 2022. This resulted in an impairment of $1.7 billion ($1.7 billion after tax) to bring the carrying value into line with the recoverable amount of $0.9 billion. The impairment was allocated primarily to property, plant and equipment.

The valuation is inherently sensitive to changes in economic and operational assumptions and there is a particularly wide range of potential outcomes given the early stage of project development:

- The model uses a long term forecast price for polyhalite of $192/tonne (2023 real basis), which is calculated using a probabilistic average of a number of pricing methodologies (including a blend substitution approach) due to the immaturity of the existing polyhalite market and the pricing uncertainty that this brings. If prices were increased or decreased by $10/tonne throughout the model, the valuation would change by $0.4 billion.
- The model uses a discount rate of 9.58%, which includes a development stage premium. If the discount rate were reduced by 0.5 percentage points, the valuation would increase by $0.5 billion.

The Board has approved capital expenditure of $0.8 billion for 2023 and the project will come to the Board for future approvals once the design and scoping review is complete. Any changes to forecast capital expenditure have a direct impact on the recoverable amount of the asset (assuming all other inputs remain the same) given the nearer term nature of the expenditure.

Los Bronces - Chagres (Copper)
The Los Bronces-Chagres CGU includes the Los Bronces copper mine and the Chagres smelter, both located in Chile. The CGU includes $0.1 billion of goodwill. The operations have not been previously impaired. As at 30 June 2022, the valuation of the CGU was assessed following the negative Environmental Qualification Ruling for the Los Bronces Integrated Project (LBIP) by the Environmental Assessment Service of Chile (SEA). As part of this assessment, alternative scenarios were considered to assess the impact of a range of potential permitting outcomes, and included scenarios involving proposed amendments to the Mining Royalty Bill.

As the CGU holds goodwill, the impairment assessment was updated as at 31 December 2022, incorporating the latest Life of Asset Plans, which include potential growth options, updated view on potential permitting outcomes and changes in the macro environment. As at 30 June 2022 and 31 December 2022, it was determined that the valuation and all reasonably possible scenarios support the carrying value of $4.5 billion.

Barro Alto (Nickel)
Barro Alto operations were previously impaired by $1.4 billion and due to improvements in forecasted market conditions in the short and medium term, the valuation was assessed at 30 June 2022.The valuation, based on a range of scenarios, considered the offsetting impact of a revised production profile based upon expected changes to the Life of Asset Plan. The recoverable amount, based on a discounted cash flow model using a discount rate of 7.8% was materially consistent with the carrying value of $0.9 billion.

The valuation was sensitive to changes in economic and operational assumptions. The model used forecasted nickel prices that fell within the analyst range through the model. The long term price in the model from 2032 onwards fell within the third quartile of the analyst price range of $7.7/lb to $8.4/lb (LME Nickel, 2022 real basis).

There were no indicators of impairment or impairment reversal identified at 31 December 2022.

Commercial Production
Commercial Production is the term used for the point at which a mining operation is available for use and capable of operating in the manner intended by management. This generally means that the operation can produce its intended output at stable

Significant items

8. Significant accounting matters continued

and sustainable levels. The determination of when a mine reaches commercial production can be complex and judgemental. The Group assesses a number of factors when making this judgement. Typically, a mine reaches commercial production when mine assets are consistently operating at 80% of nameplate production capacity.

The Group's Quellaveco copper project is most affected by this judgement in the current year. As at 31 December 2022, management have assessed that the project has not yet entered commercial production. This has the following implications:

- Costs directly attributable to project construction are capitalised to the Consolidated balance sheet, including borrowing costs
- Capitalised costs are presented in Capital Work in Progress in the Consolidated balance sheet
- Only the small number of assets which are deemed ready for their intended use are depreciated.

Although Quellaveco has not reached commercial production, revenue and associated costs are recognised in the Consolidated income statement following the adoption of the amendment to IAS 16 *Proceeds before intended use*.

The Quellaveco project is expected to achieve commercial production in 2023, after which all borrowing costs will be recognised within finance costs in the Consolidated income statement and the majority of assets will be considered ready for use and reclassified from Capital Work in Progress to appropriate asset classes and subsequently depreciated.

2021 items
In the prior year, changes in facts and circumstances meant that the Group's accounting policy for physical trading revenue, accounting estimate for PGM inventories and the Thungela disposal were disclosed as significant accounting matters. There has been no subsequent change in these areas and they are not considered significant accounting matters in 2022. Please refer to note 9 for further information.

Significant items

9. Special items and remeasurements

Overview

US$ million	Before tax (2022)	Tax (2022)	Non-controlling interests (2022)	Net (2022)	Net (2021)
Revenue remeasurements	(9)	6	(11)	(14)	14
Impairment reversals	428	(129)	—	299	959
Impairments	(2,020)	84	107	(1,829)	(557)
Other operating special items	—	—	—	—	(33)
Operating remeasurements	(80)	8	—	(72)	(111)
Operating special items and remeasurements	(1,672)	(37)	107	(1,602)	258
Disposals of businesses and investments	40	—	(8)	32	(409)
Adjustments relating to business combinations	(24)	—	—	(24)	(45)
Adjustments relating to former operations	(83)	17	20	(46)	351
Charges relating to BEE transactions	(10)	—	1	(9)	—
Other non-operating special items	—	—	—	—	(276)
Non-operating special items	(77)	17	13	(47)	(379)
Financing special items and remeasurements	15	—	—	15	(113)
Tax special items and remeasurements	—	128	(2)	126	(317)
Total	(1,743)	114	107	(1,522)	(537)
Associates' and joint ventures' special items and remeasurements				—	174
Total special items and remeasurements				(1,522)	(363)

Special items and remeasurements

Special items are those items of financial performance that, due to their size and nature, the Group believes should be separately disclosed on the face of the income statement. Remeasurements are items that are excluded from underlying earnings in order to reverse timing differences in the recognition of gains and losses in the income statement in relation to transactions that, whilst economically linked, are subject to different accounting measurement or recognition criteria. Refer to note 8 of the Group's 2022 Integrated Annual Report for further details on the classification of special items.

Special items and remeasurements, along with related tax and non-controlling interests, are excluded from underlying earnings, which is an Alternative Performance Measure (APM). For more information on the APMs used by the Group, including definitions, please refer to page 86.

Revenue remeasurements

The loss of $9 million ($14 million after tax and non-controlling interests) (2021: gain of $14million) relates to remeasurements on derivatives presented in revenue from other sources. For further details see note 3.

Significant items

9. Special items and remeasurements continued

Operating special items

Impairment reversals

Impairment reversals of $428 million ($299 million after tax) for year ended 31 December 2022 relate to Steelmaking Coal.

Further information on significant accounting matters relating to impairment reversals is provided in note 8.

2021
Impairment reversals of $959 million for the year ended 31 December 2021 comprise the reversals at Minas-Rio (Iron Ore) of $938 million and El Soldado (Copper) of $21 million. Based on improved market conditions in both the short and medium terms, the valuation of Minas-Rio was assessed and the previous impairments were partially reversed to a recoverable amount of $7,060 million. An increase in copper price forecast was identified as an indicator of impairment reversal at El Soldado and the full amount eligible for reversal was recognised to bring the carrying value to $406 million.

Impairments

Impairments of $2,020 million ($1,829 million after tax and non-controlling interests) recognised for the year ended 31 December 2022 comprise impairments within Woodsmith (Crop Nutrients): $1,707 million ($1,707 million after tax) and Kolomela (Iron Ore): $313 million ($122 million after tax and non-controlling interest).

Further information on significant accounting matters relating to impairments is provided in note 8.

2021
Impairments of $557 million for the year ended 31 December 2021 principally comprise impairments within Steelmaking Coal. As a result of changes in forecast economic parameters, including commodity prices and foreign exchange rates, impairment triggers were identified for the Moranbah-Grosvenor, Dawson and Capcoal CGUs within the Steelmaking Coal segment. Impairments reduced the carrying values of Moranbah-Grosvenor, Dawson and Capcoal to $2,169 million, $86 million and $517 million respectively.

Other operating special items

There were no other operating special items recognised for the year ended 31 December 2022.

2021
The loss of $33 million principally related to the write-off of redundant waste dump infrastructure assets at Copper Chile (Copper).

Operating remeasurements

Operating remeasurements reflect a loss of $80 million ($72 million after tax and non-controlling interests) (2021: $111 million) which principally relates to a $84 million (2021: $93 million) depreciation and amortisation charge arising due to the fair value uplift on the Group’s pre-existing 45% shareholding in De Beers, which was required on acquisition of a controlling stake in 2012.

Non-operating special items

Disposals of businesses

The $40 million profit ($32 million after tax and non-controlling interests) relates to the disposal of Bokoni (Platinum Group Metals).

Significant items

9. Special items and remeasurements continued

2021

The $409 million loss related to the demerger of the South African thermal coal operations.

Adjustments relating to business combinations

The $24 million loss during the year ended 31 December 2022 relates to adjustments in respect of business combinations in prior years.

2021

The $45 million loss during the year ended 31 December 2021 related to adjustments in respect of business combinations in prior years.

Adjustments relating to former operations

The net loss of $83 million ($46 million after tax and non-controlling interests) principally relates to contingent consideration adjustments in respect of disposals of the Group's interests in Rustenburg and Union (Platinum Group Metals) completed in 2016 and 2018 respectively.

2021

The net gain of $351 million principally related to contingent consideration adjustments in respect of disposals of the Group's interests in Rustenburg and Union (Platinum Group Metals) completed in 2016 and 2018 respectively, and contingent consideration received in respect of the disposal of Anglo American Norte (Copper) completed in 2015.

Charges relating to BEE transactions

The charge of $10 million ($9 million after tax and non-controlling interests) relates to a modification charge under IFRS 2 *Share-based Payments* following the amendment of the De Beers agreement with Ponahalo Investments (Pty) Ltd.

2021

There were no charges relating to BEE transactions recognised for the year ended 31 December 2021.

Other non-operating special items

There were no other non-operating special items recognised for the year ended 31 December 2022.

2021

Other non-operating special items of $276 million principally related to impairment charges recognised on the sale of the Group's shareholding in the Cerrejón associate.

Financing special items and remeasurements

Financing special items and remeasurements principally comprise a net fair value gain of $15 million in respect of fair value adjustments in relation to cross currency and interest rate swap derivatives and the related bonds (2021: $113 million loss principally related to bond buybacks completed in the year).

Tax associated with special items and remeasurements

Tax associated with special items and remeasurements includes a tax remeasurement credit of $72 million principally arising on Brazilian deferred tax, a tax on special items and remeasurement charge of $14 million and tax special items credit of $56 million (2021: tax remeasurements charge of $349 million principally arising on Brazilian deferred tax and tax on special items and remeasurements charge of $339 million and tax special items credit of $29 million).

Significant items

9. Special items and remeasurements continued

Of the total tax credit of $114 million (2021: charge of $659 million), there is a net current tax charge of $41 million (2021: $24 million) and a net deferred tax credit of $155 million (2021: charge of $635 million).

Associates' and joint ventures' special items and remeasurements

There were no special items and remeasurements recognised in associates and joint ventures for the year ended 31 December 2022.

2021

Associates' and joint ventures' special items and remeasurements of $174 million in the year ended 31 December 2021 principally related to $184 million income from the Cerrejón associate arising after the agreement of the transaction in June 2021 and immediately impaired to bring the carrying value of the investment in line with the expected disposal proceeds.

Capital base

We have a value-focused approach to capital allocation with clear prioritisation: maintain asset integrity; pay dividends to our shareholders while ensuring a strong balance sheet. Discretionary capital is then allocated based on a balanced approach.

Value-disciplined capital allocation throughout the cycle is critical to protecting and enhancing our shareholders' capital, given the long term and capital intensive nature of our business.

The Group uses attributable return on capital employed (ROCE) to monitor how efficiently assets are generating profit on invested capital for the equity shareholders of the Company. Attributable ROCE is an Alternative Performance Measure (APM). For more information on the APMs used by the Group, including definitions, please refer to page 86.

	Attributable ROCE %	
	2022	2021
De Beers	11	7
Copper	16	39
Nickel	24	21
Platinum Group Metals	86	140
Iron Ore	28	62
Steelmaking Coal	85	15
Manganese	138	104
Crop Nutrients	n/a	n/a
Corporate and other	n/a	n/a
	30	43

Attributable ROCE decreased to 30% in the year ended 31 December 2022 (2021: 43%). Average attributable capital employed was broadly flat at $32.0 billion (2021: $31.4 billion), primarily due to increased growth capital expenditure, largely at Quellaveco, offset by impairments at Crop Nutrients.

10. Capital by segment

The disclosures in this note include certain Alternative Performance Measures (APMs). For more information on the APMs used by the Group, including definitions, please refer to page 86.

Capital employed by segment

Capital employed is the principal measure of segment assets and liabilities reported to the Group Management Committee. Capital employed is defined as net assets excluding net debt, vessel lease contracts that are priced with reference to a freight index, the debit valuation adjustment attributable to derivatives hedging net debt and financial asset investments.

Capital base

10. Capital by segment continued

US$ million	Capital employed 2022	Capital employed 2021
De Beers	8,218	8,415
Copper	13,732	11,232
Nickel	1,393	1,285
Platinum Group Metals	4,753	4,082
Iron Ore	8,488	8,379
Steelmaking Coal	2,837	2,712
Manganese	210	238
Crop Nutrients	489	1,563
Corporate and other	492	406
Capital employed	40,612	38,312
Reconciliation to the Consolidated balance sheet:		
Net debt	(6,918)	(3,842)
Variable vessel leases excluded from net debt (see note 13)	(127)	(74)
Debit valuation adjustment attributable to derivatives hedging net debt	29	5
Financial asset investments	428	369
Net assets	34,024	34,770

Non-current assets by location

	Intangible assets, Property, plant and equipment		Total non-current assets	
US$ million	**2022**	2021	**2022**	2021
South Africa	10,074	9,711	10,778	10,185
Botswana	2,979	3,386	2,982	3,388
Other Africa	1,084	1,138	1,088	1,146
Brazil	7,529	7,502	8,138	8,059
Chile	7,424	6,745	7,498	6,821
Peru	8,075	6,691	8,079	6,931
Other South America	—	1	2	2
North America	563	621	581	621
Australia and Asia	3,591	3,048	4,083	3,547
United Kingdom[1]	2,536	3,561	2,653	3,729
Other Europe	98	99	98	101
Non-current assets by location	43,953	42,503	45,980	44,530
Unallocated assets			1,491	2,482
Total non-current assets			47,471	47,012

(1) United Kingdom is Anglo American plc's country of domicile.

Total non-current assets by location primarily comprise Intangible assets, Property, plant and equipment and Investments in associates and joint ventures.

Capital base

11. Capital expenditure

The disclosures in this note include certain Alternative Performance Measures (APMs). For more information on the APMs used by the Group, including definitions, please refer to page 86.

Capital expenditure by segment

US$ million	2022	2021
De Beers	593	565
Copper	2,031	1,773
Nickel	79	29
Platinum Group Metals	1,017	894
Iron Ore	834	628
Steelmaking Coal	648	649
Crop Nutrients	522	530
Corporate and other	14	125
Capital expenditure	5,738	5,193
Reconciliation to Consolidated cash flow statement:		
Cash flows used in derivatives related to capital expenditure	—	(8)
Proceeds from disposal of property, plant and equipment	7	17
Direct funding for capital expenditure received from non-controlling interests	446	530
Expenditure on property, plant and equipment	6,191	5,732

Direct funding for capital expenditure received from non-controlling interests represents capital expenditure relating to the Quellaveco project funded by Mitsubishi. Mitsubishi has continued to provide direct funding for its 40% share of capital expenditure via draw-downs against a committed shareholder facility which are recorded as borrowings on the Group's Consolidated balance sheet.

Capital expenditure by category

US$ million	2022	2021
Growth projects	1,595	1,752
Life-extension projects	582	474
Stay-in-business	2,558	2,068
Development and stripping	1,010	904
Proceeds from disposal of property, plant and equipment	(7)	(17)
Capitalised operating cash flows[(1)]	—	12
	5,738	5,193

(1) Following the Group's adoption of an amendment to IAS 16 *Proceeds before intended use*, operating cash flows arising while the asset is being prepared for its intended use are presented within operating cash flows rather than being presented within capital expenditure.

Growth projects and life-extension projects capital expenditure includes the cash flows from derivatives related to capital expenditure and is net of direct funding for capital expenditure received from non-controlling interests.

Capital base

12. Investments in associates and joint ventures

Overview

Investments in associates and joint ventures represent businesses the Group does not control, but instead exercises significant influence or joint control. These include (within the respective business units) the associate Jellinbah (steelmaking coal production in the Steelmaking Coal segment) and the joint ventures Ferroport (port operations in the Iron Ore segment) and Samancor (manganese mining in the Manganese segment). The Group's other investments in associates and joint ventures arise primarily in the Platinum Group Metals segment and Crop Nutrients segment.

The results for the year ended 31 December 2021 also include the results of the Cerrejón associate (thermal coal production in the Corporate and other segment). The sale of the Group's 33.3% shareholding in Cerrejón to Glencore was agreed on 28 June 2021 and completed in January 2022. Group revenue and net income from the Cerrejón associate, arising after 28 June 2021, were classified as special items and were therefore excluded from Group revenue, underlying EBITDA, underlying EBIT and underlying earnings.

The disclosures in this note include certain Alternative Performance Measures (APMs). For more information on the APMs used by the Group, including definitions, please refer to page 86.

Income statement

The Group's share of the results of the associates and joint ventures is as follows:

US$ million	2022	2021
Group revenue	2,264	1,711
Operating costs (before special items and remeasurements)	(1,225)	(1,014)
Associates' and joint ventures' underlying EBIT	1,039	697
Net finance costs	(16)	(13)
Income tax expense	(379)	(222)
Non-controlling interests	(3)	(2)
Net income from associates and joint ventures (before special items and remeasurements)	641	460
Special items and remeasurements	—	184
Special items and remeasurements tax	—	(10)
Net income from associates and joint ventures	641	634

Capital base

12. Investments in associates and joint ventures continued

Further information

The Group's share of the results of the associates and joint ventures is as follows:

US$ million	Group Revenue	Underlying EBITDA	Underlying EBIT	Share of net income	Dividends received
					2022
Samancor	840	378	312	148	169
Jellinbah	1,056	674	660	454	393
Ferroport	99	75	69	47	41
Other	269	(2)	(2)	(8)	5
	2,264	1,125	1,039	641	608

US$ million	Group Revenue	Underlying EBITDA	Underlying EBIT	Share of net income	Dividends received
					2021
Samancor	768	315	250	132	125
Cerrejón[1]	219	87	43	203	240
Jellinbah	514	279	265	183	97
Ferroport	85	69	62	41	—
Other	125	76	77	75	13
	1,711	826	697	634	475

	Aggregate investment	
US$ million	**2022**	2021
Samancor	212	233
Jellinbah	370	340
Ferroport	280	265
Other	194	183
	1,056	1,021

(1) As at 31 December 2021, Cerrejón investment in associate assets of $50 million was classified as held for sale. Income from the Cerrejón associate arising after the sale agreement dated in June 2021 has been classified as a special item and is therefore excluded from Group revenue, underlying EBITDA, underlying EBIT and underlying earnings.

Net debt and financial risk management

Net debt increased from $3.8 billion to $6.9 billion during the year, driven by working capital cash outflows of $2.1 billion. Gearing has increased from 10% at 31 December 2021 to 17% at31 December 2022.

US$ million	2022	2021
Net assets	34,024	34,770
Net debt including related derivatives (note 13)	6,918	3,842
Variable vessel leases	127	74
Total capital	41,069	38,686
Gearing	17%	10%

Net debt is calculated as total borrowings excluding variable vessel lease contracts that are priced with reference to a freight index, less cash and cash equivalents (including derivatives that provide an economic hedge of net debt but excluding the impact of the debit valuation adjustment on these derivatives). Total capital is calculated as 'Net assets' (as shown in the Consolidated balance sheet) excluding net debt and variable vessel leases.

13. Net debt

Overview

The disclosures in this note include certain Alternative Performance Measures (APMs). For more information on the APMs used by the Group, including definitions, please refer to page 86.

Movement in net debt

US$ million	Short term borrowings	Medium and long term borrowings	Total financing activity liabilities	Removal of variable vessel leases	Cash and cash equivalents	Derivatives hedging net debt	Net debt including derivatives
At 1 January 2021	(1,181)	(12,317)	(13,498)	45	7,508	415	(5,530)
Cash flow	1,585	(230)	1,355	(168)	1,809	(95)	2,901
Interest accrued on borrowings	(419)	(75)	(494)	—	—	—	(494)
Reclassifications	(963)	963	—	—	—	—	—
Movement in fair value	(4)	355	351	—	—	(466)	(115)
Other movements	(274)	(536)	(810)	197	—	20	(593)
Currency movements	30	219	249	—	(260)	—	(11)
At 31 December 2021	(1,226)	(11,621)	(12,847)	74	9,057	(126)	(3,842)
Cash flow	1,274	(2,990)	(1,716)	(86)	(420)	103	(2,119)
Interest accrued on borrowings	(430)	(130)	(560)	1	—	—	(559)
Reclassifications	(940)	940	—	—	—	—	—
Movement in fair value	8	886	894	—	—	(1,069)	(175)
Other movements	(141)	(143)	(284)	138	—	—	(146)
Currency movements	47	113	160	—	(237)	—	(77)
At 31 December 2022	(1,408)	(12,945)	(14,353)	127	8,400	(1,092)	(6,918)

Other movements within financing activity liabilities include $278 million relating to leases entered into in the year ended 31 December 2022 (2021: $705 million).

Net debt and financial risk management

13. Net debt continued

Further information

Reconciliation to the Consolidated balance sheet

	Cash and cash equivalents		Short term borrowings		Medium and long term borrowings	
US$ million	2022	2021	2022	2021	2022	2021
Balance sheet	8,412	9,066	(1,420)	(1,235)	(12,945)	(11,621)
Bank overdrafts	(12)	(9)	12	9	—	—
Net cash/(debt) classifications	8,400	9,057	(1,408)	(1,226)	(12,945)	(11,621)

Other

Debit valuation adjustments of $29 million (2021: $5 million) reduce the valuation of derivative liabilities hedging net debt reflecting the impact of the Group's own credit risk. These adjustments are excluded from the Group's definition of net debt.

Cash and cash equivalents includes $513 million which is restricted (2021: $414 million (restated to exclude initial margin of $299 million on trading exchanges which is no longer considered to be restricted)). This primarily relates to cash which is held in joint operations where the timing of dividends is jointly controlled by the joint operators.

Net debt and financial risk management

14. Borrowings

Overview

The Group borrows mostly in the capital markets through bonds issued in the US markets and under the Euro Medium Term Note (EMTN) programme. The Group uses interest rate and cross currency swaps to ensure that the majority of the Group's borrowings are exposed to floating rate US dollar interest rates.

As part of its routine financing activities, in March 2022, the Group issued $500 million 3.875% Senior Notes due 2029 and $750 million 4.750% Senior Notes due 2052 and in September 2022, its first €745 million 4.750% sustainability-linked bond due 2032.

At 31 December 2021, the following bonds were retained as fixed rate exposures: $193 million 5.375% due April 2025, $99 million 5% due May 2027, $750 million 5.625% due April 2030, and $500 million 3.950% due September 2050. During 2022 the Group swapped the following bond to floating rate exposure: $750 million 5.625% due April 2030 and retained the following newly issued bond as a fixed rate exposure: $750 million 4.750% due March 2052. All other bonds at 31 December 2022 and 31 December 2021 were swapped to floating rate exposures.

Further information

US$ million	2022			2021		
	Short term borrowings	**Medium and long term borrowings**	**Total borrowings**	Short term borrowings	Medium and long term borrowings	Total borrowings
Secured						
Bank loans and overdrafts	38	96	134	22	89	111
Leases	184	676	860	207	668	875
Other loans	—	—	—	2	—	2
	222	772	994	231	757	988
Unsecured						
Bank loans and overdrafts	253	509	762	—	180	180
Bank Sustainability linked loans	—	40	40	—	—	—
Bonds	800	9,301	10,101	858	9,113	9,971
Mitsubishi facility	—	2,323	2,323	—	1,571	1,571
Interest payable and other loans	145	—	145	146	—	146
	1,198	12,173	13,371	1,004	10,864	11,868
Total borrowings	1,420	12,945	14,365	1,235	11,621	12,856

Undrawn committed borrowing facilities

The Group had the following undrawn committed borrowing facilities at the year end:

US$ million	2022	2021
Expiry date		
Within one year	414	209
Greater than one year, less than two years	1,082	1,092
Greater than two years, less than three years	5,632	1,520
Greater than three years, less than four years	—	4,885
Greater than four years, less than five years	587	326
Greater than five years	—	9
	7,715	8,041

The Group has an undrawn $4.7 billion revolving credit facility due to mature in March 2025.

Equity

Equity represents the capital of the Group attributable to Company shareholders and non-controlling interests, and includes share capital, share premium and reserves.

Total equity has decreased from $34.8 billion to $34.0 billion in the year, driven by dividends to Company shareholders and non-controlling interests of $5.1 billion offset by the profit for the year.

15. Non-controlling interests

Overview

Non-controlling interests that are material to the Group relate to the following subsidiaries:

- De Beers plc (De Beers), which is a company incorporated in Jersey. It is the world's leading diamond company with operations across all key parts of the diamond value chain. Non-controlling interests hold a 15.0% (2021: 15.0%) interest in De Beers, which represents the whole of the Diamonds reportable segment.
- Anglo American Sur S.A. (Anglo American Sur), which is a company incorporated in Chile. Its principal operations are the Los Bronces and El Soldado copper mines and the Chagres smelter, which are located in Chile. Non-controlling interests hold a 49.9% (2021: 49.9%) interest in Anglo American Sur.
- Anglo American Platinum Limited (Anglo American Platinum), which is a company incorporated in South Africa and listed on the Johannesburg Stock Exchange (JSE). Its principal mining operations are the Mogalakwena and Amandelbult platinum group metals mines which are located in South Africa. Non-controlling interests hold an effective 20.8% (2021: 20.8%) interest in the operations of Anglo American Platinum, which represents the whole of the Platinum Group Metals reportable segment.
- Kumba Iron Ore Limited (Kumba Iron Ore), which is a company incorporated in South Africa and listed on the JSE. Its principal mining operations are the Sishen and Kolomela iron ore mines which are located in South Africa. Non-controlling interests hold an effective 46.6% (2021: 46.6%) interest in the operations of Kumba Iron Ore, comprising the 30.0% (2021: 30.0%) interest held by other shareholders in Kumba Iron Ore and the 23.7% (2021: 23.7%) of Kumba Iron Ore's principal operating subsidiary, Sishen Iron Ore Company Proprietary Limited, that is held by shareholders outside the Group.

The disclosures in this note include certain Alternative Performance Measures (APMs). For more information on the APMs used by the Group, including definitions, please refer to page 86.

						2022
US$ million	De Beers	Anglo American Sur	Anglo American Platinum	Kumba Iron Ore	Other	Total
Underlying earnings attributable to non-controlling interests	105	88	653	682	89	1,617
Profit attributable to non-controlling interests	103	88	641	586	92	1,510
Dividends paid to non-controlling interests	(21)	(234)	(754)	(738)	(47)	(1,794)
Equity attributable to non-controlling interests	1,378	1,630	1,202	1,434	1,019	6,663

						2021
US$ million	De Beers	Anglo American Sur	Anglo American Platinum	Kumba Iron Ore	Other	Total
Underlying earnings attributable to non-controlling interests	58	582	1,045	1,394	1	3,080
Profit/(loss) attributable to non-controlling interests	53	574	1,125	1,388	(3)	3,137
Dividends paid to non-controlling interests	(9)	(458)	(808)	(1,535)	(28)	(2,838)
Equity attributable to non-controlling interests	1,365	1,618	1,338	1,665	959	6,945

Equity

15. Non-controlling interests continued

Further information

Summarised financial information on a 100% basis and before inter-company eliminations for De Beers, Anglo American Sur, Anglo American Platinum and Kumba Iron Ore is as follows:

				2022
US$ million	De Beers	Anglo American Sur	Anglo American Platinum	Kumba Iron Ore
Non-current assets	8,023	4,890	6,125	3,104
Current assets	5,147	1,231	5,296	1,818
Current liabilities	(949)	(1,036)	(3,425)	(915)
Non-current liabilities	(2,489)	(1,817)	(1,531)	(802)
Net assets	9,732	3,268	6,465	3,205
Revenue	6,609	2,758	10,096	4,612
Profit for the financial year[1]	633	177	3,053	1,247
Total comprehensive income	57	160	2,592	1,034
Net cash inflow from operating activities	1,112	772	2,869	1,746

				2021
US$ million	De Beers	Anglo American Sur	Anglo American Platinum	Kumba Iron Ore
Non-current assets	8,430	4,316	6,000	3,133
Current assets	4,475	1,596	6,460	2,061
Current liabilities	(806)	(1,121)	(3,587)	(631)
Non-current liabilities	(2,429)	(1,545)	(1,596)	(856)
Net assets	9,670	3,246	7,277	3,707
Revenue	5,591	3,724	14,502	6,944
Profit for the financial year[1]	317	1,149	5,398	2,983
Total comprehensive (expense)/income	(86)	1,173	4,736	2,688
Net cash inflow from operating activities	1,163	1,682	6,698	3,366

(1) Stated after special items and remeasurements.

Unrecognised items and uncertain events

16. Events occurring after end of year

On 5 January 2023, the Group completed the combination of First Mode Holding Inc and the Group's nuGen™ Zero Emissions Haulage Solution (ZEHS). The combination is intended to accelerate the development and commercialisation of the Group's nuGen™ ZEHS. The Group has a controlling stake in the combined entity, which will be consolidated as a subsidiary.

With the exception of the proposed final dividend for 2022 (see note 7), there have been no further reportable events since 31 December 2022.

17. Contingent assets and liabilities

Overview

The assessment of risk and estimation of future outflows in respect of contingent liabilities is inherently uncertain and hence a material outflow may arise in future periods in relation to these matters.

The Group has provided indemnities against certain liabilities as part of agreements for the sale or other disposal of business operations. Having taken appropriate legal advice, the Group believes that a material liability arising from the indemnities provided is remote. The Group is required to provide guarantees in several jurisdictions in respect of environmental restoration and decommissioning obligations. The Group has provided for the estimated cost of these activities.

Contingent assets

Steelmaking Coal
In 2014, the Steelmaking Coal business was granted an arbitration award of $107 million against MMTC Limited in respect of a contractual dispute. The award has since been challenged in the Indian courts, during which time interest has continued to accrue. On 17 December 2020, the Indian Supreme Court found in favour of the Steelmaking Coal business. The award, inclusive of interest, is currently valued at approximately $135 million. The precise timing and value of receipt remains uncertain and hence no receivable has been recognised on the Consolidated balance sheet as at 31 December 2022.

Contingent liabilities

Global Industry Standard for Tailing Management (GISTM)
The Group continues to work towards conformance with the GISTM as a member of the International Council for Mining and Metals (ICMM).

The Group recognised an additional $128 million within closure provisions during the year based on estimated further costs for conformance for tailings storage facilities (TSFs) where technical studies and surveys are at an advanced stage and reliable cost estimates are available.

Ongoing studies and analysis required to estimate the value of any further incremental costs to achieve conformance at the rest of the in scope TSFs at managed operations may result in additional site construction work being undertaken. Reliable cost estimates are expected to be finalised by the end of 2023. Additional costs that are not yet estimated and not recognised are not expected to be material, but is subject to completion of rigorous site characterisation and risk analysis.

Although the Group targets conformance with Anglo American equivalent standards for non-managed operations, there is no constructive obligation in respect of GISTM where the partner is not an ICMM member, unless a public commitment has been made by that partner.

The implementation of GISTM is the next stage in the evolution of the Group Technical Standard, which is already aligned to current industry best practice.

Unrecognised items and uncertain events

17. Contingent assets and liabilities continued

Anglo American South Africa Proprietary Limited (AASA)
In October 2020, an application was initiated against Anglo American South Africa Proprietary Limited (AASA). The application seeks the certification of class action litigation to be brought on behalf of community members residing in the Kabwe area in Zambia in relation to alleged lead-related health impacts.

AASA is opposing the class certification application, and is defending itself against the allegations made. Extensive pleadings have been filed by both parties. In addition, both Amnesty International and the UN have been granted leave to intervene in the proceedings. The certification hearing was held late in January 2023, with a ruling likely to follow several months later.

This litigation is still subject to significant uncertainty, and it is not currently possible to make a reasonable estimate of the outcome, quantum or timing of any potential future determination and therefore no provision is recognised.

De Beers
Guarantees provided in respect of environmental restoration and decommissioning obligations involve judgements in terms of the outcome of future events. In one of the territories in which De Beers operates, conditions exist, or are proposed, with respect to backfilling pits on closure. A formal appeal has been lodged to remove the existing backfilling condition and no provision has been raised on the basis that it is not probable that this condition will be enforced. Should the appeal not be successful the estimated cost of backfilling is $235 million.

Group structure

18. Assets and liabilities held for sale

There were no assets or liabilities classified as held for sale as at 31 December 2022.

2021

At 31 December 2021, assets of $50 million were classified as held for sale and an impairment of $283 million to the Cerrejón associate was recognised within non-operating special items to bring the carrying amount in line with the expected disposal proceeds.

On 11 January 2022, the Group completed the disposal and received the outstanding consideration receivable of $50 million. In line with the agreement, the initial cash consideration of $294 million was reduced by cash dividends of $240 million, repayment of shareholders loan from Cerrejón of $41 million and adjusted for the cash sweeping arrangement paid to Cerrejón of $37 million.

19. Disposals

Cash received of $564 million in respect of disposals for the year ended 31 December 2022 principally relates to the settlement of deferred consideration balances of $353 million relating to the sale of the Rustenburg operations (Platinum Group Metals) completed in November 2016, the sale of the Group's remaining 8.0% shareholding in Thungela Resources Limited, the Group's disposal of the Cerrejón associate, and the sale of the Group's 49% interest in Bokoni mine to African Rainbow Minerals Limited (Platinum Group Metals).

2021

Disposals in the year ended 31 December 2021 principally related to the demerger of the Group's South African thermal coal operations. In addition, cash was received under contingent consideration arrangements for disposals in prior periods (Platinum Group Metals and Copper).

Summary by operation

This section includes certain Alternative Performance Measures (APMs). For more information on the APMs used by the Group, including definitions, please refer to page 86.

Marketing activities are allocated to the underlying operation to which they relate.

								2022
US$ million (unless otherwise stated)	Sales volume	Realised price	Unit cost	Group revenue[1]	Underlying EBITDA	Underlying EBIT	Underlying earnings	Capital expenditure
	'000 cts	$/ct	$/ct					
De Beers	30,355 [2]	197 [3]	59 [4]	6,622 [5]	1,417	994	552	593
Mining								
Botswana	n/a	193 [3]	32 [4]	n/a	614	537	n/a	70
Namibia	n/a	599 [3]	293 [4]	n/a	181	149	n/a	34
South Africa	n/a	134 [3]	42 [4]	n/a	413	315	n/a	378
Canada	n/a	100 [3]	50 [4]	n/a	(10)	(68)	n/a	48
Trading	n/a	n/a	n/a	n/a	589	582	n/a	4
Other[6]	n/a	n/a	n/a	n/a	(370)	(521)	n/a	59
	kt	c/lb	c/lb					
Base Metals	n/a	n/a	n/a	6,457	2,563	1,912	1,019	2,110
Copper	641 [7]	385 [8]	154 [9]	5,599	2,182	1,595	760	2,031
Copper Chile	563 [7]	386 [8]	157	4,991	1,952	1,387	n/a	1,217
Los Bronces[10]	268	n/a	214 [9]	2,185	533	306	n/a	725
Collahuasi[11]	256	n/a	87 [9]	2,180	1,512	1,259	865	419
Other operations[12]	39	n/a	n/a	626	(93)	(178)	n/a	73
Copper Peru (Quellaveco)[13]	78	379	136 [9]	608	230	208	87	814
Nickel	39	1,026	513 [14]	858	381	317	259	79
	koz	$/PGM oz	$/PGM oz					
Platinum Group Metals	3,861 [15]	2,551 [16]	937 [17]	10,096	4,417	4,052	2,266	1,017
Mogalakwena	1,010 [15]	2,451 [16]	826 [17]	2,466	1,548	1,380	n/a	394
Amandelbult	700 [15]	2,883 [16]	1,127 [17]	2,010	1,036	982	n/a	74
Processing and trading[18]	1,309 [15]	n/a	n/a	3,350	800	768	n/a	n/a
Other[19]	842	2,615	928	2,270	1,033	922	n/a	549
	Mt	$/t	$/t					
Bulk Commodities	n/a	n/a	n/a	13,408	6,582	5,643	3,125	1,482
Iron Ore	58.0 [20]	111 [21]	38 [22]	7,534	3,455	2,962	1,337	834
Kumba Iron Ore[23]	36.7 [20]	113 [21]	40 [22]	4,580	2,211	1,894	653	674
Iron Ore Brazil (Minas-Rio)	21.3 [20]	108 [21]	35 [22]	2,954	1,244	1,068	684	160
Steelmaking Coal	14.7 [24]	304 [25]	107 [26]	5,034	2,749	2,369	1,640	648
Manganese (Samancor)	3.6	n/a	n/a	840	378	312	148	—
Crop Nutrients	n/a	n/a	n/a	254	(44)	(45)	(51)	522
Woodsmith	n/a	n/a	n/a	n/a	n/a	n/a	n/a	522
Other[27]	n/a	n/a	n/a	254	(44)	(45)	(51)	—
Corporate and other[28]	n/a	n/a	n/a	554	(440)	(593)	(875)	14
Exploration	n/a	n/a	n/a	n/a	(155)	(162)	(148)	2
Corporate activities and unallocated costs	n/a	n/a	n/a	554	(285)	(431)	(727)	12
	n/a	n/a	n/a	37,391	14,495	11,963	6,036	5,738

See page 84 for footnotes.

								2021
US$ million (unless otherwise stated)	Sales volume	Realised price	Unit cost	Group revenue[1]	Underlying EBITDA	Underlying EBIT	Underlying earnings	Capital expenditure
	’000 cts	$/ct	$/ct					
De Beers	33,357 [2]	146 [3]	58 [4]	5,602 [5]	1,100	620	345	565
Mining								
Botswana	n/a	152 [3]	32 [4]	n/a	464	407	n/a	72
Namibia	n/a	565 [3]	359 [4]	n/a	101	68	n/a	91
South Africa	n/a	113 [3]	45 [4]	n/a	241	82	n/a	309
Canada	n/a	62 [3]	44 [4]	n/a	68	4	n/a	42
Trading	n/a	n/a	n/a	n/a	515	505	n/a	4
Other[6]	n/a	n/a	n/a	n/a	(289)	(446)	n/a	47
	kt	c/lb	c/lb					
Base Metals	n/a	n/a	n/a	7,143	4,331	3,689	1,798	1,802
Copper	641 [7]	453 [8]	120 [9]	6,433	4,011	3,428	1,519	1,773
Copper Chile	641 [7]	453 [8]	120	6,433	4,011	3,428	n/a	996
Los Bronces[10]	325	n/a	158 [9]	3,047	1,871	1,588	n/a	493
Collahuasi[11]	273	n/a	61 [9]	2,641	2,188	1,970	1,307	365
Other operations[12]	43	n/a	n/a	745	(48)	(130)	n/a	138
Copper Peru (Quellaveco) [13]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	777
Nickel	42	773	377 [14]	710	320	261	279	29
	koz	$/PGM oz	$/PGM oz					
Platinum Group Metals	5,214 [15]	2,761 [16]	868 [17]	14,502	7,099	6,753	3,789	894
Mogalakwena	1,479 [15]	2,563 [16]	694 [17]	3,787	2,611	2,471	n/a	435
Amandelbult	907 [15]	3,122 [16]	1,127 [17]	2,817	1,633	1,571	n/a	81
Processing and trading[18]	1,772 [15]	n/a	n/a	4,817	1,138	1,110	n/a	n/a
Other[19]	1,056	2,935	899	3,081	1,717	1,601	n/a	378
	Mt	$/t	$/t					
Bulk Commodities	n/a	n/a	n/a	14,771	8,148	7,059	3,663	1,277
Iron Ore	63.3 [20]	157 [21]	33 [22]	11,104	6,871	6,359	3,231	628
Kumba Iron Ore[23]	40.3 [20]	161 [21]	39 [22]	6,958	4,311	3,960	1,442	417
Iron Ore Brazil (Minas-Rio)	23.0 [20]	150 [21]	24 [22]	4,146	2,560	2,399	1,789	211
Steelmaking Coal	14.1 [24]	200 [25]	105 [26]	2,899	962	450	300	649
Manganese (Samancor)	3.7	n/a	n/a	768	315	250	132	—
Crop Nutrients	n/a	n/a	n/a	114	(41)	(42)	(39)	530
Woodsmith	n/a	n/a	n/a	n/a	n/a	n/a	n/a	530
Other[27]	n/a	n/a	n/a	114	(41)	(42)	(39)	—
Corporate and other	n/a	n/a	n/a	1,126	(3)	(289)	(631)	125
Exploration	n/a	n/a	n/a	n/a	(128)	(132)	(120)	—
Corporate activities and unallocated costs	n/a	n/a	n/a	354	(63)	(270)	(600)	44
Thermal Coal[29] South Africa	5.3 [30]	77 [31]	46 [32]	553	101	70	61	81
Thermal Coal Colombia[33]	3.4	65	34	219	87	43	28	—
	n/a	n/a	n/a	43,258	20,634	17,790	8,925	5,193

See page 84 for footnotes.

(1) Group revenue is shown after deduction of treatment and refining charges (TC/RCs).

(2) Total sales volumes on a 100% basis were 33.7 million carats (2021: 36.3 million carats). Total sales volumes (100%) include De Beers Group's joint arrangement partners' 50% proportionate share of sales to entities outside De Beers Group from Diamond Trading Company Botswana and Namibia Diamond Trading Company.

(3) Pricing for the mining business units is based on 100% selling value post-aggregation of goods. Realised price includes the price impact of the sale of non-equity product and, as a result, is not directly comparable to the unit cost.

(4) Unit cost is based on consolidated production and operating costs, excluding depreciation and operating special items, divided by carats recovered.

(5) Includes rough diamond sales of $ 6.0 billion(2021 $4.9 billion).

(6) Other includes Element Six, brands and consumer markets, and corporate.

(7) Excludes 422 kt third-party sales (2021: 432 kt).

(8) Represents realised copper price and excludes impact of third-party sales.

(9) C1 unit cost includes by-product credits.

(10) Figures on a 100% basis (Group's share: 50.1%).

(11) 44% share of Collahuasi sales and financials.

(12) Other operations form part of the results of Copper Chile. Production and sales are from El Soldado mine (figures on a 100% basis, Group's share 50.1%). Financials include El Soldado and Chagres (figures on a 100% basis, Group's share 50.1%), third-party trading, projects and corporate costs. In 2021, financials also included operational and capital expenditure related to Copper Peru.

(13) Figures on a 100% basis (Group's share: 60%). Included in capex is the project capex which represents the Group's share after deducting direct funding from non-controlling interests. In 2022, the Group's share of project capex was $633 million (on a 100% basis $1,055 million). In 2021, the Group's share was $ 777 million (on a 100% basis, was $1,295 million).

(14) C1 unit cost.

(15) Sales volumes exclude the sale of refined metal purchased from third parties and toll material. PGM volumes consists of 5E metals and gold.

(16) Average US$ realised basket price, based on sold ounces (own-mined and purchased concentrate). Excludes the impact of the sale of refined metal purchased from third parties.

(17) Total cash operating costs (includes on-mine, smelting and refining costs only) per own-mined PGM ounce of production.

(18) Purchase of concentrate from joint operations, associates and third parties for processing into refined metals, tolling and trading activities.

(19) Includes Unki, Mototolo and PGMs' share of joint operations (Kroondal and Modikwa).

(20) Sales volumes are reported as wet metric tonnes. Product is shipped with c.1.6% moisture from Kumba and c.9% moisture from Minas-Rio.

(21) Prices for Kumba Iron Ore are the average realised export basket price (FOB Saldanha) (wet basis). Prices for Minas-Rio are the average realised export basket price (FOB Brazil) (wet basis). Prices for total iron ore are a blended average.

(22) Unit costs are reported on an FOB wet basis. Unit costs for total iron ore are a blended average.

(23) Sales volumes and realised price differ to Kumba's stand-alone reported results due to sales to other Group companies.

(24) Sales volumes exclude thermal coal sales of 1.7 Mt (2021: 2.1 Mt). 2022 includes 0.3 Mt of steelmaking coal mined by third parties and processed by Anglo American.

(25) Realised price is the weighted average hard coking coal and PCI sales price achieved at managed operations.

(26) FOB cost per tonne, excluding royalties and study costs.

(27) Other comprises projects and corporate costs as well as the share in associate results from The Cibra Group, a fertiliser distributor based in Brazil.

(28) Revenue within Corporate activities and unallocated costs primarily relates to third-party shipping activities, as well as the Marketing business' energy solution's activities.

(29) Thermal Coal – South Africa mining activity included in prior year until the demerger on 4 June 2021.

(30) South African sales volumes include export primary production, secondary production sold into export markets and production sold domestically at export parity pricing and exclude domestic sales of 5.3 Mt in 2021 and third-party sales of 6.4 Mt in 2021.

(31) Thermal Coal – South Africa realised price is the weighted average export thermal coal price achieved. Excludes third-party sales from locations other than Richards Bay.

(32) FOB cost per saleable tonne from the trade operations, excluding royalties and study costs.

(33) Thermal Coal – Colombia represents the Group's attributable share from its 33.3% shareholding in Cerrejón and reflects earnings and volumes from the first half of 2021 only, before the agreement was entered into.

Key financial data

This section includes certain Alternative Performance Measures (APMs). For more information on the APMs used by the Group, including definitions, please refer to page 86.

US$ million (unless otherwise stated)	**2022**	2021	2020 (restated)	2019	2018	2017	2016	2015	2014	2013
Income statement measures										
Group revenue[1]	**37,391**	43,258	26,883	31,825	30,196	28,650	23,142	23,003	30,988	33,063
Underlying EBIT	**11,963**	17,790	7,050	7,010	6,377	6,247	3,766	2,223	4,933	6,620
Underlying EBITDA	**14,495**	20,634	9,802	10,006	9,161	8,823	6,075	4,854	7,832	9,520
Revenue[1]	**35,118**	41,554	25,447	29,870	27,610	26,243	21,378	20,455	27,073	29,342
Net finance costs (before special items and remeasurements)	**(342)**	(277)	(775)	(420)	(380)	(473)	(209)	(458)	(256)	(276)
Profit/(loss) before tax	**9,480**	17,629	5,464	6,146	6,189	5,505	2,624	(5,454)	(259)	1,700
Profit/(loss) for the financial year	**6,024**	11,699	3,328	4,582	4,373	4,059	1,926	(5,842)	(1,524)	426
Non-controlling interests	**(1,510)**	(3,137)	(1,239)	(1,035)	(824)	(893)	(332)	218	(989)	(1,387)
Profit/(loss) attributable to equity shareholders of the Company	**4,514**	8,562	2,089	3,547	3,549	3,166	1,594	(5,624)	(2,513)	(961)
Underlying earnings	**6,036**	8,925	3,135	3,468	3,237	3,272	2,210	827	2,217	2,673
Balance sheet measures										
Capital employed	**40,612**	38,312	37,970	35,576	32,269	32,813	31,904	32,842	43,782	46,551
Net assets	**34,024**	34,770	32,766	31,385	29,832	28,882	24,325	21,342	32,177	37,364
Non-controlling interests	**(6,663)**	(6,945)	(6,942)	(6,590)	(6,234)	(5,910)	(5,309)	(4,773)	(5,760)	(5,693)
Equity attributable to equity shareholders of the Company	**27,361**	27,825	25,824	24,795	23,598	22,972	19,016	16,569	26,417	31,671
Cash flow measures										
Cash flows from operations	**11,889**	20,588	7,998	9,260	7,782	8,375	5,838	4,240	6,949	7,729
Capital expenditure	**(5,738)**	(5,193)	(4,125)	(3,840)	(2,818)	(2,150)	(2,387)	(4,177)	(6,018)	(6,075)
Net debt[2]	**(6,918)**	(3,842)	(5,530)	(4,535)	(2,848)	(4,501)	(8,487)	(12,901)	(12,871)	(10,652)
Metrics and ratios										
Underlying earnings per share (US$)	**4.97**	7.22	2.53	2.75	2.55	2.57	1.72	0.64	1.73	2.09
Earnings per share (US$)	**3.72**	6.93	1.69	2.81	2.80	2.48	1.24	(4.36)	(1.96)	(0.75)
Ordinary dividend per share (US cents)	**198**	289	100	109	100	102	—	32	85	85
Ordinary dividend cover (based on underlying earnings per share)	**2.5**	2.5	2.5	2.5	2.6	2.5	—	2.0	2.0	2.5
Underlying EBIT margin	**32.0%**	41.1%	26.2%	22.0%	21.1%	21.8%	16.3%	9.7%	15.9%	20.0%
Underlying EBIT interest cover[3]	**31.8**	45.2	11.2	18.0	19.9	16.5	16.7	10.1	30.1	35.8
Underlying effective tax rate	**34.0%**	31.4%	31.2%	30.8%	31.3%	29.7%	24.6%	31.0%	29.8%	32.0%
Gearing (net debt to total capital)[4]	**17%**	10%	14%	13%	9%	13%	26%	38%	29%	22%

(1) Third-party trading amounts restated from a gross to a net presentation in 2020. Amounts prior to 2020 have not been restated.

(2) The Group amended the definition of net debt in 2021 to exclude variable vessel leases. The amounts for 2020 and 2019 were therefore restated from $5,575 million to $5,530 million in 2020 and from $4,626 million to $4,535 million in 2019. Amounts prior to 2019 have not been restated.

(3) Underlying EBIT interest cover is underlying EBIT divided by net finance costs, excluding net foreign exchange gains and losses, unwinding of discount relating to provisions and other liabilities, financing special items and remeasurements, and including the Group's attributable share of associates' and joint ventures' net finance costs.

(4) Net debt to total capital is calculated as net debt divided by total capital (being 'Net assets' as shown in the Consolidated balance sheet excluding net debt and variable vessel leases). 2020 restated to exclude variable vessel leases. Amounts prior to 2020 have not been restated.

Alternative performance measures

Introduction

When assessing and discussing the Group's reported financial performance, financial position and cash flows, management makes reference to Alternative Performance Measures (APMs) of historical or future financial performance, financial position or cash flows that are not defined or specified under International Financial Reporting Standards (IFRS).

The APMs used by the Group fall into two categories:

– Financial APMs: These financial measures are usually derived from the financial statements, prepared in accordance with IFRS. Certain financial measures cannot be directly derived from the financial statements as they contain additional information, such as financial information from earlier periods or profit estimates or projections. The accounting policies applied when calculating APMs are, where relevant and unless otherwise stated, substantially the same as those disclosed in the Group's Consolidated financial statements for the year ended 31 December 2021

– Non-financial APMs: These measures incorporate certain non-financial information that management believes is useful when assessing the performance of the Group.

APMs are not uniformly defined by all companies, including those in the Group's industry. Accordingly, the APMs used by the Group may not be comparable with similarly titled measures and disclosures made by other companies.

APMs should be considered in addition to, and not as a substitute for or as superior to, measures of financial performance, financial position or cash flows reported in accordance with IFRS. Measures used by the Group exclude the impact of certain items, which impact the financial performance and cash flows, in order to aid comparability of financial information reported. The adjustments performed to defined IFRS measures and rationale for adjustment are detailed on pages 87 to 88.

Purpose

The Group uses APMs to improve the comparability of information between reporting periods and business units, either by adjusting for uncontrollable factors or special items which impact upon IFRS measures or, by aggregating measures, to aid the user of the Annual Report in understanding the activity taking place across the Group's portfolio.

Their use is driven by characteristics particularly visible in the mining sector:

1. Earnings volatility: The Group mines and markets commodities and precious metals and minerals. The sector is characterised by significant volatility in earnings driven by movements in macro-economic factors, primarily price and foreign exchange. This volatility is outside the control of management and can mask underlying changes in performance. As such, when comparing year-on-year performance, management excludes certain items (such as those classed as 'special items') to aid comparability and then quantifies and isolates uncontrollable factors in order to improve understanding of the controllable portion of variances.

2. Nature of investment: Investments in the sector typically occur over several years and are large, requiring significant funding before generating cash. These investments are often made with partners and the nature of the Group's ownership interest affects how the financial results of these operations are reflected in the Group's results e.g. whether full consolidation (subsidiaries), consolidation of the Group's attributable assets and liabilities (joint operations) or equity accounted (associates and joint ventures). Attributable metrics are therefore presented to help demonstrate the financial performance and returns available to the Group, for investment and financing activities, excluding the effect of different accounting treatments for different ownership interests.

3. Portfolio complexity: The Group operates in a number of different, but complementary commodities, precious metals and minerals. The cost, value of and return from each saleable unit (e.g. tonne, pound, carat, ounce) can differ materially between each business. This makes understanding both the overall portfolio performance, and the relative performance of

its constituent parts on a like-for-like basis, more challenging. The Group therefore uses composite APMs to provide a consistent metric to assess performance at the portfolio level.

Consequently, APMs are used by the Board and management for planning and reporting. A subset is also used by management in setting director and management remuneration, such as attributable free cash flow prior to growth capital expenditure. The measures are also used in discussions with the investment analyst community and credit rating agencies.

Financial APMs

Group APM	Closest equivalent IFRS measure	Adjustments to reconcile to primary statements	Rationale for adjustments
Income statement			
Group revenue	Revenue	– Revenue from associates and joint ventures – Revenue special items and remeasurements	– Exclude the effect of different basis of consolidation to aid comparability – Exclude the impact of certain items due to their size and nature to aid comparability
Underlying EBIT	Profit/(loss) before net finance income/(costs) and tax	– Revenue, operating and non-operating special items and remeasurements – Underlying EBIT from associates and joint ventures	– Exclude the impact of certain items due to their size and nature to aid comparability – Exclude the effect of different basis of consolidation to aid comparability
Underlying EBITDA	Profit/(loss) before net finance income/(costs) and tax	– Revenue, operating and non-operating special items and remeasurements – Depreciation and amortisation – Underlying EBITDA from associates and joint ventures	– Exclude the impact of certain items due to their size and nature to aid comparability – Exclude the effect of different basis of consolidation to aid comparability
Underlying earnings	Profit/(loss) for the financial year attributable to equity shareholders of the	– Special items and remeasurements	– Exclude the impact of certain items due to their size and nature to aid comparability
Underlying effective tax rate	Income tax expense	– Tax related to special items and remeasurements – The Group's share of associates' and joint ventures' profit before tax, before special items and remeasurements, and tax expense, before special items and	– Exclude the impact of certain items due to their size and nature to aid comparability – Exclude the effect of different basis of consolidation to aid comparability
Basic underlying earnings per share	Earnings per share	– Special items and remeasurements	– Exclude the impact of certain items due to their size and nature to aid comparability
Mining EBITDA margin	Operating profit margin, defined by IFRS	– Revenue from associates and joint ventures – Revenue, operating and non-operating special items and remeasurements – Underlying EBIT from associates and joint ventures – Adjustment to Debswana to reflect as a 50/50 joint operation – Exclusion of third-party sales, purchases and	– Exclude non-mining revenue and EBITDA to show a margin for mining operations only which provides a relevant comparison to peers
Balance sheet			
Net debt	Borrowings less cash and related hedges	– Debit valuation adjustment – Borrowings are adjusted to exclude vessel lease contracts that are priced with reference to a freight index – Borrowings do not include the royalty liability on the basis that obligations to make cash payments against this liability only arise when the Woodsmith project generates revenues, and that otherwise the Group is not currently contractually liable to make any payments under this arrangement (other than in the event of the Anglo American Crop Nutrients Limited's insolvency)	– Exclude the impact of accounting adjustments from the net debt obligation of the Group – Exclude the volatility arising from vessel lease contracts that are priced with reference to a freight index. These liabilities are required to be remeasured at each reporting date to the latest spot freight rate, which means that the carrying value of the lease liability is not necessarily consistent with the average lease payments which are expected to be

Group APM	Closest equivalent IFRS measure	Adjustments to reconcile to primary statements	Rationale for adjustments
Attributable ROCE	No direct equivalent	– Non-controlling interests' share of capital employed and underlying EBIT – Average of opening and closing attributable capital employed	– Exclude the effect of different basis of consolidation to aid comparability
Cash flow			
Capital expenditure (capex)	Expenditure on property, plant and equipment	– Cash flows from derivatives related to capital expenditure – Proceeds from disposal of property, plant and equipment – Direct funding for capital expenditure from non-controlling interests	– To reflect the net attributable cost of capital expenditure taking into account economic hedges
Attributable free cash flow	Cash flows from operations	– Capital expenditure – Cash tax paid – Dividends from associates, joint ventures and financial asset investments – Net interest paid – Dividends to non-controlling interests – Capital repayment of lease obligations – Expenditure on non-current intangible assets	– To measure the amount of cash available to finance returns to shareholders or growth after servicing debt, providing a return to minority shareholders and meeting existing capex commitments
Sustaining attributable free cash flow	Cash flows from operations	– Cash tax paid – Dividends from associates, joint ventures and financial asset investments – Net interest paid – Dividends to non-controlling interests – Capital repayment of lease obligations – Sustaining capital expenditure – Capitalised operating cash flows relating to life	– To measure the amount of cash available to finance returns to shareholders or growth after servicing debt, providing a return to minority shareholders and meeting the capex commitments needed to sustain the current production base of existing assets. It is calculated as attributable free cash flow prior to growth capex and expenditure on non-current intangible assets (excluding goodwill)

Group revenue

Group revenue includes the Group's attributable share of associates' and joint ventures' revenue and excludes revenue special items and remeasurements. Following the agreement for the disposal of the Group's Cerrejón associate, revenue was classified as a special item in the prior year. A reconciliation to 'Revenue', the closest equivalent IFRS measure to Group revenue, is provided within note 3 to the Condensed financial statements.

Underlying EBIT

Underlying EBIT is 'Operating profit/(loss)' presented before special items and remeasurements[(1)] and includes the Group's attributable share of associates' and joint ventures' underlying EBIT. Underlying EBIT of associates and joint ventures is the Group's attributable share of associates' and joint ventures' revenue less operating costs before special items and remeasurements[(1)] of associates and joint ventures.

A reconciliation to 'Profit/(loss) before net finance income/(costs) and tax', the closest equivalent IFRS measure to underlying EBIT, is provided within note 3 to the Condensed financial statements.

Underlying EBITDA

Underlying EBITDA is underlying EBIT before depreciation and amortisation and includes the Group's attributable share of associates' and joint ventures' underlying EBIT before depreciation and amortisation.

A reconciliation to 'Profit/(loss) before net finance income/(costs) and tax', the closest equivalent IFRS measure to underlying EBITDA, is provided within note 3 to the Condensed financial statements.

Underlying earnings

Underlying earnings is 'Profit/(loss) for the financial year attributable to equity shareholders of the Company' before special items and remeasurements[1] and is therefore presented after net finance costs, income tax expense and non-controlling interests.

A reconciliation to 'Profit/(loss) for the financial year attributable to equity shareholders of the Company', the closest equivalent IFRS measure to underlying earnings, is provided within note 3 to the Condensed financial statements.

Underlying effective tax rate

The underlying effective tax rate equates to the income tax expense, before special items and remeasurements[1] and including the Group's share of associates' and joint ventures' tax before special items and remeasurements[1], divided by profit before tax before special items and remeasurements[1] and including the Group's share of associates' and joint ventures' profit before tax before special items and remeasurements[1].

A reconciliation to 'Income tax expense', the closest equivalent IFRS measure to underlying effective tax rate, is provided within note 6 to the Condensed financial statements.

(1) Special items and remeasurements are defined in note 8 to the Consolidated financial statements.

Underlying earnings per share

Basic and diluted underlying earnings per share are calculated as underlying earnings divided by the basic or diluted shares in issue. The calculation of underlying earnings per share is disclosed within note 4 to the Condensed financial statements.

Mining EBITDA margin

The mining EBITDA margin is derived from the Group's underlying EBITDA as a percentage of Group revenue, adjusted to exclude certain items to better reflect the performance of the Group's mining business. The mining EBITDA margin reflects Debswana accounting treatment as a 50/50 joint operation, excludes third-party sales, purchases and trading and excludes Platinum Group Metals' purchase of concentrate.

US$ million (unless otherwise stated)	**2022**	2021
Underlying EBITDA	14,495	20,634
Group revenue	37,391	43,258
EBITDA margin	39%	48%
Adjustments for:		
Debswana adjustment to reflect as a 50/50 joint operation	3%	2%
Exclude third-party purchases, trading activity and processing[1]	5%	6%
Mining EBITDA margin	47%	56%

[1] Third-party purchases, trading activity and processing consists of Platinum Group Metals' purchase of concentrate, third-party sales and purchases and the impact of third-party trading activity.

Net debt

Net debt is calculated as total borrowings less variable vessel lease contracts that are priced with reference to a freight index, and cash and cash equivalents (including derivatives that provide an economic hedge of net debt, but excluding the impact of the debit valuation adjustment on these derivatives, explained in note 13). A reconciliation to the Consolidated balance sheet is provided within note 13 to the Condensed financial statements.

Capital expenditure (capex)

Capital expenditure is defined as cash expenditure on property, plant and equipment, including related derivatives, and is presented net of proceeds from disposal of property, plant and equipment and includes direct funding for capital expenditure from non-controlling interests in order to match more closely the way in which it is managed. A reconciliation to 'Expenditure on property, plant and equipment', the closest equivalent IFRS measure to capital expenditure, is provided within note 11 to the Condensed financial statements.

Following the adoption of the amendment to IAS 16 *Proceeds before intended use*, operating cash flows generated by operations that have not yet reached commercial production are presented in Cash flows from operating activities in the Consolidated cash flow statement and no longer included in capital expenditure.

Sustaining capital

Sustaining capital is calculated as capital expenditure excluding capitalised operating cash flows and growth projects. Expenditure on growth projects in 2021 and 2022 principally related to Quellaveco and the Woodsmith project. The Group uses sustaining capital as a measure to provide additional information to understand the capital needed to sustain the current production base of existing assets.

Attributable return on capital employed (ROCE)

ROCE is a ratio that measures the efficiency and profitability of a company's capital investments. Attributable ROCE displays how effectively assets are generating profit on invested capital for the equity shareholders of the Company. It is calculated as attributable underlying EBIT divided by average attributable capital employed.

Attributable underlying EBIT excludes the underlying EBIT of non-controlling interests.

Capital employed is defined as net assets excluding net debt, vessel lease contracts that are priced with reference to a freight index, the debit valuation adjustment attributable to derivatives hedging net debt and financial asset investments. Attributable capital employed excludes capital employed of non-controlling interests. Average attributable capital employed is calculated by adding the opening and closing attributable capital employed for the relevant period and dividing by two.

Attributable ROCE is also used as an incentive measure in executives' remuneration and is predicated upon the achievement of ROCE targets in the final year of a three year performance period.

A reconciliation to 'Profit/(loss) before net finance income/(costs) and tax', the closest equivalent IFRS measure to underlying EBIT, is provided within note 3 to the Condensed financial statements. A reconciliation to 'Net assets', the closest equivalent IFRS measure to capital employed, is provided within note 10 to the Condensed financial statements. The table below reconciles underlying EBIT and capital employed to attributable underlying EBIT and average attributable capital employed by segment.

	Attributable ROCE %	
	2022	2021
De Beers	11	7
Copper	16	39
Nickel	24	21
Platinum Group Metals	86	140
Iron Ore	28	62
Steelmaking Coal	85	15
Manganese	138	104
Crop Nutrients	n/a	n/a
Corporate and other	n/a	n/a
	30	43

								2022
US$ million	**Underlying EBIT**	**Less: Non-controlling interests' share of underlying EBIT**	**Attributable underlying EBIT**	**Opening attributable capital employed**	**Closing capital employed**	**Less: Non-controlling interests' share of closing capital employed**	**Closing attributable capital employed**	**Average attributable capital employed**
De Beers	994	(171)	823	7,256	8,218	(1,129)	7,089	7,173
Copper	1,595	(286)	1,309	7,378	13,732	(4,780)	8,952	8,165
Nickel	317	—	317	1,285	1,393	—	1,393	1,339
Platinum Group Metals	4,052	(896)	3,156	3,411	4,753	(838)	3,915	3,663
Iron Ore	2,962	(952)	2,010	7,169	8,488	(1,243)	7,245	7,207
Steelmaking Coal	2,369	—	2,369	2,712	2,837	—	2,837	2,775
Manganese	312	(3)	309	238	210	—	210	224
Crop Nutrients	(45)	—	(45)	1,563	489	—	489	1,026
Corporate and other	(593)	14	(579)	406	492	—	492	448
	11,963	(2,294)	9,669	31,418	40,612	(7,990)	32,622	32,020

US$ million	Underlying EBIT	Less: Non-controlling interests' share of underlying EBIT	Attributable underlying EBIT	Opening attributable capital employed	Closing capital employed	Less: Non-controlling interests' share of closing capital employed	Closing attributable capital employed	Average attributable capital employed
								2021
De Beers	620	(112)	508	7,712	8,415	(1,159)	7,256	7,484
Copper	3,428	(848)	2,580	5,897	11,232	(3,854)	7,378	6,638
Nickel	261	—	261	1,157	1,285	—	1,285	1,221
Platinum Group Metals	6,753	(1,448)	5,305	4,191	4,082	(671)	3,411	3,801
Iron Ore	6,359	(1,902)	4,457	7,197	8,379	(1,210)	7,169	7,183
Steelmaking Coal	450	—	450	3,196	2,712	—	2,712	2,954
Manganese	250	(2)	248	238	238	—	238	238
Crop Nutrients	(42)	—	(42)	988	1,563	—	1,563	1,276
Corporate and other	(289)	8	(281)	893	406	—	406	649
	17,790	(4,304)	13,486	31,469	38,312	(6,894)	31,418	31,444

Attributable free cash flow

Attributable free cash flow is calculated as 'Cash flows from operations' plus dividends received from associates, joint ventures and financial asset investments, less capital expenditure, less expenditure on non-current intangible assets (excluding goodwill), less tax cash payments excluding tax payments relating to disposals, less net interest paid including interest on derivatives hedging net debt, less dividends paid to non-controlling interests.

A reconciliation of 'Cash flows from operations', the closest equivalent IFRS measure, is provided on page 10.

Sustaining attributable free cashflow

Sustaining attributable free cash flow is used to measure the amount of cash available to finance returns to shareholders or growth after servicing debt, providing a return to minority shareholders and meeting the capex commitments needed to sustain the current production base of existing assets. Sustaining attributable free cash flow is also used as an incentive measure in executives' remuneration. It is calculated as attributable free cash flow prior to growth capex and expenditure on non-current intangible assets (excluding goodwill). A reconciliation of 'Cash flows from operations', the closest equivalent IFRS measure, is provided on page 10. Growth capital expenditure in 2021 and 2022 principally related to Quellaveco and Woodsmith.

Non-financial APMs

Some of our measures are not reconciled to IFRS either because they include non-financial information, because there is no meaningful IFRS comparison or the purpose of the measure is not typically covered by IFRS.

Group APM	Category	Purpose
Copper equivalent production	Portfolio complexity	Communicate production/revenue generation movements in a single comparable measure removing the impact of price
Unit cost	Earnings volatility	Express cost of producing one unit of saleable product
Copper equivalent unit cost	Portfolio complexity	Communicate the cost of production per unit in a single comparable measure for the portfolio
Productivity	Portfolio complexity	Highlight efficiency in generating revenue per employee
Volume and cash cost improvements	Earnings volatility	Quantify year-on-year underlying EBITDA improvement removing the impact of major uncontrollable factors

Copper equivalent production

Copper equivalent production, expressed as copper equivalent tonnes, shows changes in underlying production volume. It is calculated by expressing each commodity's volume as revenue, subsequently converting the revenue into copper equivalent units by dividing by the copper price (per tonne). Long term forecast prices (and foreign exchange rates where appropriate) are used, in order that period-on-period comparisons exclude any impact for movements in price.

When calculating copper equivalent production, sales from non-mining activities are excluded. Volume from projects in pre-commercial production are included.

Unit cost

Unit cost is the direct cash cost including direct cash support costs incurred in producing one unit of saleable production. Unit cost relates to equity production only.

For bulk products (iron ore, coal), unit costs shown are FOB i.e. cost on board at port. For base metals (copper, nickel), they are shown at C1 i.e. after inclusion of by-product credits and logistics costs. For PGMs and diamonds, unit costs include all direct expensed cash costs incurred i.e. excluding, among other things, market development activity, corporate overhead etc. Platinum Group Metals unit costs exclude by-product credits. Royalties are excluded from all unit cost calculations.

Copper equivalent unit cost

Copper equivalent unit cost is the cost incurred to produce one tonne of copper equivalent. Only the cost incurred in mined output from subsidiaries and joint operations is included, representing direct costs in the Consolidated income statement controllable by the Group. Costs and volumes from associates and joint ventures are excluded, as are those from operations that are not yet in commercial production, that deliver domestic production, and those associated with third-party volume purchases of diamonds and PGMs concentrate.

When calculating copper equivalent unit cost, unit costs for each commodity are multiplied by relevant production, combined and then divided by the total copper equivalent production, to get a copper equivalent unit cost i.e. the cost of mining one tonne of copper equivalent. The metric is in US dollars and, where appropriate, long term foreign exchange rates are used to convert from local currency to US dollars.

Productivity

The Group's productivity measure calculates the copper equivalent production generated per employee. It is a measure that represents how well headcount is driving revenue. It is calculated by dividing copper equivalent production by the average direct headcount from consolidated mining operations in a given year.

Volume and cash cost improvements

The Group uses an underlying EBITDA waterfall to understand its year-on-year underlying EBITDA performance. The waterfall isolates the impact of uncontrollable factors in order that the real year-on-year improvement in performance can be seen by the user.

Three variables are normalised, in the results of subsidiaries and joint operations, for:

- Price: The movement in price between comparative periods is removed by multiplying current year sales volume by the movement in realised price for each product group.
- Foreign exchange: The year-on-year movement in exchange is removed from the current year non-US dollar cost base i.e. costs are restated at prior year foreign exchange rates. The non-US dollar cash cost base excludes costs which are price linked (e.g. purchase of concentrate from third-party PGMs providers, third-party diamond purchases).
- Inflation: CPI is removed from cash costs, restating these costs at the pricing level of the base year.

The remaining variances in the underlying EBITDA waterfall are in real US dollar terms for the base year i.e. for a waterfall comparing 2022 with 2021, the sales volume and cash cost variances exclude the impact of price, foreign exchange and CPI and are hence in real 2021terms. This allows the user of the waterfall to understand the underlying real movement in sales volumes and cash costs on a consistent basis.

Exchange rates and commodity prices

US$ exchange rates	2022	2021
Year end spot rates		
South African rand	16.94	15.96
Brazilian real	5.28	5.57
Sterling	0.83	0.74
Australian dollar	1.47	1.38
Euro	0.93	0.88
Chilean peso	859	852
Botswana pula	12.76	11.75
Peruvian sol	3.82	3.99
Average rates for the year		
South African rand	16.37	14.79
Brazilian real	5.16	5.40
Sterling	0.81	0.73
Australian dollar	1.44	1.33
Euro	0.95	0.85
Chilean peso	874	761
Botswana pula	12.34	11.08
Peruvian sol	3.83	3.88

Commodity prices		2022	2021
Year end spot prices			
Copper[1]	US cents/lb	380	440
Platinum[2]	US$/oz	1,065	962
Palladium[2]	US$/oz	1,788	1,928
Rhodium[3]	US$/oz	12,250	14,150
Iron ore (62% Fe CFR)[4]	US$/tonne	117	119
Iron ore (66% Fe Concentrate CFR)[5]	US$/tonne	131	147
Hard coking coal (FOB Australia)[4]	US$/tonne	295	357
PCI (FOB Australia)[4]	US$/tonne	285	244
Nickel[1]	US$/lb	13.80	9.49
Manganese ore (44% CIF China)[5]	US$/dmtu	5.13	5.60
Average market prices for the year			
Copper[1]	US cents/lb	400	423
Platinum[2]	US$/oz	961	1,086
Palladium[2]	US$/oz	2,111	2,388
Rhodium[3]	US$/oz	15,465	20,109
Iron ore (62% Fe CFR)[4]	US$/tonne	120	160
Iron ore (66% Fe Concentrate CFR)[5]	US$/tonne	145	185
Hard coking coal (FOB Australia)[4]	US$/tonne	364	226
PCI (FOB Australia)[4]	US$/tonne	331	164
Nickel[1]	US$/lb	11.61	8.39
Manganese ore (44% CIF China)[5]	US$/dmtu	6.06	5.21

(1) Source: London Metal Exchange (LME).
(2) Source: London Platinum and Palladium Market (LPPM).
(3) Source: Johnson Matthey.
(4) Source: Platts.
(5) Source: Metal Bulletin.

ANGLO AMERICAN plc

(Incorporated in England and Wales – Registered number 03564138)

(the Company)

Notice of Dividend

(Dividend No. 42)

Notice is hereby given that a final dividend on the Company's ordinary share capital in respect of the year to 31 December 2022 will be paid as follows:

Amount (United States currency) (note 1)	74 cents per ordinary share
Amount (South African currency) (note 2)	1358.14420 cents per ordinary share
Last day to effect removal of shares between the United Kingdom (UK) and South African (SA) registers	Monday, 13 March 2023
Last day to trade on the JSE Limited (JSE) to qualify for dividend	Tuesday, 14 March 2023
Ex-dividend on the JSE from the commencement of trading (note 3)	Wednesday, 15 March 2023
Ex-dividend on the London Stock Exchange from the commencement of trading	Thursday, 16 March 2023
Record date (applicable to both the UK principal register and SA branch register)	Friday, 17 March 2023
Movement of shares between the UK and SA registers permissible from	Monday, 20 March 2023
Last day for receipt of Dividend Reinvestment Plan (DRIP) mandate forms by Central Securities Depository Participants (CSDPs) (notes 4, 5 and 6)	Friday, 31 March 2023
Last day for receipt of US$:£/€ currency elections by the UK Registrars (note 1)	Friday, 31 March 2023
Last day for receipt of DRIP mandate forms by the UK Registrars (notes 4, 5 and 6)	Friday, 31 March 2023
Last day for receipt of DRIP mandate forms by the South African Transfer Secretaries (notes 4, 5 and 6)	Tuesday, 4 April 2023
Currency conversion US$:£/€ rates announced on (note 7)	Thursday, 6 April 2023
Payment date of dividend	Friday, 28 April 2023

Notes

1. Shareholders on the UK register of members with an address in the UK will be paid in Sterling and those with an address in a country in the European Union which has adopted the Euro will be paid in Euros. Such shareholders may, however, elect to be paid their dividends in US dollars provided the UK Registrars receive such election by Friday, 31 March 2023. Shareholders with an address elsewhere will be paid in US dollars except those registered on the South African branch register who will be paid in South African rand.
2. Dividend Tax will be withheld from the amount of the gross dividend of 1358.14420 Rand cents per ordinary share paid to South African shareholders at the rate of 20% unless a shareholder qualifies for exemption. After the Dividend Tax has been withheld, the net dividend will be 1086.51536 Rand cents per ordinary share. Anglo American plc had a total of 1,337,577,913 ordinary shares in issue as at Wednesday, 22 February 2023. In South Africa the dividend will be distributed by Anglo American South Africa Proprietary Limited, a South African company with tax registration number 9030010608, or one of its South African subsidiaries, in accordance with the Company's dividend access share arrangements. The dividend in South African rand is based on an exchange rate of US$1:R18.35330 taken on Wednesday, 22 February 2023, being the currency conversion date.
3. Dematerialisation and rematerialisation of registered share certificates in South Africa will not be effected by CSDPs during the period from the JSE ex-dividend date to the record date (both days inclusive).
4. Those shareholders who already participate in the DRIP need not complete a DRIP mandate form for each dividend as such forms provide an ongoing authority to participate in the DRIP until cancelled in writing. Shareholders who wish to participate in the DRIP should obtain a mandate form from the UK Registrars, the South African Transfer Secretaries or, in the case of those who hold their shares through the STRATE system, their CSDP.
5. In terms of the DRIP, and subject to the purchase of shares in the open market, share certificates/CREST notifications are expected to be mailed and CSDP investor accounts credited/updated on or around Tuesday, 16 May 2023. CREST accounts will be credited on Thursday, 4 May 2023.
6. Copies of the terms and conditions of the DRIP are available from the UK Registrars or the South African Transfer Secretaries.
7. The US$:£/€ conversion rates will be determined by the actual rates achieved by Anglo American buying forward contracts for those currencies, during the two days preceding the announcement of the conversion rates, for delivery on the dividend payment date.

Registered office

17 Charterhouse Street

London

EC1N 6RA

United Kingdom

UK Registrars

EQ (formerly Equiniti)

Aspect House

Spencer Road

Lancing

West Sussex

BN99 6DA

United Kingdom

South African Transfer Secretaries

Computershare Investor Services (Pty) Limited

Rosebank Towers, 15 Biermann Avenue

Rosebank, 2196, South Africa

Private Bag X3000

Saxonwold, 2132

South Africa