AngloAmerican

Integrated Annual Report 2022

Re-imagining mining to improve people's lives

Transforming the very nature of mining for a safer, smarter, more sustainable future.

Using more precise technologies, less energy and less water, we aim to reduce our environmental footprint for every ounce, carat and kilogram of precious metal or mineral.

We are combining smart innovation with the utmost consideration for our people, their families, local communities, our customers, and the world at large – to better connect precious resources in the ground to all of us who need and value them.

And we are working together to develop better jobs, better education and better businesses, building brighter and healthier futures around our operations in host communities and ultimately for billions of people around the world who depend on our products every day.

Our metals and minerals help unlock a cleaner future for our planet and meet the needs of a growing population, from homes and electronics, to food and luxuries – these are future-enabling products.

Revenue

$35.1 bn

2022	$35.1 bn
2021	$41.6 bn

Underlying EBITDA◊

$14.5 bn

2022	$14.5 bn
2021	$20.6 bn

Operating profit

$9.2 bn

2022	$9.2 bn
2021	$17.6 bn

Underlying earnings per share◊

$4.97

2022	$4.97
2021	$7.22

Profit attributable to equity shareholders

$4.5 bn

2022	$4.5 bn
2021	$8.6 bn

Net debt◊

$6.9 bn

2022	$6.9 bn
2021	$3.8 bn

Total dividends per share

$1.98

2022	$1.98
2021	$4.19

Attributable free cash flow◊

$1.6 bn

2022	$1.6 bn
2021	$7.8 bn

Group attributable ROCE◊

30%

2022	30%
2021	43%

Number of fatalities

2

2022	2
2021	2

Total recordable injury frequency rate (TRIFR)

2.19

2022	2.19
2021	2.24

Level 4-5 environmental incidents

0

2022	0
2021	0

Cover image
Business intelligence analyst Janeth Fabian Chavez, at Quellaveco copper mine in Peru, consults the Work Execution Platform app on her mobile phone. The app – developed internally – makes it faster and simpler for frontline mine workers to execute work orders, raise work requests and conduct operation checklists on site.

◊ Alternative Performance Measures
Words with this symbol ◊ are defined in the Alternative Performance Measures section of the Integrated Annual Report on pages 310–315.

Contents

Strategic Report

Governance

Financial statements and other financial information

Ore Reserves and Mineral Resources

Other information

The Strategic Report forms part of the Anglo American plc Integrated Annual Report for the year ended 31 December 2022 and should be read in conjunction with the Governance section and Financial Statements of the Integrated Annual Report.

Our reporting suite

You can find this report and others, including the Sustainability Report, the Climate Change Report, our Tax and Economic Contribution Report, and the Ore Reserves and Mineral Resources Report, on our corporate website.

— For more information, visit: **angloamerican.com/investors/annual-reporting**

Social channels

AngloAmerican

@angloamerican

angloamericanplc

angloamerican

Anglo American

Basis of reporting
The Anglo American plc Integrated Annual Report for the year ended 31 December 2022 is produced in compliance with UK regulations. Additionally, we have compiled this report using the Guiding Principles and Content Elements set out in the International Integrated Reporting Council's <IR> Framework.

Integrated Reporting aims to demonstrate how companies create value sustainably over time, for a range of stakeholders – consistent with Anglo American's Purpose, business approach and strategy. This report, therefore, includes a comprehensive overview of our material matters, in the eyes of our stakeholders, and the impact these matters have on the value we create.

Measuring performance
Throughout the Strategic Report we use a range of financial and non-financial measures to assess our performance. A number of the financial measures are not defined under IFRS so they are termed 'Alternative Performance Measures' (APMs). We have defined and explained the purpose of each of these measures on pages 310–315, where we provide more detail, including reconciliations to the closest equivalent measure under IFRS. These 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.

Units
'Tonnes' are metric tonnes, 'Mt' denotes million tonnes, 'kt' denotes thousand tonnes, 'Mct' denotes million carats and 'koz' denotes thousand ounces; '$' and 'dollars' denote US dollars and 'cents' denotes US cents.

Forward-looking statements, third-party information and Group terminology
This document includes references to the Anglo American Group, forward-looking statements and third-party information. For information regarding the Anglo American Group, forward-looking statements and such third-party information, please refer to the IBC of this document.

Non-Financial Information Disclosures
Non-financial information in this report includes subsidiaries and joint operations over which the Anglo American Group has management or acts as operator. It does not include independently managed operations, such as Collahuasi and Samancor, nor does it include De Beers' non-managed joint operations in Namibia and Botswana, unless specifically stipulated.

We comply with all relevant non-financial reporting requirements, including those contained in sections 414CA and 414CB of the Companies Act 2006; the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD); and the Streamlined Energy and Carbon Reporting (SECR) rules. The tables on pages 112 and 115–120 are intended to guide stakeholders to where the relevant non-financial information is included within our Strategic Report and other externally available Anglo American plc publications.

Our business at a glance

Anglo American is a leading global mining company with a world class portfolio of mining and processing operations and undeveloped resources, providing tailored materials solutions for our customers, with more than 105,000 people working for us around the world.

North America
850 employees[1]
$68 m wages and benefits paid[2]
$34 m taxes and royalties[3]
$141 m local procurement spend[4]

Brazil
4,000 employees[1]
$165 m wages and benefits paid[2]
$384 m taxes and royalties[3]
$993 m local procurement spend[4]

Europe
3,000 employees[1]
$639 m wages and benefits paid[2]
$383 m taxes and royalties[3]
$801 m local procurement spend[4]

Australia/Asia
3,000 employees[1]
$517 m wages and benefits paid[2]
$939 m taxes and royalties[3]
$1,769 m local procurement spend[4]

Peru
1,000 employees[1]
$132 m wages and benefits paid[2]
$43 m taxes and royalties[3]
$1,218 m local procurement spend[4]

Chile
4,400 employees[1]
$398 m wages and benefits paid[2]
$1,044 m taxes and royalties[3]
$2,815 m local procurement spend[4]

South Africa
41,100 employees[1]
$1,681 m wages and benefits paid[2]
$2,053 m taxes and royalties[3]
$5,205 m local procurement spend[4]

Other Africa
6,650 employees[1]
$330 m wages and benefits paid[2]
$1,013 m taxes and royalties[3]
$631 m local procurement spend[4]

Product groups*
- Diamonds
- Copper
- Nickel
- Platinum Group Metals
- Iron Ore
- Steelmaking Coal
- Manganese
- Crop Nutrients

* Number within dot denotes number of operations, shown by product.

See page 113 for footnotes.

We provide many of the essential metals and minerals that are fundamental to the transition to a low carbon economy and enabling a cleaner, greener, more sustainable world, as well as meeting the growing consumer-driven demands of the world's developed and maturing economies. And we do so in a way that not only generates sustainable returns for our shareholders, but that also strives to make a real and lasting positive contribution to society as a whole.

— Our overview video gives a complete introduction to what we do and our ambitions for the future
See https://youtu.be/cYUz_h97X0A

Diamonds

$1,417 million
Underlying EBITDA◊

10%
Group underlying EBITDA◊

34.6 Mct
Production (100% basis)[5]

Base Metals

Copper

$2,182 million
Underlying EBITDA◊

15%
Group underlying EBITDA◊

664 kt
Production: Copper

Nickel

$381 million
Underlying EBITDA◊

3%
Group underlying EBITDA◊

39.8 kt
Production: Nickel

PGMs

$4,417 million
Underlying EBITDA◊

30%
Group underlying EBITDA◊

4,024 koz
Production: PGMs

Bulk Commodities

Iron Ore

$3,455 million
Underlying EBITDA◊

24%
Group underlying EBITDA◊

37.7 Mt
Production: Iron ore – Kumba

21.6 Mt
Production: Iron ore – Minas-Rio

Steelmaking Coal

$2,749 million
Underlying EBITDA◊

19%
Group underlying EBITDA◊

15.0 Mt
Production: Steelmaking coal

Manganese

$378 million
Underlying EBITDA◊

3%
Group underlying EBITDA◊

3.7 Mt
Production: Manganese ore

Crop Nutrients

$(44) million
Underlying EBITDA◊
Woodsmith is a greenfield project

Corporate and other

$(440) million
Underlying EBITDA◊

— More detailed information and maps can be found in the business unit reviews
See pages 84–111

Re-imagining mining to improve people's lives

Despite all the pressures facing the global economy, business must not waver in two crucial areas: meeting the challenges posed by climate change and striving to ensure that people are brought along in a Just Transition.

In a year of geopolitical and economic turmoil, with sharply higher energy prices raising inflation and weakening near term demand for many mined products, Anglo American continued to make strategic progress, while driving to embed consistent performance across our operations after the disruptions of the two pandemic years. We also made further progress in tilting our portfolio towards those products needed for a low carbon future and which support a growing and more discerning population – from copper to crop nutrients.

Safety

We continue to work tirelessly towards our goal of zero harm. A death is always a tragic loss for family, friends and colleagues and we will continue to increase our efforts to keep everyone safe. It is with deep regret that we lost two colleagues following accidents during the year at our managed operations: 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 a non-managed operation in South Africa. Pertinent to all these awful incidents, the Group's safety focus is on vigilance and encouraging employees to speak up when they encounter a situation that doesn't look safe, so that we can finally put a stop to serious incidents.

Sustainable mining

Climate change is the defining issue of our time, beyond question. Notwithstanding the prevailing headwinds, the mining industry must move at pace along the pathway to carbon neutrality – while at the same time endeavouring to reduce its environmental footprint and help create socially sustainable employment so that there is indeed a Just Transition.

We are making good progress reducing our Scope 1 greenhouse gas (GHG) emissions and decarbonising our Scope 2 energy supply chains. The renewable energy arrangements that we have in place, in South America and Australia, are expected to result in our drawing 60% of our global electricity requirements from renewable sources from 2025. We are targeting carbon neutrality across our operations by 2040, by which time we aim to have also at least halved our Scope 3 emissions.

Our FutureSmart Mining™ programme is delivering the technology and sustainability innovation that keeps Anglo American at the forefront of responsible mining. Quellaveco, our new copper mine in Peru, is one of South America's most technically advanced mines, with many processes being automated and remotely controlled, bringing major safety and efficiency benefits. In July, at the Mogalakwena PGMs operation, we launched the prototype for a fleet of hydrogen powered mine haul trucks – a world first at this scale. Anglo American is also deploying an integrated system of processing technologies which are improving metal recoveries, energy intensity and fresh water usage. We are also working with a number of prominent steelmaking customers to develop ways of making cleaner steel and, ultimately, 'green' hydrogen-based steel.

It is pleasing, too, to see the company's effort and investment in holistic sustainable practices over many years recognised in

“Anglo American is a major producer of many energy-transition metals and minerals needed for a cleaner, greener world. As a recognised industry leader in sustainability innovation, we also continue to focus on the implementation of new technologies that are hastening the pace of decarbonisation.”

our financing for the first time. During the year, Anglo American signed a $100 million 10-year sustainability-linked loan agreement with the International Finance Corporation (IFC). The loan is the IFC’s first in the mining sector and is understood to be the first in the mining sector globally to focus exclusively on social development indicators. Anglo American also issued its first sustainability-linked bond, a 10-year €745 million instrument which includes ESG performance targets to reduce our Scope 1 and 2 GHG emissions and fresh water abstraction, and to support job creation in host communities.

Portfolio

Anglo American’s differentiated combination of portfolio diversification and growth optionality continues to set us apart from our peers and to position us strongly through the current market volatility and for the longer term cycle. The commissioning of Quellaveco has boosted our exposure to copper, a critical energy-transition metal. The mine is expected to produce an average 300,000 tonnes of copper equivalent per year in its first 10 years of operation, taking our total attributable annual copper output closer to the one million tonne mark.

We have project options of scale at Los Bronces, Collahuasi and Sakatti (Copper), and at Mogalakwena (PGMs), while the development of Woodsmith mine will introduce a unique high value and low carbon product to the global fertiliser industry – another sector whose prospects look attractive for the long term.

Operating and financial performance

In 2022, Anglo American production decreased by 2%. Steelmaking Coal recovered from the shutdowns following safety incidents in recent years, and De Beers performed well, while we also benefited from first production of copper from Quellaveco. However, production was lower at Iron Ore, in our Copper business in Chile and in PGMs, together more than offsetting those gains.

Underlying EBITDA amounted to $14.5 billion, a 30% decrease on – and second only to – the record 2021 year. In line with our dividend policy, the Board has recommended a final dividend of $0.74 per share, equal to 40% of underlying earnings, bringing total dividends for the year to $1.98 per share or $2.4 billion. Anglo American’s Total Shareholder Return (TSR) for the year was 15%, three times higher than that of the FTSE 100 Index.

Governance

At Anglo American, sustainability has long been integrated into Board decision making – as it has across the executive processes, including our remuneration metrics. Our integrated approach to sustainability is a critical differentiator, as we believe that you cannot consider only one or two elements of E, S and G – they are intrinsically connected. Societal expectations for a Just Transition and greater product provenance are two such integrated examples that the Board has examined this year.

A motivated workforce is of course a prerequisite for a truly sustainable business and the Board continues to forge stronger relationships with employees, in turn helping keep a finger on the pulse of culture. Leading this initiative is the Global Workforce Advisory Panel, which includes 11 colleagues and is chaired by non-executive director Marcelo Bastos. In November, the Panel was able to hold its first in-person session since the outbreak of the pandemic. I am pleased, too, that Duncan Wanblad and myself have been able to engage directly with Panel members.

Our Board

I believe in the strength of our Board, with each member bringing their own specialist knowledge and experience to proceedings, and all non-executive directors demonstrating the independence of mind that brings constructive challenge to the Board’s decision-making process.

As part of our regular renewal process, there have been several changes to the composition of the Board. In January, Ian Tyler joined the Board and became a member of the Remuneration and Audit committees, and subsequently chair of the Remuneration Committee and senior independent director. At the end of the AGM in April, Mark Cutifani stepped down as chief executive after nine years and was succeeded by Duncan Wanblad. Long-serving non-executive directors and committee chairs, Anne Stevens and Byron Grote, stepped down from the Board at the AGM. In September, Elisabeth Brinton stepped down, as did technical director, Tony O’Neill, at the end of December after nine years in role.

I am always keen that our non-executive directors experience our business first hand and was therefore pleased that we completed two Board visits in 2022 – to our Mogalakwena operation in South Africa and our new Quellaveco mine in Peru.

Outlook

Although signs of deglobalisation, geopolitical shifts and trade dislocations brought fresh volatility for much of 2022, there are indications of greater stability ahead. Much will depend on how the world’s two biggest economies perform – and on the nature of their bilateral ties. Quantitative tightening by the US Federal Reserve may be coming to an end; China is likely to continue its post-Covid-19 recovery via stimulus; while an end to the tragic war in Ukraine would be welcome on every level and provide a significant boost to global stability.

Looking through those macro factors, I believe that Anglo American is a well-run, resilient company with the underlying culture, assets and ambition to continue growing and to deliver many of the world’s most-needed products, the market fundamentals for which have never looked stronger.

I express my thanks to all our employees, the senior management team and Board for their tireless efforts and for their commitment to our Purpose and Values in the way they work and engage with each other and our stakeholders.

Our Strategic Report

Our 2022 Strategic Report, from pages 2–120, was reviewed and approved by the Board on 22 February 2023.

Stuart Chambers
Chairman

A safer, smarter future for mining

Over the past 12 months we have seen the effects of instability surrounding energy supply. Whether this is due to geopolitical volatility or ageing infrastructure – this must be an opportunity to accelerate the energy transition.

Recognising that many of the metals and minerals we produce enable the technologies required to decarbonise the world's energy and transport systems, our commitment to being part of the solution to climate change begins in our own business by meeting our emissions reduction and carbon neutrality goals, while supporting host communities in terms of skills, jobs and helping catalyse new economic activity. This transition must consider all of society – it must be 'Just'.

Safety and health

Safety always comes first as we strive to reach zero harm for every one of our employees, every single day. While we continue to make progress on our long term safety journey and further develop safety processes and procedures, we were deeply saddened to lose two colleagues at our managed operations following accidents 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 a non-managed PGMs joint operation in South Africa. In addition to 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. We will not rest until zero harm is achieved and sustained across our business.

Direct disruptions related to the Covid-19 virus eased considerably during the year, though we continue to see changed work routines causing injuries and near misses and we are tackling these causes without delay. We are now starting to use the many innovative engagement channels we developed during the pandemic to offer a broader range of health and lifestyle support for our employees.

Operating and financial performance

The past year has seen the world face significant volatility against a deteriorating economic backdrop. As the world emerges from the disruption caused by the pandemic, we are continuing to feel the effects of dislocations in the global economy on our business – in energy, and across supply chains and labour markets. Extreme weather has disrupted the lives and livelihoods of so many, with exceptional rainfall also setting back many of our operations, while the war in Ukraine has contributed to an energy and cost-of-living crisis that has led to policymakers around the world reacting to mitigate historically high inflation rates.

In the face of these challenges, our business built momentum during the year with our focus on regaining operational stability and targeted incremental performance improvement. Our Steelmaking Coal business recovered well as two longwall operations were safely restarted and a third brought on line, while De Beers improved production and sales. Copper production at our newly commissioned Quellaveco mine in Peru more than offset expected lower grades at our Chile copper operations, while PGMs output was lower and iron ore volumes were negatively impacted by operational issues at Kumba and rail constraints in South Africa.

Underlying EBITDA was $14.5 billion, a 30% decrease compared with the record performance of 2021, as 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. Against this backdrop, we delivered a return on capital employed of 30% – above our targeted 15% through-the-cycle return – and a mining EBITDA margin of 47%. 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, and a build in working capital of $2.1 billion at the year end. Among other special items and remeasurements, we recognised a $1.7 billion impairment to the carrying value of the Woodsmith project, as indicated in December 2022. This adjustment reflects the enhancements we are making to the configuration of this high quality asset – and therefore its longer development schedule and higher cost – to maximise its value over its long asset life. Our $2.4 billion final dividend of $1.98 per share is in line with our 40% payout policy.

Strategically positioned portfolio

Most of our portfolio and investment capital is focused on what we call future-enabling products, being those metals and minerals that are required to enable and meet the demand trends we see – meeting the needs of a cleaner, greener, more sustainable world with a growing global population – from homes and electronics to food and luxuries.

The commissioning of Quellaveco delivers a step-change in our production of copper, one of the most critical metals to global decarbonisation. Delivery of this world class mine, on time and on budget despite the challenges of the pandemic, is testament to the incredible efforts of our workforce and the strength of our relationships in Peru over many years. Quellaveco alone increases our global production base by 10%[(6)] and is the cornerstone of our margin-enhancing growth potential of 25%[(7)] over the next decade, from copper to crop nutrients.

The fundamental demand picture for mined metals and minerals – particularly those that are responsibly sourced with traceable provenance – is ever stronger as most of the world's major economies accelerate their decarbonisation efforts and as the

"The metals and minerals we produce are crucial to society's ongoing development, fundamentally improving people's everyday lives and improving our planet's prospects. We must bring them to market safely and responsibly, playing our full part in addressing the ever more urgent issue of climate change."

global population increases and continues to urbanise. We aim to keep growing our business into that demand, drawing on the range of margin-enhancing organic options within our business.

Innovation with sustainability at its heart

Our FutureSmart Mining™ programme is focused on implementing innovative technologies that make mining safer, more efficient, and more environmentally and socially sustainable. At its heart is our ambitious Sustainable Mining Plan, including commitments that span the full breadth of sustainability thinking, and particularly the connectivity between environmental and social considerations. We are making good progress.

Our launch in May of a prototype hydrogen powered mine haul truck using our proprietary nuGen™ Zero Emission Haulage Solution at our Mogalakwena PGMs mine in South Africa marks a major step towards our goal of achieving carbon neutrality across our operations by 2040. Our subsequent combination of nuGen™ with our technology partner, First Mode, a transaction which completed in early 2023, is designed to accelerate the development of this breakthrough zero emissions solution to commercial roll-out, both for our business and more broadly.

Alongside diesel, purchased electricity is a major contributor to our operational GHG emissions. With renewable electricity supply already secured for all our South America operations, we have now formed a renewable energy partnership with EDF Renewables in South Africa. Our new jointly owned company, Envusa Energy, is developing its first phase of wind and solar projects, a major step towards our vision of a 3–5 GW renewable energy ecosystem in the region. And in Australia, we have sourced the supply of 100% renewable electricity for all our operations in the country from 2025 – effectively removing all Scope 2 emissions from our Steelmaking Coal business.

Our innovative approach extends to how we foster economic and social development in a way that delivers enduring benefits to host communities – ever more urgent as we consider greater levels of automation and the changing demand for future skills. We have committed to supporting five jobs off site for every job on site by 2030, delivered through our Collaborative Regional Development partnership model to catalyse scalable and sustainable development across our operating regions.

Our people

Our people are central to everything we do. Building a safe, inclusive and diverse culture has been a focus for us for a number of years and this is constant work for any company. We are determined to provide a work environment where we all act with integrity, treat each other with care, respect and dignity, and can fulfil our roles to a high level of performance in a place free from bullying, harassment and violence.

Engagement and listening are at the heart of this work as we seek to understand the concerns of our workforce. Through regular global employee surveys, we garner opinions on issues such as physical and psychological safety; the resonance of our Purpose; and how our Values are experienced. And in November, we launched our first Living with Dignity hub in South Africa to provide committed support to our employees and their families in relation to sexual harassment and gender-based violence, and bullying, harassment and victimisation.

Outlook

At the end of my first calendar year as chief executive, the world has changed in many ways. There is no doubt that agility and resilience are qualities good businesses need in order to thrive, while also working to live up to increasing expectations of the role of business in society.

As we look forward and combine those qualities with the global trends that determine demand for our products, I believe Anglo American is strongly positioned. We offer a highly differentiated investment proposition, both through the prevailing market volatility and for the structurally attractive longer term. Our unwavering focus is on driving safe, responsible and consistent performance across our operations, delivering value-adding growth and progressing towards our full suite of sustainability ambitions.

I thank the Board for its unwavering support and all our workforce for their hard work and resilience in what has been a tough year for people everywhere in the world.

Duncan Wanblad
Chief Executive

Our business model

Anglo American draws upon a number of key inputs that, through targeted allocation, development, extraction and marketing, create sustainable value for our shareholders and our diverse range of stakeholders.

Our inputs

> Ore Reserves and Mineral Resources
Our high quality, long life mineral assets provide a range of organic options for long term value delivery.

> Other natural resources
We aim to effectively manage the water and energy requirements of our mining and processing activities.

> Know-how
We use our industry-leading technical, sustainability and market knowledge to realise optimal value from our assets.

> Plant and equipment
We form strong relationships with suppliers, many of whom are located in the countries where we operate, to deliver tailored equipment and operating solutions.

> Financial
A strong focus on productivity, cost discipline and working capital management helps deliver sustainable positive cash flows, with balanced capital allocation to optimise returns.

Our value chain

We invest in those parts of the value chain that provide us with the best return on our investment, holding ourselves to the highest standards through our holistic and integrated approach to sustainable business practices.

Outputs

We deliver many of the metals and minerals that enable a cleaner, greener, more sustainable world and that meet the fast growing consumer demands of developed and maturing economies. We strive to minimise our environmental footprint through our use of technologies and bring enduring social benefits through our approach, encompassed in our ambitious Sustainable Mining Plan.

Attributable free cash flow
$1.6 bn

Group attributable ROCE
30%

CO_2 equivalent emissions (Scopes 1 and 2)
13.3 Mt

Mined product shipped by our fleet
>70 Mt

Production in 2022
– Diamonds: **34.6 Mct**
– Copper: **664 kt**
– Nickel (from Nickel and PGMs): **61.1 kt**
– Platinum: **1,783 koz refined**
– Palladium: **1,199 koz refined**
– Rhodium: **249 koz refined**
– Iron ore: **59.3 Mt**
– Steelmaking coal: **15.0 Mt**
– Manganese ore: **3.7 Mt**

Governance

Our governance controls ensure we respond effectively to those matters that have the potential to cause financial, operational or reputational harm, while acting ethically and with integrity.

— For more information **See pages 121–204**

Materiality and risk

Identifying and understanding our material matters and risks is critical in the development and delivery of our strategy.

— For more information **See pages 20–21**

How we measure the value we create

Safety and health
Socio-political
Environment
People
Production
Cost
Financial

— For our pillars of value **See page 10**

Stakeholder engagement

Open and honest engagement with our stakeholders is critical in gaining and maintaining our social and regulatory licences to operate. Working within our social performance framework, it is our goal to build and sustain constructive relationships with host communities and countries that are based on mutual respect, transparency and trust.

— For more on the value we create for stakeholders **See pages 11–13**
— For more on stakeholder engagement **See pages 16–19**

Our value chain

Across every aspect of our value chain, we are thinking innovatively about how we work to ensure the safety of our people, enhance our sustainability performance, and deliver industry-leading margins and returns.

Discover

Our geologists search for and discover new sources of the minerals that make our modern lives possible. We benefit from developing and using world class expertise and leading technologies, often that we have developed ourselves, to find deposits we can develop and mine in a safe and sustainable way.

Plan and build

Before we put a spade in the ground, our geologists and engineers work together using virtual mine planning systems to design the most effective, cost-efficient and environmentally sound construction and operational mine plan.

Mine

In extracting the products that we all need in our daily lives, we draw on over 100 years of mining experience. Safety comes first: our whole way of working is focused on zero harm. We plan for the lifecycle of the mine and beyond and use our own technologies for reducing waste and protecting environments.

Process

By processing, converting and refining our raw materials, we produce what our customers need and value. Our processing technologies also enable us to reduce energy and waste, recycle more water, increase efficiency, drive innovation and, by adding value to our products, further support economic activity in the areas we mine.

Move and market

After processing, we then transport our metals and minerals to where they are needed, to our customers. We use the latest technologies to co-ordinate and optimise our global shipping needs. And we use our scale and detailed knowledge of the demand and uses for our products to offer our customers a reliable supply to their exact specifications – adding value for them every step of the way and, ultimately, for billions of consumers who rely on our products every day.

End of life plan

We don't only plan for the lifecycle of the mine – we also take great care to look beyond and determine the rehabilitation of the site and the real benefits that will help sustain local communities, long after the site is closed.

Purpose to value

We are guided by our Purpose – re-imagining mining to improve people's lives – to deliver sustainable value for all our stakeholders.

Our Purpose

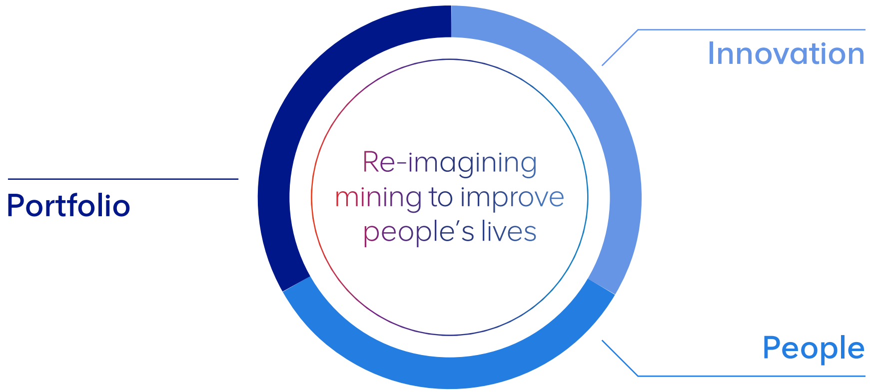
Re-imagining mining to improve people's lives

Transforming the very nature of mining for a safer, smarter, more sustainable future.

Our Values

Anglo American's Values and behaviours are at the heart of everything we do. Guided by our Purpose and our Values, we enable high performance and purposeful action. Our Values and the way in which we, as individuals, are expected to behave are the foundation of our Code of Conduct.

Our strategy



Guided by our Purpose, our strategy is to secure, develop and operate a portfolio of high quality and long life mineral assets, from which we will deliver leading shareholder returns. We achieve this through innovative practices and technologies – in the hands of our world class people.

Capital allocation

Underpinning our strategy, we have a value-focused approach to capital allocation, with clear prioritisation. Our Sustainable Mining Plan outlines ambitious targets that our projects must support to ensure a Healthy Environment, Thriving Communities and our position as a Trusted Corporate Leader.

— For more on capital allocation
See pages 64–66

Measuring delivery of our strategy

We track our strategic progress holistically – spanning non-financial and financial performance using KPIs that are based on our seven pillars of value:

Safety and Health
To ensure our workforce is safe and healthier for working with us

Environment
To have a net positive and sustainable impact on climate change, water and the natural environment

Socio-political
To build thriving communities and develop trust as a corporate leader

People
To create a sustainable competitive advantage through capable people and an effective, purpose-led, high performance culture

Production
To sustainably produce and grow valuable product

Cost
To achieve optimal margins based on delivery of targeted growth

Financial
To deliver industry-leading sustainable returns to our shareholders

Value

Delivering sustainable value for all our stakeholders

We are working together to develop better jobs, better education and better businesses, building brighter and healthier futures around our operations in host countries and ultimately for billions of people who depend on our products every day.

- Investors
- Suppliers
- Employees
- Customers
- Communities
- Host countries
- Natural environment

Balanced reward

Anglo American's directors' remuneration policy is designed to encourage delivery of the Group's strategy and creation of stakeholder value in a responsible and sustainable manner, aligned to our Purpose.

The main elements of the remuneration package are basic salary, annual bonus and Long Term Incentive Plan (LTIP).

— For more on remuneration
See pages 160–203

Creating value for our stakeholders

Anglo American is re-imagining mining to improve people's lives.

Mining has a safer, smarter, more sustainable future. Using more precise technologies, less energy and less water, we aim to reduce our environmental footprint for every ounce, carat and kilogram of precious metal or mineral.

We are combining smart innovation with the utmost consideration for our people, their families, local communities, our customers and the world at large – to better connect precious resources in the ground to all of us who need and value them.

And we are working together to develop better jobs, better education and better businesses, building brighter and healthier futures around our operations in host countries and ultimately for billions of people around the world who depend on our products every day.

Our metals and minerals help unlock a cleaner future for our planet and help meet the needs of a growing population, from homes and electronics, to food and luxuries – these are future-enabling products.

Investors

Delivering sustainable financial returns
Underpinning our strategy, we have a value-focused approach to capital allocation, with clear prioritisation: sustaining capital to maintain asset integrity; payment of base dividends, and then the allocation of discretionary capital to either growth investments, upgrades to our portfolio, or additional returns to shareholders.

— For more information
Visit angloamerican.com/investors

$2.4 bn
Total returns to shareholders

15%
TSR performance

7.3%*
Dividend yield

Employees

People are our business, and that means our first priority is always employee safety
Our people are critical to all that we do. And always front of mind are the safety and health of our employees and contractors; we train, equip and empower our people to work safely every day. We believe, too, that creating an inclusive and diverse working environment and culture that encourages and supports high performance and innovative thinking gives our business a competitive advantage.

— For more information
Visit angloamerican.com/employees

$3.9 bn
Total wages and benefits paid

*Calculated using average share price of $40.16 for the year ended 31 December 2022.

Communities

Helping to create thriving communities
We are committed to delivering a lasting, positive contribution to host communities, beyond the life of our mines. This starts with understanding and responding to their needs and priorities. We manage the relationship with host communities through our recently updated social performance system, the Social Way 3.0, and aim to drive shared value through our Sustainable Mining Plan commitments.

— For more information
See pages 51–55

$175 m
Total Community Social Investment (CSI)

114,534
Total number of jobs supported off site

Natural environment

Protecting our natural environment
We apply holistic thinking to address the interconnectivity of nature, the environment and the ecosystems in which we operate to deliver positive environmental outcomes and address global challenges such as climate change.

Some of the targets we have set include:

- To be carbon neutral across our operations (Scopes 1 and 2 GHG emissions) by 2040
- Net-positive biodiversity outcomes
- Reducing fresh water withdrawals by 50% in water scarce areas by 2030.

Suppliers

Responsible sourcing aligned to our Purpose
Our approach to responsible sourcing defines the minimum sustainability requirements and decent work principles required by the more than 17,000 suppliers to Anglo American. Our vision is to create a more inclusive supply chain as we seek to generate more equitably shared and sustainable prosperity in host countries, where over 70,000 jobs are supported by our procurement worldwide.

— For more information
See page 55

$13.6 bn
spent with local suppliers in 2022

92%
of total supplier spend of $14.8 bn

Customers

Understanding our customers' needs
We work closely with our customers, who are increasingly interested in sourcing responsible materials. By 2022, we had met our Sustainable Mining Plan target of 50% of our mining operations to be audited against recognised responsible mining certification systems and are on course to have all our operations audited by 2025. In addition, two operations have undergone the Responsible Jewellery Council certification and we have adopted the Copper Mark certification at Los Bronces and El Soldado while they await being assured against the Initiative for Responsible Mining Assurance (IRMA).

— For more information
Visit angloamerican.com/about-us

Host countries

Playing our role in society
Anglo American contributes to economies and society both directly and indirectly, through the taxes and royalties we pay, the jobs we create, the local workforces we upskill, the local business opportunities we generate, and the education and community health initiatives we support.

— For more information
See our Tax and Economic Contribution Report 2022

$5.9 bn
Total taxes and royalties borne and taxes collected

Stay up to date

— For more on our performance in the year, see the video link.
Visit https://www.youtube.com/watch?v=kN8W79RI3Gc

How we make decisions

In line with best-practice corporate reporting, Anglo American's Integrated Annual Report includes a comprehensive assessment of the principal risks we face, as well as those matters that we and our stakeholders believe have a material bearing on the success of the business in the near and long term – beginning with safety and environmental sustainability.

By engaging with our stakeholders and being aware of their perspectives, and by understanding the risks we know we face, we are better placed to make informed decisions that help support the delivery of our strategy.

Insightful and considered strategic decision making

Insights

Stakeholder engagement and topics raised
— **See page 16–19**

Material matters
— **See pages 20–21**

Global trends
— **See pages 22–24**

Principal risks
— **See pages 69–73**

Strategy

To secure, develop and operate a portfolio of high quality and long life mineral assets, from which we will deliver leading shareholder returns. We achieve this through innovative practices and technologies – in the hands of our world class people – towards our common Purpose.

— For more on our Strategy
See page 10

Board review

- Chief executive and senior management team formulate the Group's long term strategy.
- In addition to regular discussion on strategic topics, the Board dedicates a full meeting to a discussion of the Group's strategy, addressing critical short, medium and long term issues.
- Board approves critical strategic decisions and endorses the Group's strategy.
- Board reviews progress of delivery of Group's strategic goals, as well as periodic business unit strategic reviews.

— For more on Board activity
See pages 134–137

Capital allocation

Underpinning our strategy, we have a value-focused approach to capital allocation, with clear prioritisation: sustaining capital to maintain asset integrity; payment of base dividends, and then the allocation of discretionary capital to either growth investments, upgrades to our portfolio, or additional returns to shareholders. All of our capital allocation decisions consider sustainability issues and impacts.

— For more information on our capital allocation approach
See pages 64–66

Determining what is important
Identifying and evaluating matters that are of common material interest to our stakeholders and to our business, and understanding how they may affect our ability to create value over time, are integral to our planning processes and help support the delivery of Anglo American's strategy.

At the heart of decision making
Consideration of the wide spectrum of stakeholder and environmental interests is firmly embedded into Anglo American's culture, governance structures and management systems and is guided by our Purpose. Stakeholder concerns and considerations therefore feature prominently in the discussions of our Board meetings and those of its committees.

The Board, through its role in setting the tone from the top, provides leadership to the Group and is responsible for promoting and safeguarding the long term success of the business, supporting the executive management team in its formulation and implementation of the Group's strategy.

The duties of directors with regard to ensuring there is effective dialogue between the Group and its shareholders and stakeholders are broadening in scope, while society's expectations of company boards also continue to grow. At Anglo American, those matters considered by the Board and our stakeholders to be of material importance, and the views of our stakeholders in relation to those matters, are integral to the Board's discussions and decision making, including in relation to the Group's strategy and its evolution.

The following pages discuss how we make our decisions in further detail

(Left to right) Longwall operator Wayne Brown, Group chief executive Duncan Wanblad, operations manager Scott Dobbie and Bulk Commodities CEO Themba Mkhwanazi in the control room at our Steelmaking Coal's Aquila longwall operation in Queensland, Australia.

Understanding our stakeholders

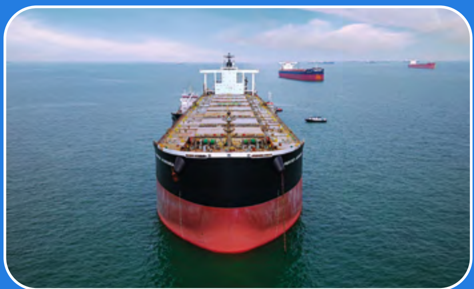
Healthy stakeholder relationships help us to better communicate how our business decisions, activities and performance are likely to affect or be of significant interest to our stakeholders, and provide the opportunity to co-create effective and lasting solutions to business and other challenges.

Investors
Our shareholders own the business, and their continued support is key to its long term sustainability. Regular meetings and occasional site visits with the investor and financial analyst community inform and help to shape our strategy, including our value-based approach to capital allocation.

Employees and unions
Our people are critical to all that we do and are essential to our commercial success. We have more than 105,000 people working for us around the world. We support labour rights, including the right to freedom of association and collective bargaining.

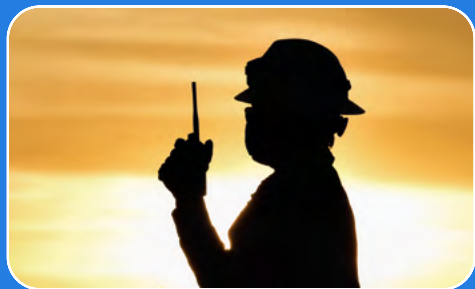
Communities
Building mutually respectful relations with the communities around our operations is essential to gaining and maintaining our licence to operate. We strive to deliver long term and sustainable economic growth and social progress to host communities, including beyond the life of our mine.

Suppliers and contractors
We work with suppliers to deliver tailored equipment, services and other solutions to enable best-in-class operating performance while remaining cost competitive. Our responsible sourcing programme defines the sustainability requirements expected of our more than 17,000 suppliers.



Customers
We work closely with our customers to address their raw material needs in a way that is tailored to their requirements and expectations. With presence across key commercial hubs and close market contact, we have the industry understanding to provide the solutions customers want.

Civil society (NGOs, faith groups and academia)
Engagement with the elements that make up civil society brings a unique ethical and sustainability lens to our business. The cross-sector relationships we forge with NGOs and other groups enable us to be a more responsive and effective development player, pulling levers where others can't.



Governments and multilateral institutions
Our strong relationships with governments at a local, national and international level enable us to be more effective in building capacity in host communities. They are also crucial, in an increasingly stringent regulatory and permitting environment, in securing and maintaining our licence to operate.

Industry associations
Our advocacy role on the international stage, including our work with industry associations ranging from IRMA, the TCFD and TNFD, to the Minerals Councils of South Africa and Australia, is helping to make mining safer, cleaner, more sustainable and more attuned to the modern world's demands of the mining industry of the future.

Investors

How we engage

The Group, through its investor relations team, has an active engagement programme with its key financial audiences, including institutional shareholders.

Any significant concerns raised by a shareholder are communicated to the Board. The Board receives a briefing at each meeting from the investor relations team. The chairman also hosts meetings with some of the Company's largest institutional investors through the year.

What was important to our stakeholders in the year

- Operational performance (including safety)
- Sustainability, including climate change (strategy, targets, progress and non-binding AGM resolution), water, workplace culture and harassment
- Progress of major projects
- Chief executive and other executive management transition

Employees and unions

How we engage

The Group undertakes global employee engagement surveys, the results of which are communicated to executive management and the Board. The Group's Global Workforce Advisory Panel meets during the year to discuss a range of topics. Feedback from the meetings is shared with the Board and the Group Management Committee.

Every business unit has formal points of contact for union engagement, and material matters are routinely reported to various boards. In 2022, we had two dialogue sessions with IndustriALL Global Union. In South Africa, our Tripartite structure (comprising South African businesses, recognised trade unions, the Department of Mineral and Energy Resources and industry councils) met to continue its focus on a number of topics important to our employees.

What was important to our stakeholders in the year

- Safety and health
- Mental health and well-being
- Living with Covid-19 and vaccination policies
- Cost of living
- Bonuses and incentives
- The future of work

Communities

How we engage

Our Social Way 3.0 engagement requirements and commitment to local accountability that forms part of our Sustainable Mining Plan are at the heart of how we engage with local communities. We aim to always engage proactively, meaningfully and respectfully with all of our stakeholders in relation to impacts and risk and to maximise development opportunities.

The Sustainability Committee receives a report on social performance and community issues at each meeting. The Board is also updated via presentations from business unit leaders and visits operations, which often include engagement with local community representatives.

The Social Way Policy sets out requirements for the management of grievances and incidents with social consequences. All incidents with Level 4–5 social consequences are reported to, and discussed by, the Board.

What was important to our stakeholders in the year

- Community health and safety
- Livelihoods and job creation
- Community education
- Land access, displacement and resettlement
- Local accountability forums
- Grievances and incidents with social consequences
- Collaborative Regional Development

Suppliers and contractors

How we engage

The Group engages with suppliers through several channels, including: supplier events; host community procurement forums; supplier capability development initiatives; various digital platforms; and our responsible sourcing programme.

Material matters are reported to the Board through the chief executive's reports. Material supply contracts are approved by the Board. Reports to the Board from the technical director and business unit leaders contain updates on contractor management.

What was important to our stakeholders in the year

- How to mitigate the risk of modern slavery and labour rights abuses within the supplier network
- Stimulating local manufacture of mining goods and increasing procurement opportunities for host community suppliers
- Promoting transparency and access to information
- Protecting the safety, health, well-being, human rights and dignity of workers employed by contracting companies and suppliers
- Understanding how suppliers can help us meet our Sustainable Mining Plan goals

Civil society (NGOs, faith groups and academia)

How we engage

The Group's engagement includes one-on-one interactions (including with the chief executive); various multi-stakeholder initiatives and partnerships; addresses at civil society gatherings; and open and ongoing dialogue on tax transparency and responsible mining practices. The Group hosts accountability dialogues on the UN's Sustainable Development Goals (SDGs), which bring together a cross-section of stakeholders (including NGOs) around our performance related to SDGs. Any key concerns or trends from these engagements are reported to relevant executive and/or Board structures.

Anglo American participates in the global Mining and Faith Reflections Initiative and the South African multi-faith 'courageous conversations' initiative, and also has longstanding partnerships with NGOs such as TechnoServe, Fauna & Flora International and WorldVision.

What was important to our stakeholders in the year

- Climate change and Just Transition
- Respect for human rights
- Investing in social and community development
- Industry transparency and reporting initiatives
- Critical raw materials
- Free, prior and informed consent

Customers

How we engage

Our Marketing business engages with customers through direct personal engagements and via business and industry forums.

The CEO of Marketing provides an annual update to the Board on the Group's marketing strategy and activities, including customer engagement. The Board also receives a regular update on commodity markets from the Marketing team.

What was important to our stakeholders in the year

- Delivery of product on agreed timing and terms
- Decarbonisation roadmap and carbon management solutions
- Assurance that products have been responsibly mined and sourced
- Collaboration opportunities
- Participation in responsible mining certification systems
- Price risk management in an inflationary environment
- Continued engagement around key industry shifts

Governments and multilateral institutions

How we engage

Group engagement includes: face-to-face meetings with local and national government representatives; dialogue and ongoing advocacy work – both directly and through industry bodies; and participation in inter-governmental and multilateral processes.

The Board receives a report on key geopolitical developments in the Group's operating jurisdictions at each meeting, as well as updates from the chief executive on government engagement.

What was important to our stakeholders in the year

- Compliance with mining licence and related requirements
- Contribution to national and international developmental priorities
- Taxation policy, including national and international tax reforms related to digitalisation, globalisation and the environment against a backdrop of challenging fiscal scenarios for many governments
- Wider sustainability and development agenda, including climate change
- The role of mining companies in addressing the impacts of Covid-19
- Permitting of new technology for transformational change

Industry associations

How we engage

The Group participates in more than 130 industry associations worldwide. An audit of our memberships is undertaken and published biennially. The Group's participation is directed by our International and Government Relations Policy. The chief executive reports any matters of significance to the Board.

What was important to our stakeholders in the year

- Contributing constructively in business initiatives, with the aim of enhancing the collective business interest
- Contributing to shared responses to challenges faced by governments and societies in host jurisdictions
- General knowledge sharing on our approach to managing material issues

Trader Erica Huang at our Marketing office in Singapore.

Our material matters

Determining what is important

Identifying and evaluating matters that are of common material interest to our stakeholders and to our business, and understanding how they may affect our ability to create value over time, are integral to our planning processes and help support the delivery of Anglo American's strategy.

Our process for determining those matters involves consultation, analysis and approval.

Our last externally facilitated integrated materiality process took place in 2020 and incorporated in-depth interviews with a range of internal and external stakeholders. In 2021, we supplemented the assessment with a stakeholder survey and desktop research, while, in 2022, we confirmed the outcomes of the 2020 assessment through desktop research. The desktop research included a review of the Group Risk register, global media coverage and analyst reports on Anglo American and the mining sector, and an analysis of minuted Board and executive discussions.

We will conduct a fresh externally facilitated materiality assessment in 2023 which will consider the evolving nature of global reporting standards and the principle of double materiality – a materiality lens that assesses both the impact of sustainability issues on our business, as well as the impact our business has on societal, environmental and economic issues. We expect to repeat that assessment every two years.

To better demonstrate and communicate how our sustainability material matters link to our Sustainable Mining Plan, we have mapped each material matter to the relevant critical foundations and Global Sustainability Pillars. More detail on how we report on our Sustainable Mining Plan progress and our sustainability material matters can be found in our Sustainability Report 2022.

— For more information
Visit angloamerican.com/sustainability-report-2022

Understanding our stakeholders

Healthy stakeholder relationships help us to better communicate how our business decisions, activities and performance are likely to affect or be of significant interest to our stakeholders, and provide the opportunity to co-create effective and lasting solutions to business and other challenges.

Anglo American's stakeholders include host communities, governments, employees, customers, business partners, multinational organisations, industry peers, broader civil society, trade unions, trade associations and suppliers, in addition to our shareholders who own the business. In some instances, we work with representatives from multi-stakeholder initiatives to provide a more collaborative and holistic view on the issues facing our industry.

Beyond the materiality process, we continually engage with our stakeholders at global, national and local levels to develop long term mutually beneficial relationships and respond to society's most pressing challenges.

— For more information on how we engage with our stakeholders
See pages 16–19

Material matters in 2022

The matters identified through our materiality process are naturally numerous and wide-ranging. In order for us to report against these material matters effectively and demonstrate how they affect the delivery of our strategy, we have set them out under the headings listed on page 21. No changes to the material matters determined in 2020 through the in-depth stakeholder interview process were identified through the 2022 materiality process.

Each material matter covers a number of topics and issues, and some also intersect with specific principal risks facing the Group, as identified in the Group Risk Register. Principal risks are those risks, or combination of risks, that would threaten the business model, future performance, solvency or liquidity of Anglo American and are shown with the following symbol (‡).

All topics shown on page 21 are considered important by our stakeholders and by the Group, with those topics considered to be of the highest importance and most material highlighted in bold.

— For more information on the Group's principal risks
See pages 69–73

Material topic	Material matters	Read more
Driving business performance	– **Operational and cost performance‡**	Page 80
	– Capital allocation	Page 64
	– **Innovation and technology**	Page 36
	– Data security and privacy‡	Page 69
	– Corporate governance	Page 121
Adapting to the world around us	– Geopolitical context‡	Page 24
	– Societal expectations‡ (e.g. tax, supply chain)	Page 53
	– Policy advocacy	Page 51
	– Macro-economic environment‡	Page 78

Critical foundations

SMP elements	Material matters	Read more
Zero Harm	– **Occupational safety‡**	Page 57
	– **Occupational health‡**	Page 58
	– Responsible mine closure	Page 32*
Leadership and Culture	– **Business conduct and ethics‡**	Page 63
	– Talent attraction, retention and development	Page 60
	– Future of work	Page 62
Inclusion and Diversity	– Inclusion and diversity	Page 62
Human Rights	– Human rights	Page 53
Governance and policies	– Group standards and processes	Page 49*
	– Compliance with legal requirements	Page 49*

Global sustainability pillars

SMP elements	Material matters	Read more
Healthy Environment	– **Tackling climate change‡**	Page 45
	– **Greenhouse gas (GHG) emissions‡**	Page 48
	– **Energy‡**	Page 48
	– Environmental management	Page 49
	– Biodiversity	Page 61*
	– **Water‡**	Page 50
	– **Mineral residue management‡**	Page 51
	– Air quality and operational emissions	Page 68*
	– Circular economy and materials stewardship	Page 69*
Thriving Communities	– **Social performance**	Page 51
	– Cultural heritage	Page 76*
	– Collaborative Regional Development	Page 51
	– Development through partnerships	Page 79*
Trusted Corporate Leader	– Public policy engagement	Page 84*
	– Ethical value chains	Page 54
	– Responsible and inclusive supply chain	Page 54
	– Economic contribution	Page 55

* Page reference relates to the Sustainability Report 2022.

Looking at global trends

In considering the evolution of our long term strategic context, we identify and analyse a wide range of trends that are likely to influence our business.

We assess trends in terms of their potential impact on the value of our business, while also considering the value created for, and impact on, all our stakeholders, and the timeframe over which they could develop in significance. We recognise that individual trends do not unfold in isolation and that when they converge there is potential for more pronounced effects.

Our strategy positions us well to navigate the many dimensions of our external context and, as trends develop, is flexible enough to allow us to adapt as required. Our high quality and diversified portfolio of assets, relentless approach to innovation, and talented people – combined with business decisions guided by our Purpose – set us up to take advantage of commercial and other opportunities, thereby unlocking our full potential for sustainable value creation.

1. Climate change and the environment

Winter-exploration activity taking place at our Sakatti base metals project in northern Finland.

What are they?
Climate change is the defining challenge of our time and there is increasing focus across society on efforts to reduce emissions of carbon dioxide and other GHGs. There is also growing awareness of the implications of climate change and the need to mitigate and adapt to its possible impacts across the economy.

The global response includes a transition towards renewable power generation, electrification of transport, development of low carbon industrial processes and changes to agricultural practice. There is also a move towards more efficient use of materials, building more sustainable and/or circular supply chains.

At the same time, many countries are tightening air quality standards to mitigate other harmful emissions, while there is an increasing focus on measures to protect water supplies, biodiversity and local ecosystems.

What does it mean for our industry?
An increased demand for the metals and minerals essential to the low carbon transition and a broadening awareness of the vital role that mining has to play. Low carbon technologies, such as renewable power generation infrastructure and electric vehicles (EVs) powered by batteries and fuel cells, generate additional demand for many metals, including copper, nickel, platinum group metals (PGMs) and steelmaking raw materials (iron ore and steelmaking coal). Longer term, evolution away from carbon emitting technology could introduce downside demand risk for some materials. For example, while increased demand for battery electric vehicles poses a downside risk demand for the PGM-containing catalytic converters used in internal combustion engine (ICE) vehicles, it is partly offset by hybrids, which require similar quantities of PGMs, and longer term, fuel cell electric vehicles.

A focus on reducing the GHG footprint of the mining value chain, including for carbon intensive downstream sectors such as the steel industry. Steel will remain an essential building block of the modern economy, irrespective of pressure to develop lower carbon methods of steel production. Pathways to decarbonise the steel industry include technologies that will favour higher quality iron ore (such as that produced by our operations), as well as the increased use of recycled material.

Adoption of circular economy practices. The mining industry has a role to play in supporting the development of more sustainable supply chains for basic raw materials. This includes an industry drive to balance ore extraction and support the sustainability performance of our downstream value chains to ensure raw material supply from primary production, as well as recycling.

Anticipating and preparing for the impacts of physical risks. Mining operations, their value chains and their broader social and environmental networks are already experiencing the impacts of climate change, including increased incidence of drought conditions, flooding, wildfires and supply chain disruptions. Identifying and assessing risks and putting in place mitigating measures to effectively respond to weather events, water stress and threats to biodiversity enhances the resilience of the industry and supports surrounding communities.

Delivering value through our strategy

We produce many of the metals and minerals that are essential to the low carbon transition, including copper for EVs and renewable energy capacity, nickel for EV batteries, and PGMs for hydrogen fuel cells and green hydrogen production.

Our exit from thermal coal operations, the commissioning of the Quellaveco copper project in mid-2022, and the Crop Nutrients business represent the latest phase of our portfolio trajectory towards future-enabling products.

We have set a target to be carbon neutral (Scopes 1 and 2) across our operations by 2040, with a 30% reduction (on a 2016 baseline) by 2030. We aim to achieve this through efficiency improvements, a transition to renewable power supply across our operations and the implementation of a number of low carbon technologies through our FutureSmart Mining™ programme.

In addition, we have set an ambition to reduce our Scope 3 (value chain) emissions by 50% by 2040. Emissions from the steel value chain make up the significant majority of our Scope 3 emissions and we are working closely with our customers and the broader industry to help achieve this ambition.

We are enhancing our systematic assessment of climate change physical risks across our operations and under different climate trajectories. This supports ongoing refinement of response and mitigation plans to identified material risks.

— For more on our Portfolio
See pages 28–35

— For more on our approach to climate change
See pages 45–49

2. Macro-economics and demographics

What are they?

Several developing economies, most notably China, have experienced a period of rapid urbanisation and industrialisation over the past two decades, resulting in an unprecedented number of households entering the wealthier middle class.

More recently, the economic fall-out of the pandemic and energy security crisis has reversed poverty reduction efforts in some regions, increasing levels of inequality.

Several countries and regions are expected to experience greater economic maturity in the coming decades, particularly India, south east Asia and South America, as well as Africa.

In the developed world and globally, patterns of consumption may also change due to changing demographics, including changes to fertility rates and ageing populations.

What does it mean for our industry?

As the global population grows (at least for the next four decades; current rate c.70 million per year) and as economies develop, so the need for food supply and infrastructure (e.g. housing and transport) grows, resulting in higher demand for crop nutrients, steel and base metals. Likewise, as disposable incomes increase, so demand for metals used in a wide array of consumer products will further increase.

As purchasing power increases, so too does the appetite for luxury goods and services. Demand for consumer-facing luxury products, such as those that use diamonds and PGMs, is expected to grow.

Delivering value through our strategy

Anglo American has a diversified product portfolio, increasingly focused on products that enable lower carbon economic development and that serve the needs of the expanding global consumer class.

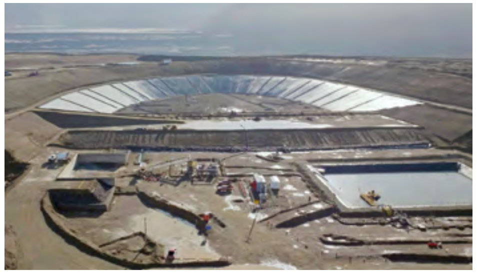
We have exposure to some of the largest resource bases in both PGMs and diamonds. We also have world class copper assets in Los Bronces, Collahuasi and Quellaveco. We have exposure to nickel through Barro Alto and as a co-product of our PGMs mines. Our premium quality iron ore and steelmaking coal assets are well placed to support demand for cleaner steelmaking and we expect our Crop Nutrients business to be well positioned to support sustainable, high yielding, low carbon, organically certified food production.

Our innovative market development and investment programmes aim to sustainably stimulate demand for our products, in particular for PGMs and diamonds.

— For more on Portfolio
See pages 28–35

— For more on Innovation
See pages 36–55

3. Emerging technologies



What are they?

New technologies are constantly emerging, focused on improving existing solutions, solving global challenges, or addressing society's unmet needs. These have the potential to significantly disrupt the status quo in some sectors of the economy, while unlocking opportunities for new products and services.

Important areas of technological development include those related to digital and big data, the application of automation and artificial intelligence, and the opportunities presented by blockchain and digital finance.

Meanwhile, innovation in the materials sciences will continue to influence applications for metals and minerals. This could create both demand upside through new use cases, as well as downside from substitution.

Increasing sustainability challenges, notably access to water and clean energy, are often at the heart of many of these emerging technologies.

What does it mean for our industry?

Automation, digital and big data are changing the way mineral deposits are discovered and developed, helping to alleviate the growing challenge of identifying and developing Tier 1 assets.

Technology will play a major role in identifying new resources, managing costs of production, improving productivity and minimising the environmental impact of mining.

Blockchain technologies, enabling secure, centralised and transparent data, will change the nature of industry supply chains, and will support the needs of our customers and consumers, for whom the provenance of materials is increasingly important.

Innovation in materials science has the potential to significantly impact demand, presenting both opportunities and risks for metals and materials. For example, there is growing potential for use of PGMs in fuel cells and for applications in medical science.

Delivering value through our strategy

Innovation is at the heart of our strategy, focused on safety, sustainability and operating performance. FutureSmart Mining™ uses innovative mining methods and technologies to overcome challenges of water availability, lower ore grades and increasing energy requirements, reducing our environmental footprint as well as reducing capital intensity and operating costs.

Our participation across the value chain allows us to apply our innovations in technology and sustainability more widely, looking beyond upstream production to examine other opportunities in the value chains in which we participate. For example, De Beers is a pioneer in blockchain-based traceability, applying the technology to the diamond value chain.

— For more on De Beers' blockchain technology
See page 31

4. Geopolitical shifts

What are they?

The economic growth of China has shifted the balance of economic and political influence eastwards. A resulting shift in patterns of global trade and ongoing regional tensions have seen the emergence of new regional trade agreements, as well as more widespread use of protectionist trade measures.

Russia's invasion of Ukraine has disrupted many global energy flows and supply chains through government imposed and voluntary corporate sanctions. With the full impact yet to be felt, the war has already led to effects such as increased price volatility for energy and agricultural products, changing trade flows as Europe is pushed to reduce dependence on Russian oil and gas, and heightened food security risks in some countries.

Rising inequality and a perceived failure of governments to deliver meaningful improvements in quality of life have, in some countries, led to an increase in populism, polarisation and protest, weakening democratic norms and government functioning. This has further increased geopolitical, political and policy uncertainty.

What does it mean for our industry?

The realignment of regional trading blocs and greater socio-political complexity can shift centres of demand and consequently the flow of raw materials to them. Trade restrictions and interstate conflict can impact strategically important raw materials, bringing a renewed focus on supply chain resilience and alternative sources of supply. This offers both challenge and opportunity to the mining industry as new sources and routes are found while the world adjusts.

In countries where sources of mineral supply are located, governments can introduce both certainty and uncertainty to the legislative and regulatory environment, while constitutional change can lead to delays in licensing and permitting, and tax regime changes, all of which can affect operational continuity and influence investment in those countries.

Delivering value through our strategy

Our Marketing business focuses on providing tailored materials solutions for our customers and, by drawing together our longstanding relationships, market insight and analytics capability, we can respond to demand shifts and redirect flows to fulfil the needs of our customers and stakeholders.

Our successful track record of developing and operating projects in multiple jurisdictions makes Anglo American a partner of choice for countries looking to develop their natural resource endowments. Our innovation-led pathway to sustainable mining – FutureSmart Mining™ and, within it, our Sustainable Mining Plan – helps us to work with governments to advocate for progressive regulatory frameworks that encourage and support investment in modern, sustainable mining. We have sought to invest, over many years, in long term relationships and the sustainable economic development within host communities so that we have the relationships in place to manage periods of complexity.

— For more on Innovation
See pages 36–55

Reflecting stakeholder views in our Board decision making

Anglo American has long understood the role of its business in society. In 2017, we began to formalise that role by validating our underlying Purpose with our employees, while also consulting stakeholders and shareholders, culminating in a Board discussion to encapsulate that Purpose as: re-imagining mining to improve people's lives.

Anglo American provides many of the metals and minerals our modern society needs, combining integrity, creativity and innovation with due consideration for all our stakeholders to better connect precious resources to the people who need and value them. We work together to provide people with better jobs, a better education and better businesses, and we are building brighter and healthier futures around our operations, in host countries and ultimately for billions of people around the world who depend on our products every day.

Our Values
Safety; Care and Respect; Integrity; Accountability; Collaboration; and Innovation shape our culture and guide our behaviour, and are fundamental to creating enduring benefit for all our employees, shareholders and stakeholders in a way that demonstrably improves people's lives.

Understanding our employees
Our people are critical to everything we do. We create safe, inclusive and diverse working environments that encourage and support high performance and innovative thinking. We are acutely aware that to get the best from our people we need to understand their viewpoints and address any concerns they may raise about working for us.

We consider workforce engagement to be a priority for every leader at Anglo American and we run regular surveys available to all employees to identify areas where, for example, we need to do more to ensure that colleagues feel cared for and respected. In 2019, we established a Global Workforce Advisory Panel, with the intention of giving employees more of a voice in the boardroom so their views can be better understood and considered when decisions are being made about the future of the business. In 2022, the panel met twice – with one of the meetings taking place in person for the first time since the start of the Covid-19 pandemic – and the panel chair, non-executive director, Marcelo Bastos, shared the key messages from those meetings with the Board. The People and Governance sections of this report provide more detail on these engagements and explain the resultant outcomes.

– For more information on our Global Workforce Advisory Panel
See pages 143–144

Section 172 statement
The Anglo American plc Board is cognisant of its legal duty to act in good faith and to promote the success of the Group for the benefit of its shareholders and with regard to the interests of a broad range of stakeholders. These include the likely consequences of any decisions we make over different time horizons; the need to foster the relationships we have with all our stakeholders; the interests of our employees; the impact our operations have on the environment and local communities; and the desire to maintain a reputation for high standards of business conduct. The new director appointed to the Board in 2022 received tailored, individual briefings on these duties, and the Board received updates in 2022.

As a major global mining company, the Board understands that our wide range of stakeholders (identified on page 16) is integral to the sustainability of our business, underpinning our social licence to operate. In addition, the Board is conscious that expectations around our performance and contribution to society – from local to global – are both diverse and continuously evolving.

By listening to, understanding and engaging with our stakeholders, the Board endeavours to live up to their expectations, by staying true to our Purpose, acting in accordance with our Values, and supporting management in the delivery of our strategy.

Stakeholder considerations are integral to the discussions at Board meetings and the decisions we make take into account any potential impacts on them and the natural environment. Like any business, we are aware that some of the decisions we make may have an adverse impact on certain stakeholders.

In 2018, the Board approved, and is holding management to account for delivery of, our Sustainable Mining Plan – a key component of our FutureSmart Mining™ programme. We are committed to a series of ambitious medium and longer term goals that are aligned with the UN's SDGs. These goals are designed to make a comprehensive and lasting contribution that we expect will positively transform how our stakeholders experience our business.

The Board and its committees took a broad range of factors and stakeholder considerations into account when making decisions in the year. Decisions are made within the context of the long term factors that may impact the Group, including key competitive trends and disruptions; technology capability; and climate change considerations. For more detail on Board activity in the year, see pages 134–137. For more on the global trends that influence the mining industry and our business, see pages 22–24, and for more on our approach to climate change, see pages 45–49. A summary of some of the key decisions made by the Board during the year is to be found on pages 26–27.

The Board (through its Sustainability Committee) monitors progress towards our Sustainable Mining Plan targets and how these may affect future decision making.

Key decisions made in 2022

Partnering to create a renewable energy ecosystem in South Africa

Following our exit from thermal coal operations, the Board continues to support Anglo American on its pathway away from reliance on fossil fuels as a primary source of energy for our activities. Drawing on our experiences in South America, we are working to decarbonise the largest single source of our Scope 2 emissions, our use of South Africa's coal-fired electricity grid. Anglo American has partnered with EDF Renewables to form a new jointly owned company, Envusa Energy, to develop a regional renewable energy ecosystem (RREE) in South Africa. In October 2022, the two companies formalised the relationship to explore the ecosystem's development, designed to meet 100% of our operational power requirements in South Africa and support the resilience of the local electricity supply systems and the country's wider decarbonisation. The RREE is also expected to catalyse economic activity in South Africa's renewable energy sector, supporting the country's broader Just Transition.

— For more information on the RREE
See page 47

nuGen™ – our Zero Emissions Haulage Solution

Eliminating the use of diesel at our mine sites is fundamental to decarbonising our global operations. This objective was the driving force behind the nuGen™ Zero Emission Haulage Solution (ZEHS), an end-to-end integrated green hydrogen production, fuelling and haulage system for mine sites. Following three years of extensive development with our engineering partner, First Mode, in 2022 we launched a prototype of the nuGen™ ZEHS at our Mogalakwena PGMs mine in South Africa. To capitalise on the success of this initial project and accelerate the technology's commercialisation, Anglo American has since combined nuGen™ with First Mode. We have also entered into a supply agreement with First Mode that sets out a pathway to decarbonise our global fleet of mine haul trucks over the next c.15 years, subject to ongoing studies and other conditions.

— For more information on our approach to climate change
See pages 45–49

— For more information on the launch of our first hydrogen-fuelled haulage truck
See page 37

Enhancing water supply for communities in Chile

Adopting a more sustainable approach to water management is a key tenet of Board policy and a critical objective for Anglo American – and no more so than in central Chile, where the decade-long drought continues to have a profound impact. In September 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 of the project, from 2025, we expect to be supplied with enough desalinated water to satisfy more than 45% of Los Bronces' needs while also providing clean water to approximately 20,000 people in local communities. In the second phase (still to be approved), we are also planning an innovative swap scheme to provide desalinated water for human consumption in exchange for treated waste water that will supply our operation. This would allow us to stop drawing any fresh water for Los Bronces, while further enhancing the provision of clean water to nearby communities.

— For more information on our approach to water management
See page 50

The launch of our first sustainability-linked bond

In September 2022, Anglo American issued its first sustainability-linked bond, linking our ESG performance to debt securities through non-financial KPIs and science-based targets. The €745 million, 10-year bond is the first instrument to be issued after the publication of our sustainability financing framework, with bond investors entitled to a higher final coupon payment should our targets not be met. The 2030 performance targets are linked to our Sustainable Mining Plan and include a 30% reduction in absolute GHG emissions (Scopes 1 and 2) compared to 2016; a 50% reduction in the abstraction of fresh water in water scarce areas compared to 2015; and the support of five jobs off site for every job on site.

— For more information on our progress against our non-financial KPIs
See pages 74–75

The distinctive dome of the Papujune processing plant at our Quellaveco copper mine, which was commissioned in July 2022. Quellaveco has an estimated 35-year life and is expected to produce around 300,000 tonnes of copper equivalent per annum on average over its first decade of production.

Portfolio

The quality and long life of our mineral assets are the foundations of our global business. We actively manage our asset portfolio to improve its overall competitive position, providing metals and minerals essential for a cleaner, greener, more sustainable world and that meet the needs of a growing global population, from homes and electronics, to food and luxuries.

Case study

Quellaveco – FutureSmart Mining™ in action

Delivering one of South America's most technologically advanced mines
Quellaveco is one of the largest mines to be developed across the mining industry in many years and is ramping up to produce 300,000 tonnes of copper equivalent per year on average over the first 10 years of operation, with a 35-year Reserve Life. In 2023 alone, we expect Quellaveco to produce between 310,000–350,000 tonnes of copper.

Our chief executive Duncan Wanblad comments: "Delivery of Quellaveco, a major new world class copper mine, on time and on budget despite the challenges posed by the Covid-19 pandemic, is testament to the incredible efforts of our workforce and the strength of our relationships in Peru over many years."

Holistic water planning
Designed as a model of FutureSmart Mining™, epitomising what we think a modern mine should look like from a technical, operational, environmental and social perspective, Quellaveco incorporates many innovative practices, and particularly in relation to water.

Quellaveco's water supply comes from two main sources: the Titire and Vizcachas rivers. The Titire is naturally highly contaminated due to its volcanic origins, making it unsuitable for agriculture, livestock or human consumption, while the Vizcachas has much higher quality water.

Both rivers have large seasonal variations in volume, meaning reliable and consistent water availability is a challenge. One of the major commitments we made during the extensive community dialogue process when planning the construction of the mine was to use the Titire as the principal water supply source for Quellaveco, with the Vizcachas becoming the secondary source via a reservoir that can then fully regulate the river flow, mitigating the otherwise seasonal variations.

During the dry season, we compensate the water we use from the Titire river with water from the Vizcachas. This swap arrangement of poor quality water for a high quality and reliable supply from the Vizcachas is a major improvement for local communities. The Vizcachas dam, which can hold up to 60 million m^3 of water, also provides a reliable volume of water for communities and for farmers in Moquegua, and the Arequipa regions.

In addition, we diverted the Asana river away from the mine's operational area via a tunnel through the mountainside to ensure it continues its flow downstream unaffected by the mine's activities.

The combination of all these developments ensures there is enough water for the mine – drawn principally from the Titire – and helps local communities by both providing water for additional agriculture activities and improving water quality and reliability, year round, significantly improving water supply on all fronts.

A fully digitalised and integrated mine
Quellaveco is fully digitalised and is either automated, or automation-ready, with all data integrated and accessible in real time. This is transforming the way we mine, allowing us to extract, transport and process ore while keeping operators safely out of harm's way.

The Integrated Operations Centre (IOC) is where all operations are controlled and integrated; it monitors the entire copper production chain, from ore extraction to shipment, in real time. The IOC marks a step-change in innovation, as it changes the work approach from a reactive model that studies what has happened, to a proactive model that anticipates what could happen.

Operationally, Autonomous Drilling Systems (ADS) are already widely used as the mine ramps up. Quellaveco has six remote-controlled blasthole drilling machines, each of which can drill a 16-metre hole in 12–15 minutes – substantially quicker than conventional drills. ADS enables operators to control drill rigs remotely, as well as allowing drilling to take place in areas which, before the introduction of drone technology, would have been infeasible or hazardous.

Transporting ore from the open pit to the processing plant mine is a fleet of 28 driverless heavy-haul trucks, the only such fleet in Peru. The automated vehicles are setting records for safety performance, fuel saving and reliability. They are complemented by three electric shovels, plus a conventional hydraulic shovel, that load the trucks safely and efficiently.

Studying the geology and topography of the mining area from the highly digitalised control centre.

Innovation saving energy and water
Anglo American is at the forefront of applying innovative technologies that are fundamentally changing the way minerals are processed – including coarse particle recovery (CPR).

At Quellaveco, a new CPR plant, one of the world's largest, will utilise CPR technology using Hydrofloat™, which combines flotation with gravity concentration, allowing the flotation process to be changed to treat larger-diameter material and permit coarser grinding. Expected to be commissioned in late 2023, the plant will initially increase copper recovery by an estimated 3%. Then, through increasing to a coarser grind, it will deliver a waste stream that is easier to handle, effecting predicted savings of around 20% in energy, while water recycling rates increase as it is simpler to separate water from larger sized particles. Moreover, because CPR makes it easier to drain the water and recover it, the technology assists in creating a lower volume of tailings, which, being drier, can be stored much more safely than wet tailings.

This technology, when implemented across the Group, will help us to significantly reduce our energy and water consumption in line with our ambitious Sustainable Mining Plan targets.

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 operations, development projects and undeveloped resources provides many of the metals and minerals that enable a cleaner, greener, more sustainable world through a lower carbon global economy and that meet the fast growing consumer-driven demands of developed and maturing economies. We are a responsible producer of diamonds (through De Beers), copper and nickel, platinum group metals, and the steel ingredients of iron ore and steelmaking coal. The exit from the last of our thermal coal operations in 2021, the delivery of the Quellaveco copper mine in Peru in 2022, and the ongoing development of our Woodsmith project (Crop Nutrients business) represent the latest phase of our portfolio trajectory towards future-enabling products.

The scale and diversity of our portfolio allow us to optimise our financial resources, technical expertise and supplier relationships to deliver on our potential, for the benefit of all our stakeholders. The portfolio's depth and breadth create a measured risk profile that is financially resilient in a low carbon world, and support strong returns through spreading our investments across diverse asset geographies and end markets.

Building strategic advantage

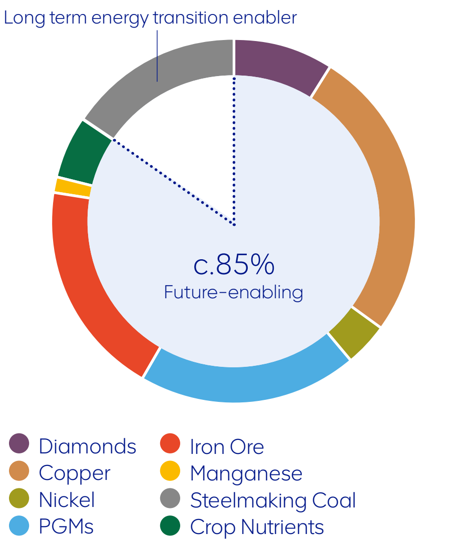
The primary source of competitive advantage in the mining industry is to own high quality, high margin, long life mineral assets of scale, with positions that can be further enhanced if those assets deliver products into structurally attractive markets.

The evolution of the Anglo American portfolio is guided by our strategy. Specific choices with respect to our portfolio are governed by a set of strategic principles. These principles also inform our capital allocation and investment appraisal processes, ensuring consistency of strategic decision making across the Group, and embedding climate-related and broader sustainability considerations at all stages.

In assessing our asset portfolio, the strategic principles we consider include:

– The stand-alone quality of individual assets, including their relative cost position, asset life and growth potential
– Our global competitive position within the individual product groups
– The additional value potential generated through leveraging our internal capabilities.

A future-enabling portfolio*



*Based on copper equivalent production which is calculated including the equity share of De Beers' production and using long term consensus parameters. Future production levels, based on information available at December 2022, are indicative and subject to final approval.

Our product groups

Future-enabling metals and minerals constitute approximately 85% of current production. That trend is set to continue in the coming years as we bring new copper and PGMs production on stream and introduce low carbon fertiliser into our global customer offering.

Diamonds

De Beers is a global leader in diamonds, producing around a third of the world's rough diamonds, by value, across four countries: Botswana, Canada, Namibia and South Africa. Within its portfolio, De Beers (Anglo American: 85% interest), in partnership with the Government of the Republic of Botswana – known as Debswana – has one of the richest diamond mines in the world at Jwaneng, and one of the largest resources, in terms of total carats, at Orapa.

De Beers' major diamond mining assets have large, long life and scalable resources and we are continuing to invest in the existing operations to extend mining activities. The Cut-9 expansion of Jwaneng will extend the life of the mine by increasing its depth to 800 metres; in Namibia, a new custom-built diamond recovery vessel, the Benguela Gem, was successfully commissioned in the first quarter of 2022; and in South Africa, Venetia is transitioning to an underground operation, extending the life of mine to 2047.

The lack of significant kimberlite discoveries globally over recent years, combined with the ongoing trend of growth in consumer demand for diamond jewellery in both mature and developing markets, points to good prospects for the diamond business. The continued investment in diamond mining support technologies, will enhance De Beers' portfolio of high quality and high margin assets and the ability of the business to flex production to prevailing demand.

Through its differentiated rough diamond distribution model, which includes Sightholders, De Beers has a range of insights into its customers' demand patterns. The company seeks to stimulate consumer demand for diamonds through its De Beers Forevermark and De Beers Jewellers brands and through its participation in the Natural Diamond Council. Rigorous ethical standards are underpinned by De Beers' Best Practice Principles (BPP) programme, while the business also provides source assurance through its proprietary Tracr™ blockchain platform.

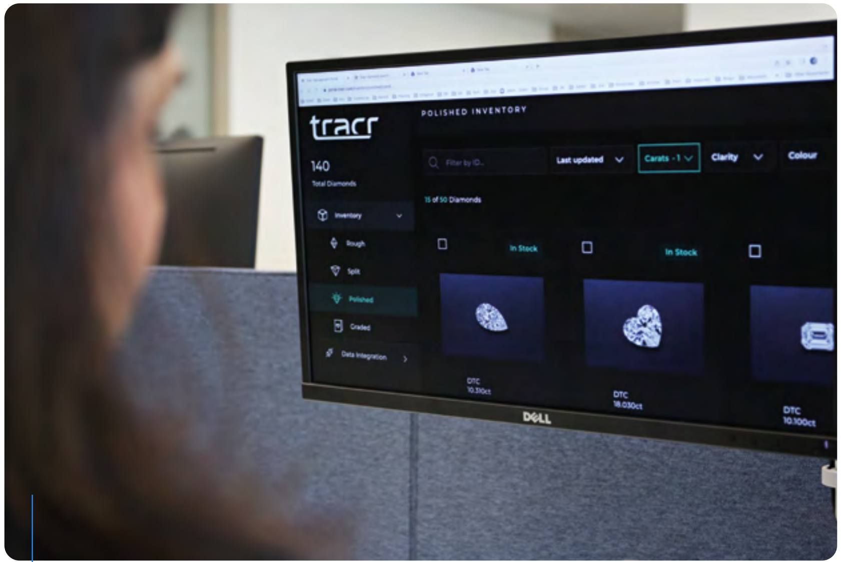
Although diamonds have a limited role in the transition to a low carbon economy, our mined diamond production is highly aligned with a low carbon future – aiming to be carbon neutral by 2030 – while continuing to contribute significantly to the local economies that host our mines, most notably in Botswana and Namibia. De Beers has a longstanding commitment to sustainability and environmental protection and restoration.

Base Metals

Copper

Anglo American has a world class position in copper, built around its interests in three of the world's largest copper mines. In Chile, we have interests in Los Bronces (a 50.1% owned and managed operation) and Collahuasi (44% interest in the independently managed joint operation), with Reserve Lives of 34 years and 84 years, respectively. Our tier one Quellaveco copper mine, located in Peru, started production in mid-2022. It has one of the

Case study



Using Tracr™, a diamond can be digitally tracked throughout its journey from its source to the end-purchaser.

De Beers' Tracr™ – assuring forever

For more than 130 years, De Beers has been synonymous with diamonds. And, while demand for our diamonds is led by consumer demand trends for the precious and the natural, it is nonetheless important that we produce diamonds in a manner that is highly aligned with society's sustainability expectations and a low carbon future.

Increasingly, customers want to feel reassured by understanding the ethical origins of the products they buy – especially for an emotionally significant purchase such as that of a diamond. That is why De Beers has such a sharp focus on providing assurance about the provenance of its diamonds and how they have made a positive contribution to the lives of the people and the places where they are found.

De Beers' Tracr™ initiative represents a significant advance in providing such assurance. Tracr™ is De Beers' groundbreaking technology platform focused on supporting diamond-sector assurance on provenance, traceability and authenticity from source to the end-purchaser. Developed in-house and in collaboration with industry representatives along the diamond value chain, Tracr™ brings together several key technologies – blockchain, artificial intelligence (AI), the internet of things, and high grade privacy and security technology – and it is the only truly distributed platform to digitally track a diamond's journey from its source in an immutable way, while enabling each user to maintain full control of their own data.

Tracr™ works by creating digital assets that represent the physical rough diamonds registered on the platform before they are sold. These assets can then be transferred to the next participant in the value chain, such as the company that cuts and polishes the diamonds. Additional data points can also be added to the Tracr™ blockchain, enabling diamond businesses to undertake digitally enhanced storytelling about the diamonds they sell, including with information about the diamonds' provenance and sustainability credentials.

In 2022, provenance assurance assumed greater importance within the diamond sector as the sanctions introduced on Russia and Alrosa by several western nations led to more desire from diamond businesses to know where their diamonds had come from. As a result, De Beers accelerated its focus on scaling this technology by conducting extensive testing of Tracr™ and significantly increasing the pace and throughput of the system, thereby reducing the time to process a diamond from seven days to less than six hours. Tracr™ is now being deployed at scale, with the ability to register up to one million diamonds per week, enabling Sightholders to provide an unchangeable record of a diamond's provenance, and empowering jewellery retailers – and ultimately consumers – to have confidence in the origin of the diamonds they purchase.

world's largest untapped copper orebodies and is expected to add around 300,000 tonnes per annum of copper equivalent production (100% basis) on average in the first 10 years of production. The resource base of these assets underpins our future near-asset growth opportunities, in addition to the polymetallic Sakatti deposit, which is being evaluated extensively by our Discovery and Base Metals teams in Finland.

Copper is critical to decarbonisation, in particular to the transition of the global energy system. Increased electrification and the shift from carbon intensive to renewable power generation are resulting in significant changes to energy grids and distribution systems, all of which require additional copper.

The copper mining industry is expected to struggle to meet longer term demand growth, including from hybrid and electric vehicles and renewable energy, as declining grades and more challenging physical and environmental conditions, along with tougher licensing and permitting requirements, are expected to limit the industry's ability to deliver new copper supply.

— For more on our Quellaveco mine
See page 29

Nickel

Anglo American produces two types of nickel. Our Barro Alto and Codemin nickel assets (both 100% owned) are located in Brazil and produce ferronickel, the majority of which is used in the production of high quality stainless and heat resistant steels. Together, these assets have the capacity to produce up to 45,000 tonnes of nickel per year. Our PGMs operations in South Africa produce nickel sulphate as a co-product, amounting to 21,300 tonnes in 2022. Nickel sulphate is a critical input in lithium-ion batteries used in multiple carbon abatement technologies, including battery electric vehicles (BEVs).

Platinum Group Metals (PGMs)

Our PGMs business (held through an effective 79.2% interest in Anglo American Platinum Limited) is a leading producer of PGMs — platinum, palladium, rhodium, iridium and ruthenium. We mine, process and refine the PGMs basket of five precious metals from its high quality resource base, located in the biggest known PGMs deposit in the world – the Bushveld Complex in South Africa. We also own and operate Unki mine – one of the world's largest PGMs deposits outside of South Africa, on the Great Dyke in Zimbabwe. Our flagship mine, Mogalakwena, is one of the world's highest margin PGMs producers, in part due to being the only large open pit PGMs mine that exists today.

We are continuing to reposition the business around a leaner, best-in-class operating footprint at our Mogalakwena, Amandelbult and Mototolo mines in South Africa, and Unki mine in Zimbabwe, alongside our joint operation interests in the Kroondal and Modikwa mines in South Africa.

Demand for PGMs is forecast to remain healthy, helped by the ongoing trend towards cleaner-emission vehicles, driven by more stringent global emissions legislation. Strong demand from the automotive industry is likely to be augmented by growing opportunities for emerging new applications, including hybrid and hydrogen fuel cell electric transport, while emerging economies such as India offer the potential of developing, from a relatively low base, into significant platinum jewellery markets. The versatility of the basket of metals is highlighted too in the breadth of applications for the lesser-known PGMs.

We are well positioned to proactively stimulate demand for PGMs, including through targeted campaigns in emerging jewellery markets; through direct investment in a number of companies developing new technologies that are expected to drive industrial demand for PGMs; and creating new investment demand for these precious metals as a store of value.

Bulk Commodities

Steel is an essential material for almost all infrastructure and provides the backbone of the low carbon economy and wider, long term socio-economic development. Steelmaking is currently carbon intensive, but our high quality iron ore and steelmaking coal products support efficient – and therefore lower emitting – steelmaking today and are well positioned to support the transition of the sector to lower carbon production methods centred around hydrogen.

Iron Ore

Anglo American's iron ore operations provide customers with high iron content ore, a large percentage of which is direct-charge product for steelmaking blast furnaces. In South Africa, we have a 70% shareholding in Kumba Iron Ore, whose Sishen and Kolomela mines produce high grade and high quality lump ore and also a premium fine ore.

In Brazil, our Minas-Rio operation (100% ownership), consisting of an open pit mine and beneficiation plant, produces a high grade pellet feed product, with low levels of contaminants. The iron ore is transported through a 529 km pipeline to the iron ore handling and shipping facilities (50% owned) at the port of Açu.

As steel producers in China and elsewhere face ever-tighter emissions regulation and are seeking ways to make their furnaces cleaner and more efficient, so the demand for higher quality iron ore products increases. The lump iron ore produced from Kumba's operations commands a premium price, owing to its excellent physical strength and high iron content (63–65% average Fe content). Minas-Rio's pellet feed product also commands a premium price, as its ultra-low contaminant levels and high iron content (c.67% Fe content) are sought after by steel producers who are seeking to minimise emissions while boosting productivity.

Steelmaking Coal

We are the world's third largest exporter of steelmaking coal and our operations, located in Australia, serve customers throughout Asia, Europe and South America.

Our Tier 1 steelmaking coal assets include the Moranbah and Grosvenor mines (both 88% ownership), located in Queensland. The mines are underground longwall operations and produce premium quality hard coking coal. More stringent environmental and safety regulations have led to a requirement for many steel producers to run cleaner, larger and more efficient blast furnaces which, combined with a number of mine closures in recent years, results in increased global structural demand for high quality coking coal, such as that produced by our Australian mines.

Manganese

We have a 40% shareholding in Samancor joint venture (managed by South32, which holds 60%), with operations based in South Africa and Australia.

Crop Nutrients

Anglo American is progressing the development of 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.

Our fertiliser product – known as POLY4 – will be exported to a network of customers overseas from our port facilities at Teesside. As we develop the mine and associated infrastructure, we are also developing demand for its product. POLY4 continues to demonstrate the significant benefits of its multi-nutrient, low chloride characteristics on the full breadth of crops at commercial scale. Beyond its crop yield and quality benefits over other bulk fertiliser products, the value of the product is also expected to be enhanced by its positive environmental properties – a very low carbon footprint given minimal processing requirements, its natural ability to improve soil health, and its suitability for organic use.

This long-life asset fits well with our established strategy of securing and developing world class assets, particularly in the context of Anglo American's trajectory towards products that support a fast growing global population – in this case, to meet ever growing demand for food – and enable a cleaner, greener, more sustainable world.

Portfolio update
We continue to refine and upgrade the quality of our asset portfolio to ensure that our capital is deployed effectively to generate enhanced and sustainable returns for our shareholders.

Anglo American has transformed the quality and performance of its portfolio over the last decade, producing significantly more physical product from a far smaller number of larger and higher quality assets, resulting in a step-change in our profit and cash flow generation capability.

Case study

Head of agronomy and technical services Ross Mitchell inspects a wheat field in South Africa as part of our Crop Nutrients business's extensive series of farm trials of POLY4.

POLY4 – helping to feed the world

The scale of the food challenge
By 2050, the world's population is expected to approach 10 billion. If no changes are made to our food systems, feeding this growing population could require up to a 60% increase in food production, 50% more grain, 120% more meat and 593 million additional hectares of agricultural land – an area almost twice the size of India.

Drawbacks of traditional fertilisers
Historically, increased agricultural activity has led to significant environmental damage. Deforestation, soil degradation, water pollution and GHG emissions are all side-effects of unsustainable farming practices. So, not only is there intense pressure to raise agricultural productivity, but ever-growing demands on land require doing so without using more land or harming the environment.

The use of artificial chemical fertilisers can directly and indirectly contribute to these problems through significant carbon emissions emitted in their production, and inappropriate and imbalanced use of fertiliser causing water pollution and poor soil health.

POLY4 – a more sustainable solution
POLY4 is uniquely placed to play a significant role in helping farmers improve their productivity, while assisting in addressing environmental challenges. Although artificial fertilisers based primarily on nitrogen, phosphorous and potassium will continue to have a vital use in enhancing crop yields, Woodsmith's natural polyhalite product, POLY4, will be an accessible, easy way for farmers to apply a broader range of nutrients while improving their soil and reducing their environmental impact. More than 1,500 large scale, on-farm trials continue to demonstrate that POLY4 increases the yield, quality and health of crops, while strengthening soil structure and reducing the environmental impact of fertiliser use.

Marketing POLY4
POLY4 will be available primarily as a dissolvable granule with a specification similar to other mass-market granular fertilisers, so that it can be easily mixed with other products, such as nitrogen and phosphorous fertilisers, to produce an enhanced nutrient blend. It's an easy, efficient way for farmers to provide their plants with a more balanced and nutritious diet, without having to invest in any new technology or application method. Its multi-nutrient nature, low chloride content (essential for chloride-sensitive high value crops, like potatoes and tomatoes), low carbon emissions in production, and suitability for organic use give POLY4 a distinct advantage over standard fertilisers, differentiating it in the marketplace.

Portfolio management
During 2022, our focus was on continuing to improve our competitive position, completing the construction of the Quellaveco copper mine in Peru and progressing the technical review of the Woodsmith polyhalite project.

Our Woodsmith polyhalite project will be a long-life asset. Since acquisition, detailed technical reviews have taken place to bring the project in line with Anglo American's safety and operational integrity standards. Further, 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 overall. 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.

In October 2022, Anglo American, in partnership with EDF Renewables, a global leader in renewable energy, announced their agreement to form a new jointly owned company – Envusa Energy – to develop a regional renewable energy ecosystem in South Africa. The ecosystem is expected to be designed to meet Anglo American's operational electricity requirements in South Africa through the supply of 3–5 GW of 100% renewable electricity (solar and wind) and storage by 2030, with excess electricity supplied to the grid to increase its resilience. The partnership is also expected to bring a host of economic benefits – stimulating the development of new economic sectors, local production and supply chains – to South Africa and the broader region, while also supporting the wider decarbonisation of energy in the country and the Just Transition.

— For more on our regional renewable energy partnership
See page 47

In December 2022, Anglo American signed a binding agreement with First Mode Holding Inc (First Mode) to combine Anglo American's nuGen™ Zero Emissions Haulage Solution (ZEHS) with First Mode, the specialist engineering technology company that partnered with Anglo American to develop the nuGen™ ZEHS. The combination is intended to accelerate the development and commercialisation of Anglo American's nuGen™ ZEHS.

Anglo American acquired a 10% strategic equity interest in First Mode in 2021. The transaction includes Anglo American making an additional capital investment of $200 million in the combined business to help fund the ongoing development of ZEHS, which values the business in the order of $1.5 billion and results in Anglo American owning a majority shareholding in First Mode.

The transaction completed in January 2023, and Anglo American has now entered into a supply agreement with First Mode that sets out a pathway to decarbonise its global fleet of ultra-class mine haul trucks, of which more than 400 are currently in operation, in support of Anglo American achieving its 2040 target for carbon neutral operations. The roll-out across Anglo American's haul truck fleet over the next c.15 years is subject to the completion of agreed and committed studies across seven mine sites, certain performance and cost criteria, and relevant regulatory, corporate and shareholder approvals. The supply agreement also includes the appropriate provision of critical supporting infrastructure such as refuelling, recharging and facilitation of hydrogen production.

— For more on the launch of the nuGen™ ZEHS
See page 37

Future growth
Anglo American offers one of the most attractive organic growth profiles in the mining industry. Quellaveco alone increases our global production base by 10%[6] and is the cornerstone of our margin-enhancing growth potential of 25%[7] over the next decade, with further optionality beyond, focused on our future-enabling metals and minerals, from copper to crop nutrients. We are sequencing options appropriately, based on capital efficiency and returns, cognisant of balancing current macro-economic uncertainties with the compelling longer term supply and demand dynamics.

The fundamental demand picture for mined metals and minerals is ever stronger 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 our business into that demand, drawing on the range of margin-enhancing organic options within our business.

Discovery
Discovery and Geosciences, including our exploration activities, is consolidated and centrally co-ordinated, covering near-asset and greenfield discovery activities, projects and operations. The integrated team represents a strategic differentiator, enabling the detailed understanding of our world class assets to inform our pursuit of discoveries.

Anglo American was founded on world class mineral discoveries. Building on the Group's strategy and long track record of discovery success, we continue to shape a global, diversified, risk-balanced portfolio focused on new discovery search spaces and mineral system thinking. This effort is enhancing our position as a discoverer of superior-value deposits that have the potential to improve materially our production profile, over time.

Quality discovery portfolio
We are concentrating on the discovery of mineral deposits in existing and new district-scale positions that are capable of delivering:

- Sustainable returns to the business, on a material scale
- Further improved diversification and optionality for the business, especially with respect to future-facing products that will enable a cleaner, greener, decarbonised world.

Our robust and diverse discovery portfolio includes:

Near-asset discovery projects
Our near-asset discovery projects are focused on the district-scale mineral tenure around Anglo American's existing operations. Innovative geoscientific thinking and sustained effort have yielded notable discoveries over the past years that continue to grow and provide development optionality with further drilling. For example, post-discovery drilling at the Los Bronces Underground project (Chile) has increased contained copper in Mineral Resources by 160% to c.45 million tonnes since these were first reported in 2009. Similarly, drilling at the Northern Limb of the Bushveld complex (South Africa) is helping to enhance optionality by materially increasing the confidence in

Mineral Resources that support a potential underground development pathway (see Ore Reserves and Mineral Resources Report 2022 for further details). In other districts such as Quellaveco (Peru), and Sakatti (Finland), additional copper and PGMs prospects respectively have been identified and are currently being evaluated.

Greenfield discovery projects

Greenfield discovery projects are those that identify and secure district-scale mineral tenure covering strategic, highly prospective search space in established and frontier settings. Our greenfield discovery focus includes copper, nickel, PGMs and diamonds. The mineral-system focus also brings the potential for co/by-products, including gold, cobalt, silver, molybdenum and zinc. The Group has active greenfield programmes in Australia (Queensland and Western Australia), Canada, Greenland, South America (Brazil, Chile, Ecuador and Peru), Europe and sub-Saharan Africa (Angola, Botswana, Namibia and Zambia).

Case study

Our Discovery teams are often the first point of contact with Anglo American in non-operational areas and we work closely with traditional owners of land and local communities to ensure our footprint is a positive one.

Discovery in Australia – ensuring our footprint is a positive one

Anglo American's Discovery teams recognise the discovery potential in the Earth's vast, still only partially explored, 'covered' search space, where younger sequences 'hide' the prospective basement rocks. At Anglo American's exploration project in central west Queensland, Australia, our geoscientists are targeting the undercover extent of the copper-prospective Mount Isa domain. Here, the highly prospective rocks lie concealed beneath younger sedimentary rocks. The project is allowing us to develop and refine the scientific toolkit and workflows in the quest for promising copper deposits. This includes building models of the sub-surface through the integration of geophysical techniques that are sensitive to the Earth's natural fields, along with workflow innovations in drilling and on site geochemical analysis to enable focused, low-impact, safe and timely programme advancement.

Situated within the semi-arid Outback, remoteness and seasonal flooding present a number of challenges, as well as opportunities, requiring close co-ordination and positive relationships with local stakeholders, including pastoralists and Traditional Owner groups. Our Discovery teams are very often the first point of contact people have with Anglo American in non-operational areas, and we work closely with environmental experts, community stakeholders and Traditional Owner groups to help ensure our footprint on the ground is a positive one. For example, Anglo American works with Traditional Owner groups to undertake cultural heritage work, sources supplies and services from local providers wherever possible and has also supported the annual camel races at the small remote Queensland town of Boulia – a key event on the calendar for the local community.

Commenting on a geophysical survey completed in collaboration with the local traditional owners, Tammy Meers, representative of the Maiawali First Nations group, said:

"The Martu people in the Western Desert have a saying, *'ngaparrtji ngaparrtji'*, which means that science is an exchange of knowledge and a chance to learn based on mutual respect, responsibility and connectedness. The whole Anglo American Group Discovery and Geosciences team embodied this throughout the survey and, on behalf of our family, we would like to thank Anglo American and the team for treating our ancestors' land in this way."

Our prototype nuGen™ hybrid hydrogen and battery-powered heavy haul truck, which was launched at Platinum Group Metals' Mogalakwena mine in May 2022.

Innovation

Across every aspect of our business, we are thinking innovatively to ensure the safety of our people, to enhance the sustainability of our business, and to deliver enduring value in its many forms for all our stakeholders.

Case study

nuGen™ – a major milestone in decarbonising mine transportation

We are targeting carbon neutrality across our operations by 2040, alongside an ambition to reduce our Scope 3 emissions by 50% by the same date. Currently, around 16% of our Scope 1 GHG emissions come from the direct use of diesel in our mining and processing operations. We have more than 400 heavy haul trucks at our operations worldwide, each one typically burning 2,500–3,000 litres of diesel and generating 8 tonnes of CO_2 per day.

We have long sought a commercially viable solution to reduce emissions from this fleet. Recognising the scale of the challenge to abate this source of emissions, and set with the challenge of developing the world's biggest hydrogen powered vehicle, we knew we needed to form collaborative partnerships with world-leading creative engineering and technology companies to co-create a solution.

Standing in front of the nuGen™ hydrogen truck is Alex Tumisang Lekgau, Africa's first and, to date, only licensed hydrogen heavy haul truck operator.

The nuGen™ truck takes shape

In December 2019, Anglo American signed an agreement with the US engineering company, First Mode, to design the world's largest fuel cell electric vehicle (FCEV). Following a robust testing process, we settled on a plan that would exchange the current heavy haul fleet's diesel internal combustion engine (ICE) power system with a hybrid hydrogen fuel cell and battery power plant.

The model chosen for the exchange was the Komatsu 930E-4 Ultra Class haul truck at our PGMs mine at Mogalakwena in South Africa. But nothing on this scale had ever been built – and a key challenge was to retrofit an entirely new power system into a space formerly occupied by an ICE, while continuing to support all the auxiliary systems of the existing truck. The fuel system needed to work at least as well, and produce equivalent or more power, than the existing diesel-powered systems, as well as emitting zero emissions.

The truck has eight fuel cells, with a collective capacity of 837 kilowatts (kW), and a 1.2 megawatt hour (MWh) lithium-ion battery – and is able to generate more power than its diesel predecessor.

In parallel, we also asked Engie, a French multinational specialising in energy transition, to provide an integrated hydrogen solution for Mogalakwena mine that could produce, compress and store hydrogen on site while enabling the trucks to be refuelled in record time. Critical to the project was that the hydrogen would be generated as far as possible using local solar energy, maximising the amount of 'green' hydrogen used to fuel the truck.

The fuelling system

An electrolyser uses electricity to break down water (H_2O) in a process called electrolysis. At Mogalakwena, the largest electrolyser in Africa will be able to generate, and store, an estimated one tonne per day of hydrogen to refuel the trucks. A pilot-scale solar plant has been constructed to support Mogalakwena's electrolyser, but a 100 MW solar photovoltaic (PV) plant is under construction, and is due to enter service by end-2024. The whole process is designed to ensure that green hydrogen is generated to power the heavy haul fleet – and that the entire value chain will be green.

This is about more than the truck

In May 2022, on its official launch, the nuGen™ hybrid hydrogen-battery power system performed faultlessly, including demonstrating its ability to improve overall efficiency by recovering energy through regenerative braking.

The haul truck forms part of an integrated solution, known as the Zero Emission Haulage Solution (ZEHS). To capitalise on the success of this initial project and accelerate the technology's commercialisation, Anglo American has combined nuGen™ with First Mode. We have also entered into a supply agreement with First Mode that sets out a pathway to decarbonise our global fleet of mine haul trucks. The roll-out across Anglo American's haul truck fleet over the next c.15 years is subject to the completion of studies across seven mine sites and a number of other conditions.

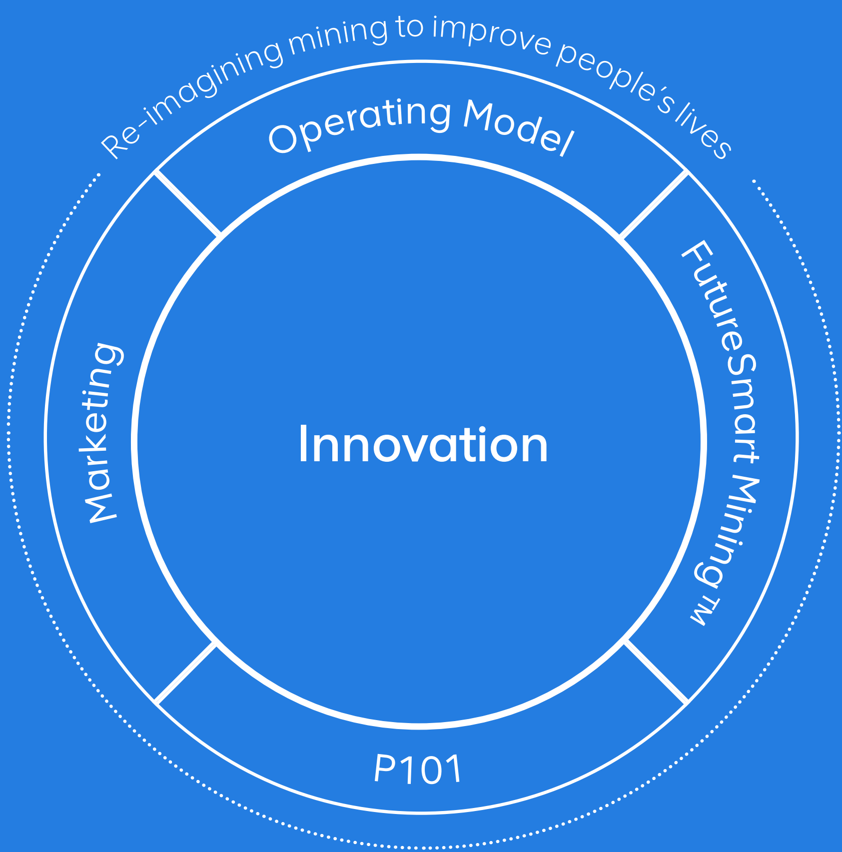
> "Delivery of the world's biggest hydrogen truck in terms of load size and capacity in just 30 months since we signed the first agreement to develop it is an astonishingly short time, and it is huge testament to the value of having partnerships on mega-projects, drawing on the very best skills available to achieve the unthinkable. This technology alone has the potential to cut up to 80% of diesel emissions at our open pit mines."
>
> **Natascha Viljoen**
> CEO – Platinum Group Metals

And although nuGen™'s initial focus is on decarbonising mine haulage and building on site hydrogen production and refuelling facilities, Anglo American aims to build green hydrogen 'clusters' to export hydrogen and oxygen to off site applications, developing new business opportunities and supporting new jobs and supply chains. Looking ahead, Mogalakwena is set to play a central role in the proposed 'hydrogen valley' that is envisaged to stretch from the PGMs-rich Bushveld Complex in Limpopo province of South Africa, along the industrial and commercial corridor to Johannesburg and to the Indian Ocean at Durban. We have a catalysing role to play in integrating hydrogen into South Africa's economy, and in establishing South Africa and its abundant renewable energy resources as a strategically important centre for green hydrogen production.

Our approach to innovation

Across every aspect of our business, from mineral exploration to delivering our products to our customers, we are thinking innovatively to ensure the safety of our people, to enhance the sustainability of our business, and to deliver enduring value in its many forms for all our stakeholders.

The combination of our innovative Marketing business, best-in-class operational improvements provided by the stable platform of our Operating Model and through our P101 programme, and FutureSmart Mining™ – our innovation-led pathway to sustainable mining – is fundamentally changing the way we extract, process and market metals and minerals, providing our next step-change in operating and financial performance.



Marketing

Our Marketing business optimises the value from our mineral assets and product offerings. We do this by fully understanding and addressing our customers' specific needs and optimising our capabilities in the financial and physical markets to drive the right commercial decisions across the value chain – from mine to market.

— For more information
See pages 43–44

Operating Model

We believe we can build a long term sustainable competitive advantage by securing access to the best resources and through operating assets more effectively (productive) and more efficiently (cost competitive) than our competitors.

Our Operating Model is the foundation to support us by providing structure, stability and predictability in the way that we plan and execute every task. Planned work is inherently safer and more cost effective than unplanned work.

— For more information
See page 44

P101

P101 is our transformational asset productivity programme that builds on the stability provided by our Operating Model.

It is about improving the performance of our most value-accretive mining and other processes to best-in-class benchmarks, then pushing the capability boundary further, establishing new benchmarks for the industry in terms of efficiency and the way we work.

— For more information
See page 44

FutureSmart Mining™

FutureSmart Mining™ is our blueprint for the future of our business. The intrinsic links between technology, digitalisation and many of our sustainability outcomes are driving the innovations that will transform the nature of mining and how our stakeholders experience our business. A future in which broad, innovative thinking, enabling technologies and collaborative partnerships are helping to shape an industry that is safer, more sustainable and efficient, and better harmonised with the needs of host communities and society. This is about transforming our physical and societal footprint.

Technology and digitalisation

Through embracing step-change technologies, our mining operations are becoming safer and more water- and energy-efficient. Through digitalisation and the application of big data and artificial intelligence, FutureSmart Mining™ is enhancing our performance across the entire mining value chain, from the discovery of new mineral deposits, to mining equipment and processing techniques, to tailoring products to our customers.

— For more on technology and digitalisation
See pages 40–41

Sustainability

Our Sustainable Mining Plan, integral to FutureSmart Mining™, is built around three Global Sustainability Pillars and sets out our commitment to stretching goals – driving sustainability outcomes through technology, digitalisation and our innovative approach to sustainable economic development.

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.

— For more on our Sustainable Mining Plan
See page 42

Technology and digitalisation

By integrating data intelligence and technology with our Sustainable Mining Plan commitments, we are creating new systems that optimise value for our stakeholders. We expect this integrated and holistic approach to deliver increasingly significant safety, environmental and social benefits, while reinforcing the ethical credentials of our products.

FutureSmart Mining™ has systemic thinking at its core – with additional value being realised through multiple new technologies working together. The framework for our approach to technology and digitalisation is set out as follows:

Concentrating the Mine™

We are optimising mining processes through technologies that target the required metals and minerals more precisely, with reduced water, energy and capital intensity, and producing less waste. These technologies include bulk ore sorting (BOS), coarse particle recovery (CPR), fines flotation, dry processing and novel classification, with their implementation integrated into resource development planning.

Progress in 2022

Full-scale BOS units, delivering improved grade feed through the early rejection of waste, and increasing throughput with no additional energy or water usage and with lower unit costs, are operational at our PGMs' Mogalakwena North concentrator (c.70% of complex feed) and at Copper's Los Bronces Confluencia plant (c.65% of complex feed). An in-pit upgrade at Barro Alto (Nickel) commenced in the second half of 2022 to enable improved sorting performance, with planning for trials at Kolomela (Kumba Iron Ore) under way.

A modular ultra-fines recovery plant at Mogalakwena has been constructed, which will address the industry-wide challenge of reducing ultra-fine mineral losses, with the potential to increase recovery rates by up to 3%. The project allows for ease of transportation and lowers our energy footprint, with 30% less mass transported to high-intensity downstream smelters.

The Sensor Fusion Loop was commissioned in South Africa. This one-of-a-kind test plant handles up to 750 tonnes of ore per hour and enables the development of breakthrough sensing and sorting algorithms which are being deployed rapidly to BOS operations globally, starting with Los Bronces.

Fresh waterless Mine

With more than 80% of our assets located in water scarce areas, we must reduce our dependence on water and associated tailings facilities. We will always need water, but we can get closer to full recovery recycling. Through an integrated system of technologies including CPR and hydraulic dewatered stacking (HDS), we are reducing fresh water usage, moving to closed loop and, potentially, the ultimate aim of dry processing in our operations, thereby eliminating the need for wet tailings and instead creating stable, dry, economically viable land.

Progress in 2022

A 250,000 m^3 HDS pilot at Copper's El Soldado mine received its first CPR sand, with the placement of wet tailings starting in November 2022. Water recovery has already been measured at more than 80% (our initial target), and dewatering is continuing, with the potential for up to 85% water recovery. The trial is still ongoing and is expected to continue into the fourth quarter of 2023. A brownfield trial to assess benefits from water quality and quantity improvements will commence at Mogalakwena in the first quarter of 2023.

Following its construction in 2021, the CPR unit at El Soldado was successfully handed over to operations, having exceeded targets in energy unit consumption and enabling a 16% increase in copper production without the need for additional energy. The innovative flotation process, which permits material to be ground to a larger particle size, allowing the early rejection of coarse waste and greater water recovery, has already begun producing the coarse waste which will be used in the nearby HDS pilot plant.

A full-scale CPR plant has been constructed at the Mogalakwena North concentrator, with start-up anticipated in late 2023. Construction of a full-scale CPR plant at Quellaveco (Copper) to treat flotation tailings began in July 2022, with commissioning planned for late 2023.

Modern Mine

Safety is our number one priority and we are committed to achieving zero harm, so that all of our colleagues return home safely, every day. We are developing a new generation of engineered controls to reduce exposure to risk in work processes. We are using existing modernisation technologies, introducing remotely operated machinery – such as automated drilling and blasting, and continuous hard rock cutting, to remove people from harm's way.

Progress in 2022

Anglo American's first fleet of 28 autonomous mining trucks is fully operational at our Quellaveco copper mine in Peru, where they are working alongside six autonomous production drills controlled from a remote operations centre some 20 km by road from the mine. During 2023, control of the autonomous truck system will also transition to this operations centre.

At Los Bronces, the first stage of the autonomous haulage system implementation is complete, with 22 new fully autonomous trucks operating. During 2023, the remaining truck fleet will be retrofitted, and control will transition to the Integrated Remote Operations Centre (IROC) in Santiago alongside the autonomous drill fleet. Our Minas-Rio iron ore mine in Brazil will commission the first autonomous drilling unit in late 2023, with the remainder of the fleet planned in 2024 and 2025. During 2022, extensive autonomous drilling installation and upgrade work was undertaken at our Mogalakwena, Sishen (Kumba Iron Ore) and Kolomela operations in South Africa, providing a platform for an increase in remote autonomous drilling operations in 2023.

The Group Geographic Information System (GIS) platform, which makes accurate geospatial data more widely accessible, is now available at all operations and work will progress in 2023 to identify assets where the tool will generate maximum value.

Intelligent Mine

We are transforming how we make best use of data, through integrated digital tools for planning, simulation, execution and monitoring, from resource definition to the output of processing plants. Our integrated digital transformation platform (known as VOXEL™) is bringing the full mining value chain together in a digital form to help our people make data-driven decisions in the most efficient manner, predicting outcomes and driving safety, environmental and productivity improvements.

Progress in 2022

In 2022, VOXEL™ enhanced our people's ability to take advantage of new digital resources through an extensive digital literacy programme – with over 3,000 personnel completing digital training, and 75 graduating from our specialist nanodegree programme – giving them the capability to conduct their own data science and analysis. Clear data governance principles have been embedded throughout the business that provide our VOXEL™ applications with the best quality data, as well as protecting our intellectual property. These governance principles are also fuelling the growth of the VOXEL™ data lake, feeding not only our applications, but also the Group's ability to make use of our data.

Spatial Inventory Modelling software is in use at key sites to achieve better efficiency, allowing the real-time assessment of the movement, separation and mixing of ore during blasts, while two pilot assisted core logging projects have seen cores from five drillholes logged digitally for the first time. Digital Operational Planning digitalises our Anglo American Operating Model and is being used at multiple sites to produce higher quality quarterly performance reports, running thousands of simulations to produce positive outcomes in a fraction of the usual time.

In Australia and South America, we have implemented gas analytics monitoring and critical control monitoring solutions respectively to help predict safety risks before they can impact our operations and workforce. We have also implemented a number of sophisticated analysis techniques to pockets of data to deliver value. For example, at Mogalakwena, we have brought on stream a semi-automated ore control pilot that has delivered an increase in production through a reduction in ore dilution and misclassification and, at our Copper operations, we have seen the potential for higher metal recovery through smarter control of processing plant parameters.

Our Sustainable Mining Plan

Our Sustainable Mining Plan, integral to FutureSmart Mining™, is built around our Critical Foundations and three Global Sustainability Pillars and sets out our commitment to stretching goals – driving sustainability outcomes through technology, digitalisation and our innovative approach to sustainable economic development.

Partnership and engagement

Environment

Healthy Environment

Climate change

2030: Reduce Scope 1 and 2 GHG emissions by 30%; improve energy efficiency by 30%; carbon neutral at 8 sites

2040: Carbon neutral at all operations; reduce Scope 3 emissions by 50%

Biodiversity

2030: Deliver net-positive impact (NPI) on biodiversity across Anglo American

Water

2030: Reduce withdrawal of fresh water by 50% in water scarce areas

— For more information **See pages 45–51**

Social

Thriving Communities

Health and well-being

2030: Relevant SDG3 targets for health to be achieved in our host communities (operations to be halfway to target by 2025, with baselines and strategies to achieve target established by 2022)

Education

2025: Host community schools to perform within top 30% of state schools nationally

2030: Host community schools to perform within top 20% of state schools nationally

Livelihoods

2025: Three jobs supported off site for every job on site

2030: Five jobs supported off site for every job on site

— For more information **See pages 51–54**

Governance

Trusted Corporate Leader

Accountability

2030: Establish open and accountable dialogue, leading to greater mutual trust and recognition of the benefits/challenges of mining

Policy advocacy

2030: Recognition of our leadership in policy advocacy. Strong levels of engagement in policy debates

Ethical value chains

2022: Half our operations to undergo third-party audits against responsible mine certification systems

2025: All operations to undergo third-party audits against responsible mine certification systems

— For more information
See pages 82-92 of our Sustainability Report 2022

Partnership and engagement

Collaborative Regional Development

Our innovative partnership model to catalyse independent, scalable and sustainable economic development in regions around our operations – the objective being to improve lives by creating truly thriving communities that endure and prosper well beyond the life of the mine.

— For more information **See pages 51–52**

Our Critical Foundations

These form the common and minimum requirements for each of our operations and our business as a whole. The Critical Foundations are essential to the long term credibility and success of both the Sustainable Mining Plan and our social licence to operate.

Zero Harm
— For more information **See pages 58–60**

Leadership and Culture
— For more information **See pages 56–63**

Inclusion and Diversity
— For more information **See page 62**

Human Rights
— For more information **See page 53**

Group standards and processes
— For more information **See page 49 of our Sustainability Report 2022**

Compliance with legal requirements
— For more information **See page 49 of our Sustainability Report 2022**

Our Marketing business
Our Marketing business was created to optimise the value from our mineral assets and product offerings for the benefit of all our stakeholders, with a focus on shaping long term, direct commercial relationships that place the expectations of our customers firmly at the centre of our approach.

Whether from our own mine portfolio or sourced through complementary third-party production, we offer a reliable supply of essential resources to our customers and the industries they support, which are key to the development of a cleaner and more connected future.

By understanding, addressing and anticipating our customers' specific needs, and evolving our capabilities in the financial and physical markets, we are taking an active role in building customised solutions and successfully bringing them to the industries we serve.

Our approach in action
Across our activities, we harness the potential of our diversified portfolio to provide a commercial offering that responds to customer requirements, is supported by consistently high quality service, and reflects society's increasing expectations for responsible production and sourcing.

Our trading activities have continued to evolve, allowing us to use our scale and market insight to help ensure security of supply and mitigate risk. Through our third-party sourcing framework, we can flex and expand our supply capabilities, responding to evolving industry demand while also helping partners bring their resources to market and extend their reach.

Case study

The newly launched LNG dual-fuelled Capesize+ vessel, the Ubuntu Harmony, with its first cargo of iron ore from Kumba in South Africa.

Decarbonising our value chains

Our Group-wide targets and ambitions
A key goal of our Sustainable Mining Plan is to reduce, by 2030, our Scope 1 and 2 GHG emissions by 30% (against a 2016 baseline). We are also targeting to be carbon neutral across our operations by 2040, and have an ambition to reduce our Scope 3 emissions by 50%, also by 2040.

Our Scope 3 emissions are responsible for the largest share of our emissions profile, with the majority being linked to steelmaking coal and iron ore. This makes the steel value chain central to the Group's Scope 3 emissions reduction ambition, which includes aiming to reach carbon neutrality across our controlled ocean-freight activities by 2040, with an interim target of a 30% reduction in carbon emissions by 2030.

Why the focus on shipping?
Shipping carries around 90% of world trade. Although a relatively carbon-efficient mode of transport, it is nonetheless a significant GHG emitter, accounting for c.3% of global emissions.

Since we started chartering our own shipping vessels in 2012, ocean freight has become an increasingly important part of our business. Our chartered fleet moves over 70 million tonnes a year of metals and minerals – principally, iron ore, steelmaking coal and copper concentrate.

A pathway to cleaner shipping
Decarbonising these activities will require a comprehensive approach, including, crucially, transitioning to a lower carbon fuel mix. In this framework, liquefied natural gas (LNG) has an important role to play. We are introducing 10 LNG dual fuel Capesize+ 190,000 dwt[(1)] bulk carriers, which we call the Ubuntu fleet, to our roster of vessels, with the first vessel delivered in December 2022 – the remaining vessels are expected to be delivered by mid-2024. They offer significant environmental benefits, having the potential to cut CO_2 emissions by up to 35% compared with vessels fuelled by conventional marine oil alone, while adoption of new technologies will eliminate the release of unburnt methane, as well as removing sulphur oxides, and reducing the volume of nitrogen oxides and particulate matter.

Designed to be larger, but just as flexible as conventional Capesize vessels, the Ubuntu fleet is expected to carry up to 10 million tonnes of product per annum, transporting cargo from Anglo American's operations in South America, South Africa and Australia to our global customer base.

Among alternative fuels today, LNG is available and viable now and we recognise its key role as a transition fuel to lower emissions immediately, while working on other longer term alternatives, such as sustainable biofuels, methanol, green ammonia and hydrogen.

(1) Deadweight tonnage – defined as the maximum deadweight of the ship and measure of the ship's carrying capacity.

We endeavour to match our commitment to reliable supply with robust assurance around responsible production, prioritising ethical decision making across our entire supply chain. With reference to Anglo American's Responsible Sourcing Standard, we are building a consistent and comprehensive approach to sustainability screening, due diligence and post-deal management of sustainability risks and opportunities so that, when buying Anglo American products, our customers know that our processes are underpinned and guided by our Values and focus on ethical value chains.

We also recognise the value of independent assurance to verify these aspects of our performance, against which we can test our internal criteria for alignment with best practice, as demonstrated by our goal to have all our operations assessed against an independent, globally recognised, third-party mining standard by 2025. Our support for the IRMA and the Responsible Jewellery Council (through De Beers) are key examples of this approach in action.

Work continues on developing digital solutions that can help us trace the journey of our products – part of our efforts to drive visibility of the provenance and value chain, of the metals and minerals we produce. For example, we are working with Aurubis – a global provider of non-ferrous metals and one of the world's largest copper recyclers – to bring greater transparency of provenance through the complex copper supply chain.

Collaborating across industry to decarbonise our value chain

As part of the Group's 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 working 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. The collaboration agreements with Japan's Nippon Steel Corporation and Germany's Thyssenkrupp Steel, signed in 2022, are an example of this approach.

The way we transport our metals and minerals to our customers also plays a role. The first vessels of our chartered LNG-fuelled Ubuntu fleet were launched in the fourth quarter of 2022 – a key milestone in our roadmap to deliver on our ambition to achieve carbon neutrality by 2040 for our controlled ocean freight.

— For more on decarbonising our controlled ocean freight
See page 43

Our trading capabilities also allow us to shape a suite of low carbon solutions, such as emissions offset schemes, as part of a focused delivery strategy designed to complement our existing product and service portfolio. Finally, through focused investment, industry collaborations and stakeholder engagement, we are looking to unlock the potential of technology development, materials science and circularity to discover, accelerate and scale-up climate positive innovations for long term decarbonisation, with a focus on those industry sectors which most contribute to our Scope 3 emissions profile, such as steelmaking.

Making targeted interventions for new and sustainable demand

We continue to nurture additional sources of sustainable demand for our products, with a focus on PGMs. Our integrated approach includes advancing, financing and backing new technologies, from the spark of an idea through to commercialisation, to create and sustain scale.

Beyond our wide-ranging, long-lasting focus on developing the hydrogen economy – from promoting the adoption of hydrogen-fuelled solutions for the electrification of transport to researching the use of hydrogen as a reductant in steel production – our efforts to capitalise on the unique qualities and unparalleled versatility of PGMs continue to grow in a variety of future-focused applications. These include investing in the development of palladium-containing lithium battery technologies; support for the creation of new materials and technologies, such as alloys and 3D printing, to serve industries ranging from jewellery to aerospace; and programmes aimed at accelerating the adoption of PGMs-containing memory chips to enable low energy consumption and high performance computing.

Operating Model

We believe we can build a long term sustainable competitive advantage by securing access to the best resources and through operating assets safely, more effectively (productive), and more efficiently (cost-competitive) than our competitors.

The Anglo American Operating Model is the foundation that provides structure, stability and predictability in the way that we plan and execute every task. Planned work is inherently safer and more cost effective than unplanned work. We have implemented the Operating Model across all managed assets and cemented a strong foundation for safe and sustainable business performance. We have been leveraging the power of our digital transformation platform, VOXEL™, to digitise our Operating Model through VOXEL™ Digital Operational Planning and feedback tools such as VOXEL™ Stable & Capable Analysis, enabling the use of integrated data to streamline business processes and enhance management systems.

We continue to build organisation capability across the core disciplines of operational planning, work management and performance improvement, supported by a comprehensive set of advanced learning resources which enable all our employees to understand, adopt and sustain our Operating Model.

P101

P101 is our transformational asset productivity programme that builds on the stability provided by our Operating Model. It improves the performance of the most value-accretive processes in our value chain to achieve best-in-class benchmarks, then pushes the capability boundary further, establishing new industry benchmarks in terms of effectiveness, efficiency and sustainability.

Our programmatic approach includes P101 sprints – which seek to identify, prioritise and ultimately eliminate operational instability and system constraints that prevent the realisation of full value from assets.

In 2022, in Chile, El Soldado became the latest Anglo American site to deploy an industry-first air quality predictive monitoring system designed to mitigate the environmental impact of its operations. This drew inspiration from the pioneering initiative deployed at the Chagres copper smelter in 2021, which helped the site to keep a perfect environmental management record. The work has reduced water consumption for road dust suppression by 75%.

At Minas-Rio, a new fibre optic system is helping to safely manage the 529 km of pipeline running from the iron ore operation in Minas Gerais to Açu port, on the Atlantic coast in the state of Rio de Janeiro.

A three-month trial was conducted at our PGMs' Amandelbult concentrators to assess the long term operational impact of a low-mass pull strategy that is expected to deliver a substantial reduction in electricity consumption for downstream processes. This mass-pull reduction will lead to a projected decrease of around 30,000 tonnes of waste in concentrate produced annually, with potential annual savings of more than $2.6 million in transport and smelter electricity costs.

Other P101 projects in the year include a pilot study to improve the recovery of rhodium from our PGMs operations. The process, tested at small scale, saw rhodium recovery improve to a purity of 99.98%. We also developed a successful pilot trial of a ferronickel briquette that has the potential to improve smelting efficiency at our Barro Alto and Codemin (Nickel) operations.

FutureSmart Mining™

FutureSmart Mining™ has systemic thinking at its core – with the greatest value being realised through multiple new technologies working together.

This system-based approach to innovation has seen the development of the world's largest hydrogen powered mining truck and its supporting infrastructure such as refuelling, recharging, and facilitation of hydrogen production using renewable energy.

The nuGen™ ZEHS mine haul truck at Mogalakwena is continuing operational testing – it has accessed the deepest parts of the mine and been loaded by both the electric rope shovel and hydraulic excavators, hauling 300-tonne loads of PGMs-bearing ore and waste materials.

— For more on the launch of the nuGen™ ZEHS
See page 37

Climate change

Climate change is the defining challenge of our time and our commitment to being part of the solution to climate change is embedded across the business. We continue to align our portfolio with the needs of a low carbon world; we are transforming our operations towards carbon neutrality; we are pushing for decarbonisation along our value chains; and we are considering carefully the social and wider environmental inter-relationships associated with our decarbonisation journey.

Our approach to climate-related risk

The scientific evidence of human-induced climate change is clear. However, the longer term impacts to our business are, to a degree, unpredictable. As a consequence, our risk management processes embed climate change in the understanding, identification and mitigation of risk. We have aligned ourselves with the Task Force on Climate-related Disclosures (TCFD) recommendations on climate-related risks and we are committed to evolving our disclosure to meet the recommendations of the UK's Transition Plan Taskforce, as these are finalised.

The nature of climate change means that climate-related risk cannot be managed independently of wider business strategy. Anglo American is well placed to respond to the challenges and opportunities we face as the climate changes, including being strategically and physically resilient for the future.

Testing our resilience

Anglo American is committed to playing its part in the transition to a low carbon economy. While the exact future pathway is uncertain, we expect climate change to affect the mining industry through risks and opportunities in two broad areas:

- **Transition risks/opportunities:** The potential impact on demand for different products, given assumptions on regulatory, technological and behavioural changes in the transition to a low carbon economy.
- **Physical risks/opportunities:** The potential impact on our operations and surrounding communities from both acute extreme weather events and chronic shifts in climate patterns.

— For more on Anglo American's principal risks, including Climate change
See pages 69–73

— For our TCFD table
See pages 115–119

Managing transition risks

To consider potential transition impacts and inform our strategic choices, we developed a set of climate change scenarios, including a 1.5°C pathway, as detailed in our 2021 Climate Change Report. The scenarios include a ~3°C scenario, based on the Wood Mackenzie Energy Transition Outlook. We also reference the Wood Mackenzie Accelerated Energy Transition scenarios for a 2°C scenario and 1.5°C scenario. In addition, we incorporate pathways for AFOLU GHG emissions into the three scenarios, reflecting guidelines set by the Intergovernmental Panel on Climate Change (IPCC) *Special Report on Global Warming of 1.5°C* for methane and nitrous oxide emissions.

— For more information on our climate scenario work
See page 15 of our Climate Change Report 2021

Across the scenarios, we assess Anglo American's resilience to transition impacts along key dimensions of financial strength and strategic robustness. Financially, we measure how our cash flow would evolve across scenarios, focusing on our existing assets and organic growth opportunities, to ensure consistency. This is overlaid with an assessment of the strategic risks and opportunities across each scenario, considering the evolution of our product profit pools, the life of our assets, as well as the quality and mix of our portfolio.

We continue to monitor the evolving climate change context to refine our understanding of the potential impacts to our industry and our business. A full refresh and update of our climate change scenarios and the quantified transition impacts are conducted every two to three years. The frequency with which our scenarios are updated is based on a consideration of several factors, including shifts in climate-related policy and emerging technologies, updates in climate change and emissions projections, and materiality of the updated impact on our business. We expect to produce an updated scenario analysis for the 2023 iteration of this report.

Limiting global warming to 1.5°C above pre-industrial levels by 2100 requires a rapid acceleration of global climate change efforts. This includes the deployment of low carbon technologies which will underpin an increase in demand for a range of mined products. As a result, we expect the overall extraction industry profit pool to be robust across the three scenarios. In addition, our analysis suggests that the profit pools in which Anglo American participates will remain broadly resilient under a 1.5°C scenario.

Our assessment that Anglo American remains resilient is based on the interrelationship between the quality of our endowments, the expected life of our assets, our exposure to commodities that support a green transition and mix of products in our portfolio, as well as our strong organic growth optionality. Under the ~3°C scenario, with our current asset footprint and organic growth options, we expect stable cash flows to 2035. Similarly, we expect our cash flow to remain resilient under both the 2°C and 1.5°C scenarios, but with greater uncertainty given the broad range of potential pathways to achieve the low carbon outcomes. For example, in the next decade under the 1.5°C scenario, our cash flow could be up to 30% higher relative to the ~3°C scenario. In the subsequent decade, our cash flow could be 20-25% lower under the 1.5°C scenario, relative to the ~3°C scenario. This range of uncertainty falls within our risk tolerance. In addition, the optionality in our portfolio will allow us to further strengthen our resilience and offset any potential downside risks to our cash flow.

As these scenarios are risk management tools only, no singular scenario should be taken as representative of management's view of the likely outcome.

— For further detail on how we expect demand for our mined products to be impacted by climate change
See page 16 of the Climate Change Report 2022

Physical risk – adapting to a changing climate

Our operations, communities and broader value chain, from the Arctic to the far South, are already experiencing the impacts of climate change.

We use two key processes to guide how we manage physical climate change risks – our Operational Risk Management (ORM) programme for mining operations, and the Investment Development Model (IDM) for projects. The ORM guides operations on how to assess and integrate climate risk management at each level of activity. The IDM process and evaluation criteria ensure that physical and market-related climate change risks and opportunities are embedded in the investment design.

For over 10 years, we have been working to ensure that our operations have the best available models to understand, assess, mitigate and adapt to the physical risks of climate change. We have drawn on the expertise of the UK Met Office, the South African Council for Scientific and Industrial Research (CSIR), Jupiter Intelligence and the Pontificia Universidad Católica de Chile to understand future climate projections and the vulnerability of our operations, host communities and host countries more broadly.

We recognise the importance and urgency of enhancing our resilience – in fact, our production in 2022 was affected by extreme weather, exacerbated by climate change, around the world. We have begun to use a climate change scenario analysis solution specifically for our assessment of physical climate change risks that uses multiple Global Climate Model (GCM) projections dynamically downscaled to a local level to provide projected changes in climate and hazard estimates for each of our assets and key shipping ports over the period 2020 to 2100. The modelling is based on three of the Shared Socioeconomic Pathways (SSPs) used in the IPCC Sixth Assessment report on climate change: SSP1-2.6, SSP2-4.5 and SSP5-8.5. These scenarios project warming of ~1.8°C, ~2.7°C and ~4.4°C respectively by 2100. This analysis provides us with a top-down view of key physical climate change hazards across our portfolio. To complement this, we have defined a bottom-up approach to understand the climate context at a local and regional level, including understanding past weather trends, present emerging climate-related impacts as well as vulnerabilities and adaptive capacities particular to each site.

Our aim is to reduce the risks from the harmful effects of climate change to an acceptable level in addition to identifying and capitalising on any opportunities arising from the changes. Identified risks which may only emerge in the long term under an SSP5 (~4.4°C warming by 2100) scenario will be monitored, as it may not be necessary to invest in mitigation or adaptation in the short term. Where response actions are identified, these are built into the operations' business plans to ensure that resources and responsibilities are allocated appropriately.

It is imperative that we also understand the climate change risks and opportunities across our broader value chain. Where these risks exist in areas not within our control, we will seek to collaborate with our stakeholders to address them.

— For more information
See pages 18–21 of our Climate Change Report 2022

A strategy to deliver a future-enabling portfolio

The evolution of the Anglo American portfolio is guided by our strategy. Specific choices with respect to our portfolio are governed by a set of strategic principles. These principles also inform our capital allocation and investment appraisal processes, ensuring consistency of strategic decision making across the Group, and embedding climate-related considerations at all stages.

In addition to these principles, we also assess the alignment with and resilience of our portfolio and opportunities to a range of long term trends including, critically, the implications of climate change. We explore how the world might develop under a range of climate change pathways and the potential outcomes for mining profit pools and for our business.

Our portfolio comprises future-enabling products that support the transition to a cleaner, greener, more sustainable world and that cater to demand trends of a growing global population. Our growth capital expenditure is earmarked for projects in key future-enabling metals and minerals, including copper, PGMs and polyhalite.

Allocating capital to achieve our targets

Our commitment to achieve carbon neutrality across our operations, as described fully in the Decarbonising our Operations section of the Climate Change Report 2022 (pages 23–26), is embedded in the Group's strategy and our medium term plan, including the allocation of capital. Through the work we have done with the Carbon Trust, and recognising that with forecasts of any type there is a margin of error, we are confident that our 2040 ambition is broadly in the range of what is widely understood as a 1.5°C future. We believe, therefore, that capital deployed to meet those targets is aligned with a contribution to achieving the goals of the Paris Agreement.

In many cases it is impossible to distinguish between capital deployed to continually improve our business and that which is deployed to achieve carbon neutrality. For example, our investments in FutureSmart Mining™ technologies, such as digitalisation, result in a wide range of benefits, including but not limited to, reducing the emissions of our operations through efficiencies which, in turn, also improves the profitability of our business.

Our major investments take into account the cost of carbon by embedding forward-looking carbon price assumptions, which are developed in conjunction with leading external providers, and are differentiated by geography and time horizon. The aim is to reflect our best estimate of the level of carbon pricing likely to prevail in the respective jurisdictions over time. These prices range between $10–60 per tonne by 2030. This approach ensures that project returns are evaluated on a realistic basis alongside consideration of a project's impact on carbon abatement and portfolio resilience to the effects of climate change.

— For more on how we allocate capital
See pages 64–66

Case study

Assembling PV panels for the solar-powered hydrogen plant under construction at our Mogalakwena PGMs mine.

Renewable energy – powering South Africa through partnership

South Africa is one of Africa's most industrialised economies, with a vast mineral endowment and huge natural-resources potential. Yet while many countries are seeking to substantially decarbonise, South Africa is sitting on extensive reserves of coal, which remain crucial to the country's energy security, including currently fuelling well over 90% of its electricity generation.

How to progressively shift from coal to renewables while effecting a Just Transition to a low-carbon future is an ongoing challenge for the country. We are working to decarbonise our South African operations in line with our ambitions for a low carbon future – while supporting South Africa's own decarbonisation journey. We are doing this in a number of ways, including partnering with a global partner, EDF Renewables, to form a new company, Envusa Energy, that will help us deliver our ambition.

The partnership with EDF Renewables is designed to abate the largest single source of Anglo American's Scope 2 emissions, its usage of South Africa's electricity grid. Initially, Envusa Energy will launch a network of more than 600 MW of on site and off site solar and wind-farm projects, intended to form the development of a broader regional renewable energy ecosystem (RREE) expected to generate 3–5 GW of renewable energy by 2030. This first phase is expected to be fully funded and ready for construction to begin in 2023.

Going beyond our own renewable energy requirements, however, the RREE we are creating aims to supply surplus energy to the national grid, while opening a pathway to developing an entirely new renewable energy generation industry, and all the services that will support it. The RREE has now been given status as a Strategic Integrated Project for South Africa, consolidating the government's support for the programme.

The build-out of the RREE across South Africa will also provide the foundation for developing a hydrogen economy through the production of green hydrogen. In July, Anglo American piloted its integrated green hydrogen production, fuelling and haulage system for its mine sites – the nuGen™ ZEHS. The ZEHS is designed to have the potential to replace diesel as the energy source across the Group's more than 400-strong haul truck fleet.

Taking diesel emissions out of the equation would not only propel Anglo American a long way along the path towards achieving carbon neutrality across the Group by 2040; replacing diesel with hydrogen would support the development of South Africa's hydrogen valley, a principal component of an eventual hydrogen economy in the region that is intended to take the Just Transition further through stimulating myriad new economic opportunities.

Our pathway to operational carbon neutrality by 2040

Achieving our target of carbon neutrality across our operations is a complex, multi-dimensional challenge. It begins from a clear and detailed understanding of current emissions sources. This understanding allows us to take decisions on the best means of abatement. The target of a 30% reduction in Scope 1 and 2 GHG emissions by 2030, with eight sites carbon neutral, is an interim target on our journey to carbon neutrality.

Scope 1 and 2 abatement

In 2022, our operations were responsible for a total of 13.3 million tonnes of CO_2 equivalent emissions (Mt CO_2e) (2021: 14.5 Mt CO_2e), of which 8.3 Mt CO_2e were Scope 1 emissions and 5.0 Mt CO_2e were Scope 2 emissions. This represents a 9% decrease compared with 2021, as various energy savings initiatives, driven by our FutureSmart Mining™ approach, start to have an impact on Scope 1 emissions across the business, and our renewable energy contracts are reducing our Scope 2 emissions. Our emissions in 2022 are, therefore, 1% lower than the 2016 baseline, on which our 2030 target is set. In 2022, our Group emission intensity was 6.1 Mt CO_2e /tonnes copper-equivalent (CuEq) (2021: 6.7 Mt).

Our total energy consumption decreased to 83 million GJ (2021: 84 million GJ). In 2022, our Group energy intensity was 38.4 GJ/tonnes CuEq. Our energy intensity is now 6% lower than the 2016 baseline.

These reductions have been driven primarily by the continued execution of our FutureSmart Mining™ programme, particularly with regard to diesel efficiency, other energy efficiency improvements and renewable energy roll-out, predominantly in South America. Operational decisions also play a significant role. For example, in the last year, our Steelmaking Coal business has transitioned production to new mining areas that generate lower methane concentrations.

In 2022, we sourced 52% of our electricity supply from renewable sources. We are committed to working towards the decarbonisation of the balance of our electricity supply via the use of power purchase agreements and self-developed generation at site. From 2023, all our South America operations (Brazil, Chile and Peru) will be being powered by 100% renewable energy. Building on this progress, we have secured 100% renewable energy to meet all our electricity needs in Australia from 2025. This will result in approximately 60% of our global electricity requirements being provided from renewable sources.

In October 2022, Anglo American formalised a partnership with EDF Renewables to form a new jointly owned company, Envusa Energy. Envusa Energy is expected to develop a regional renewable energy ecosystem in South Africa with the aim of meeting 100% of Anglo American's operational power requirements, as well as supporting the resilience of the local electricity supply systems and the country's wider decarbonisation. We expect that these projects will displace more than 1.5 million tonnes of CO_2e by the end of 2025 – a significant first step towards developing an ecosystem that is intended to generate 3–5 GW of renewable energy by 2030.

— For more on our regional renewable energy ecosystem in South Africa
See page 47

Our commitment to decarbonising our value chains

We are committed to playing our part to mitigate the impact of our value chain emissions, while recognising that the nature of Scope 3 emissions is such that most remain outside our direct control. We continue to build on our understanding of both the levers we can pull, and the influence each of those levers can have, over our Scope 3 emissions. We are committed to our ambition of reducing our Scope 3 emissions by 50% by 2040.

Our Scope 3 emissions saw a 14% year-on-year fall in 2021 to 98.5 MtCO_2e (2020: 114.8 MtCO_2e). Reduction was primarily driven by an increase in the proportion of iron ore sales to DRI-EAF steel production (~20% in 2021 vs ~10% in 2020) with a corresponding decrease in the share of sales to BF-BOF steel production. Emissions from DRI-EAF route are significantly lower than emissions from BF-BOF route. The detailed methodology that we developed in 2020 for measuring our Scope 3 emissions, which included differentiating emissions by customers, provides the basis on which this reduction has been realised and can be measured. Scope 3 emissions continue to be reported with a 12-month lag. This is due to the complexity involved in processing data at a granular level across our value chain, and continuous improvements to our methodology.

Climate change performance

Scope 1 emissions 2022

8.3 Mt CO_2e

(2021: 8.9 Mt CO_2e)

Scope 2 emissions 2022

5.0 Mt CO_2e

(2021: 5.6 Mt CO_2e)

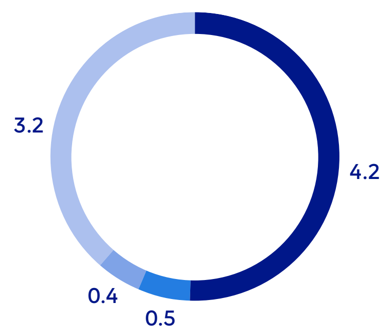
Scope 3 emissions 2021*

98.5 Mt CO_2e

(2020: 114.8 Mt CO_2e)

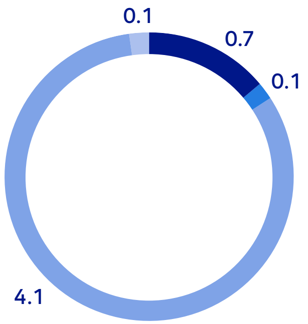
Anglo American GHG emissions 2022

Scope 1 (Mt CO_2e)



- CO_2e from fugitive emissions from coal mining
- CO_2e from methane flaring
- CO_2e from processes
- CO_2e from fossil fuel consumption

Scope 2 (Mt CO_2e)



- Australia
- Peru
- South Africa
- Other

* Scope 3 emissions continue to be reported with a 12 month lag. This is due to the complexity involved in processing data at a granular level across our value chain, and continuous improvements to our methodology.

Since announcing, in 2021, our ambition to halve our Scope 3 emissions, we have been working on developing a detailed pathway to meet our commitment.

Our initial focus has been on Categories 10 and 11– the processing and end-use of our products. Given the importance of the steel sector in our value chain, understanding the sector's likely pace of decarbonisation is crucial. Our base case assumption is that the 2020s will be a decade of transition and steel production will outpace technologically driven reductions in GHG emissions until 2030. Against this backdrop – and given the profile of production at our assets and our expectations for the sourcing of third-party product for our customers – we expect our Scope 3 emissions to increase to 2030, before reducing rapidly once investments in steel value chain decarbonisation begin to take effect.

Our activities with suppliers and our operations contribute approximately 18% of the overall Anglo American Scope 3 footprint predominantly through the procurement of equipment and capital goods. In support of our Scope 3 decarbonisation target and objectives, working with over 17,000 suppliers across the world, we are considering how best to position ourselves to leverage both our influence and, critically, our spend, to reduce carbon across our shared value chains.

We are targeting carbon neutrality in our controlled ocean freight by 2040 and, aligned with our Scope 1 and 2 targets, are aiming for a 30% reduction by 2030. We are making progress towards achieving this goal, actively working to contribute to the long term sustainability of the shipping sector.

— For more on how we are decarbonising our shipping fleet
See page 43

Policies and governance
Anglo American applies a principled and consistent approach to the governance of the Company's approach to climate change.

Policy approach
In 2015, we demonstrated our commitment to the Paris Agreement through our signature of the Paris Pledge for Action. That pledge demonstrates our willingness to work to support efforts in meeting and exceeding the ambition of governments to keep the world on a trajectory that limits the global warming temperature rise to well-below 2°C and pursue efforts to limit it further to 1.5°C.

Governance and executive remuneration
At Anglo American, the Board approves the Group's strategy on climate change, and holds regular discussions on material climate-related activities and energy efficiency targets. The Board's Sustainability Committee is responsible for addressing climate change-related topics. The Committee oversees, on behalf of the Board, material policies, processes and strategies designed to manage safety, health, environment, social and climate-related risks and opportunities.

Matters relating to climate change are included in quarterly reports to the Committee, and as stand-alone items on the agenda where necessary. The chairman of the Sustainability Committee provides a summary of the Committee's discussions at the Board, which addresses the most material issues raised by the Committee.

For senior leaders, a proportion of their variable pay each year is tied to the delivery of climate-related goals. This is predominantly incorporated into the performance measures for the Group Long Term Incentive Plan (LTIP). The LTIP is awarded to our most senior leaders across Anglo American, in total around 450 employees across our jurisdictions.

We have linked 20% of the 2022 LTIP to ESG measures, specifically the delivery of our 2030 Sustainable Mining Plan goals. This is broken down as follows: 14% is linked to climate-related measures that support the delivery of our 2030 Sustainable Mining Plan goals of reducing GHG emissions (Scope 1 and 2) by 30% against a 2016 baseline (6% of award); achieving a 50% net reduction in fresh water abstraction in water scarce areas (8% of award); social responsibility measures on the number of off site jobs we help to support in the communities where we operate (6% of award).

In addition to the measures as outlined above for the 2022 LTIP, a portion of our in-flight 2020 and 2021 LTIPs is also linked to climate-related measures. For 2020, these include reducing our GHG emissions and improving our operational energy efficiency. For 2021, this is based on reduction of our GHG emissions.

— For more information on our executive remuneration
See pages 160–203

Protecting our natural environment
We are committed to being stewards of the natural environment in which we operate and seek to minimise the footprint of our operations on the land and ecosystems around our sites. Today, digital technologies provide us with dynamic new tools to not only monitor our impact on the environment, but also to predict and mitigate risks.

We do this through ecosystem-thinking and by using nature-based solutions, managing a range of interconnected issues – from climate and biodiversity to social impact and health, including using our digital transformation platform, known as VOXEL™, to predict environmental impacts and help us adjust operational planning accordingly.

Our environmental work involves protecting the biodiversity of areas in which we operate, accounting for and optimising our water use, supporting the circular economy throughout the value chain and across our business, and addressing quality of the air around our operations.

Our approach and policies
Aligned with our Purpose, Values, and internationally recognised safety, health and environmental standards (ISO 45001 and 14001), our Safety, Health and Environmental (SHE) Policy embodies three guiding principles: zero mindset; no repeats; and non-negotiable minimum standards.

Our SHE Way V2 is the tool we use to manage and improve performance in safety, health and the environment.

Our Sustainable Mining Plan focuses on a mindset of causing zero harm to the environment and delivering a net positive impact for biodiversity, and at the same time, a lasting positive legacy for society. We also look beyond what we can achieve alone, collaborating globally with a diverse range of partners to develop and implement sophisticated solutions that support our sustainability goals.

Our approach under the Sustainable Mining Plan is to prioritise the environment throughout the lifespan of our mines. We look at the entire ecosystem to understand the intertwining relationships of people, biodiversity, climate, air, water, land and the economy.

— For more information on the SHE Policy, see
www.angloamerican.com/policies-and-data

Learning from environmental incidents
We classify incidents on five levels, according to their impact. Our chief executive reports all Level 3–5 incidents (from moderate to significant) to the Board, which discusses them through its Sustainability Committee.

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 investigation was carried out and lessons learned across both PGMs and the wider Anglo American Group.

In 2022, we were issued no material environment-related fines.

Water
Water stewardship is an integral part of our business and we welcome this role as we work to meet the Sustainable Mining Plan's water goals. Around the world, we operate in water stressed and water scarce areas, factors that are becoming more acute due to climate change.

We work with our stakeholders to not only minimise risk but unlock opportunities in a changing world. Our approach to water management is embedded in our business plans and aligned with the Social Way, which recognises that access to water is a priority for our stakeholders. We are guided in our work by our Group Water Policy and the Group Water Management Standard. The standard incorporates water issues into the lifecycle of any project, from site selection and early studies, through design to operation, closure and post-closure.

We put in place a pathway for the achievement of our ambitious Sustainable Mining Plan goal of reducing Group-wide fresh water withdrawals in water scarce areas by 50% by 2030, relative to the 2015 baseline. Using the World Resources Institute's Aqueduct tool, 83% of our sites are in areas with medium to high water stress.

Case study

From 2025, desalinated water will meet more than 45% of Los Bronces' needs, while also providing clean water for local communities.

Enhancing water supply in Chile

At Anglo American, we know we must adopt a more sustainable approach to water management. That is particularly the case in central Chile, where the drought that has persisted for more than a decade continues to have a profound impact on our operations, communities, industry, agriculture, and on the country's economy.

Already, we have funded and implemented more than 60 water-saving projects in the region to strengthen water-supply systems to host communities. But it has become clear that we must significantly up-scale. Over the past four years, therefore, we have been evaluating numerous methods to achieve a more co-ordinated and sustainable water supply solution for both Los Bronces and its neighbours. This work has culminated in the Integrated Water Security Project (IWSP), which comprises two phases:

Desalinated water secured for Los Bronces
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. 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.

Swapping high quality water from the desalination plant for treated sewage water
In the second phase (still to be approved), we are also planning an innovative swap scheme to provide desalinated water for human consumption in exchange for treated waste water that will supply our operation. This would allow us to stop drawing any fresh water for Los Bronces – our ultimate goal, while further enhancing the provision of clean water to local communities.

The benefits of the IWSP are numerous and wide-reaching. The project will not only provide a permanent water supply solution for Los Bronces, a key factor in maintaining current and potential future production levels, but would contribute significantly to the Group's 2030 fresh water reduction target, as well as providing community access to a sustainable drinking water supply.

Our fresh water withdrawals decreased by a further 3% to 35,910 ML (2021: 36,888 ML). This is a total reduction of 26% against the 2015 baseline that informs the Sustainable Mining Plan target – one that we are well-positioned to achieve. The reductions in fresh water were mainly due to significant increases in efficiency at the Amandelbult (PGMs) and Venetia (De Beers) mines. The sites achieved this by improving their water re-use and recycling rates, reducing their reliance on fresh water. This focus on efficiency will continue at all our operations throughout 2023. 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. In the event of any incident, we launch a comprehensive investigation of the root causes of the event to ensure it is not repeated.

Mineral residue management

The management and storage of waste rock and processed mineral residue – known as 'tailings' – remains a critical issue for the global mining industry. We are determined to meet the social, safety and environmental challenges of mineral residue management, both by developing practical technological solutions, and encouraging industry-wide conversation on the subject, while implementing leading practice across our Group.

— For more information and disclosure, see **www.angloamerican.com/tailings**

Our approach and policies

Our Group Tailings Standard addresses the risks of both tailings and water management facilities, as well as waste rock dumps. The standard sets out requirements for design, monitoring, inspection and surveillance, which we follow as a minimum requirement practice in each jurisdiction where we operate. It is aligned with current best practice, including the requirements of the Global Industry Standard on Tailings Management (GISTM).

The GISTM represents a vital step forward for the global mining industry. It was the product of the Global Tailings Review, which was co-convened by the United Nations Environment Programme (UNEP), Principles for Responsible Investment (UNPRI), and the International Council on Metals and Mining (ICMM).

Anglo American played an active role in the multi-stakeholder process of developing the GISTM, which covers standards and practices over the entire tailings facility lifecycle and sets a high bar for the mining industry to achieve strong social, environmental and technical outcomes. The GISTM is intended to be applied to existing and future tailings facilities, wherever they are found, and to whomever operates them.

To further our conformance with GISTM requirements, we have made significant progress on investigating site and tailings material strength, behaviours and facility instrumentation installation. For example, to better understand the technical risk related to potential outer wall collapse, we performed comprehensive in situ testing of upstream constructed tailings storage facilities (TSFs) in South Africa. We also investigated geochemical, geotechnical and groundwater quality matters related to our TSFs. As part of our implementation, we worked to develop guidance to allow operations to fully define the requirements of post-failure recovery and emergency management planning.

We also continued to engage with all stakeholders on emergency preparedness and response planning.

Playing our role in society

As a global business, we see it as our role to make a positive contribution to society. We are continuing to implement our industry-leading social performance management system for the global extractive sector, the Anglo American Social Way 3.0. It represents a comprehensive and innovative approach to how we interact with host communities that prioritises respect and mutual benefit for all stakeholders.

Through our Collaborative Regional Development (CRD) approach, we work to catalyse independent, scalable and sustainable economic development in regions around our operations to support our Sustainable Mining Plan commitments. We also transparently and continuously engage stakeholders to collaboratively find solutions to the most pressing issues of our time. We set our standards high, embedding them into our Code of Conduct. We also have high expectations of our suppliers, and provide guidance and support to emerging companies to meet those expectations, ensuring we address sustainability matters throughout the entire value chain.

Social performance

Social performance encompasses our interactions, activities and outcomes with respect to host communities and other local stakeholders affected by our activities. Delivering value into the lives of our external stakeholders and managing our impact on host communities are integral to the long term success of our business.

Our approach and policies

The Social Way 3.0 provides a social performance management framework for all Anglo American-managed sites, at all phases of development. Aligned with our Purpose and our strategic business objectives, the Social Way embeds international standards and best practice and sets out clear minimum requirements to:

- Engage with affected and interested stakeholders
- Avoid, prevent, and, where appropriate, mitigate and remediate adverse social impacts
- Maximise development opportunities.

The Social Way 3.0 emphasises the integration of social performance into our core operational planning and processes, including our Operating Model and Sustainable Mining Plan. The Social Way Management System is one of the main vehicles through which we are working to achieve some of our ambitious Sustainable Mining Plan commitments. We have made the Social Way 3.0 publicly available for other companies to use and, just as importantly, so stakeholders know what our standards are and what they can expect of us.

Assessing performance

External, independent assessors carry out annual assessments across all our managed operational sites, as well as De Beers' non-managed joint operations.

The launch of the Social Way 3.0 in 2020 required us to embark on our most ambitious social performance training programme. Since 2020, we have trained more than 2,000 people at our sites across multiple functions and levels of leadership, from the Group Management Committee to on site social performance practitioners.

At the end of 2022, 66% of Social Way 3.0 requirements were implemented. While we did not meet our goal of complete implementation of the Social Way 3.0 at all sites by the end of 2022, we continued to make significant progress. Although sites are assessed annually against all requirements applicable to their context, for consistency during the transition period this metric reflects performance against the Social Way foundational requirements.

Case study

Gabriela Condori Chambilla, from local grant winners Maricultura Las Brisas, at the Agro-Industrial fishing fair held in Ilo (Moquegua Region) organised by the Peruvian government.

Building Collaborative Regional Development in Peru

Collaborative Regional Development (CRD) is Anglo American's innovative model to support diversified, sustainable regional development, which is undertaken in partnership with a range of stakeholders.

Moquegua Crece – making an impact
Our CRD initiative in Peru, Moquegua Crece, is building on existing experience acquired through the extensive community dialogue process we undertook when planning the construction of our Quellaveco copper mine in the Moquegua region. This highly urbanised but sparsely populated region faces several challenges, including a high dependence on the economic benefits of mining.

By working alongside our platform partners – the Regional Government of Moquegua, Mitsubishi Corporation, M.C. Inversiones Perú, and the International Finance Corporation (IFC), and supported by Engie Peru and Forest Trends (an international NGO) – Moquegua Crece aims to catalyse lasting socio-economic development opportunities that will benefit the region long after Quellaveco ceases to operate.

Activities started in 2019 and Moquegua Crece was formally launched in November 2021 and legally formalised as an association in December 2022. The three focus areas identified by the partnership comprise institutional strengthening; development of value chains; and the sustainable management of renewable and natural resources.

Significant progress was made during 2022, including:

- Our integrated approach towards improving local capacity included providing support to the Regional Government of Moquegua in preparing the 2032 Regional Development plan for the Moquegua region. These efforts have been complemented by the technical assistance programme 'Por Un Buen Gobierno', which has aligned budgets of sub-national governments in Moquegua with the regional priorities.
- We have identified various opportunities to expand and diversify the region's economic activities, including agriculture and aquaculture. A pilot project is under way to assess the potential of cultivating and processing algae, a highly versatile product with a wide variety of uses and environmental benefits. In collaboration with Peru's hydrogen association, H2Peru, Moquegua Crece is also analysing the viability of creating a green hydrogen valley in the solar-rich south of Peru.
- A pilot project is under way with Forest Trends to restore the natural infrastructure of local ecosystems with native and exotic species that consume less water and are more climate resilient.

In 2023, Moquegua Crece plans to consolidate and scale up its activities, with new partners coming on board to help further unleash the region's exciting socio-economic potential.

Engaging our local communities
Our Sustainable Mining Plan site-level local accountability goal has been incorporated into our Social Way stakeholder engagement requirements. While we have not achieved full compliance with the Sustainable Mining Plan target, all sites are in the process of establishing or strengthening their accountability mechanisms, such as community engagement forums, to ensure mechanisms are in place at local level for transparency and meaningful dialogue around impact management.

We recognise that the context for engagement and accountability differs across sites and is more challenging in some places than others. We are committed to taking the time needed and supporting sites to design and embed an holistic approach to strengthening accountability that is informed by their local context.

Accountability and engagement are a core element of our Social Way 3.0 approach. By having strong mechanisms in place for accountability, such as community engagement forums, we aim to build trust and mutual understanding with our communities based on their participation and oversight of our social performance work.

Grievances and incidents
We define a grievance as a complaint from an external stakeholder relating to the site, its policies, activities, real or perceived impacts, or the behaviour of its employees or contractors. Grievances are an expression of dissatisfaction with the company on the part of stakeholders.

Incidents with social consequences are the unwanted events related to site activities that have an adverse impact on the health and safety, economic welfare, personal and political security and/or cultural heritage of stakeholders. An incident with social consequences may arise from a site's technical failure or accident, or a failure to anticipate, prevent or mitigate an impact.

Our objective is to avoid incidents, but also to encourage stakeholders to raise their grievances or concerns with us in a free and open manner. Because of this, while we keep a track of the number of grievances received, we do not use this as a performance indicator. An increase in the number of grievances may reflect greater confidence that grievances will be heard and acted upon. As a metric of performance, we prefer to focus on the number of actual incidents with social consequence. We rate the 'seriousness' of incidents according to the consequences experienced by stakeholders, the most significant being Level 5.

During 2022, our sites have been in the process of migrating their grievance and incident reporting to an integrated data management system. This system will allow for improved tracking, analysis and management of grievances and incidents. Once this transition is completed, we will be able to report more granular data on the different types of grievances received and recurring themes from grievances.

Human rights

Consistent with our Values, we are committed to respecting human rights across every area of our business. To continually improve in this important area, we are embedding human rights as a foundation of the approaches and standards that we apply throughout our business and value chains.

Our approach and policies

Consistent with our commitments, we have enshrined human rights as one of the six Critical Foundations of our Sustainable Mining Plan. Respect for human rights is stated explicitly in our Code of Conduct and is reflected in our Values. Specific commitments are expressed in our Group Human Rights Policy, which is aligned with the UN Guiding Principles on Business and Human Rights (UNGPs).

Our commitment to human rights is further expressed through our being a signatory to the UN Global Compact, the Voluntary Principles on Security and Human Rights, and the Business Network Commitment on Civic Freedoms and Human Rights Defenders.

We have embedded our approach to human rights and our expectations for suppliers in our Responsible Sourcing Standard for Suppliers. The Standard sets out our expectations of suppliers in relation to protecting the health and safety of workers and the environment, respecting labour and human rights, contributing to thriving communities, and ethical business conduct. It clarifies steps that suppliers must take to comply with the standard. All suppliers are expected to commit to responsible business practices and complete self-assessment questionnaires.

We have published several modern slavery statements in compliance with the UK Modern Slavery Act 2015 and the Australian Modern Slavery Act 2018. Our latest statement is a joint statement, made in accordance with the UK MSA and Australian MSA.

With great respect for the close connection of Indigenous Peoples to the land, we remain committed to obtaining and maintaining Free, Prior and Informed Consent (FPIC) for all relevant projects, in line with the 2013 ICMM Position Statement on Indigenous Peoples and Mining and International Finance Corporation (IFC) Performance Standard 7(2012). We have incorporated this commitment into the Social Way 3.0.

Governance and performance

Due diligence is central to Anglo American's approach to human rights. As part of the ongoing process to identify and manage key human rights risks, we have integrated due diligence into existing standards that apply to our critical risks and, increasingly, business activities that cut across several risk areas.

The primary Group standards and policies that support due diligence for salient risks – particularly for those risks where there is heightened risk of causing or contributing to adverse human rights impacts – include the Social Way 3.0, SHE Way and the Group Security Policy, as well as several labour-related policies (such as the inclusion and diversity, and anti-bullying, harassment and victimisation policies).

Our most salient human rights risks relate to occupational health and safety, the environment, labour, communities, security and human rights, and our supply chain. While these risks have the potential to affect human rights, a key element of managing these risks is through our compliance with relevant legislation.

Incidents and grievances can be reported in various ways, including through YourVoice, operational grievance mechanisms and internal reporting processes. Since human rights touches on almost every aspect of human life, a number of incidents relate in some way to human rights. Our focus is therefore on incidents with the most severe actual or potential human rights impacts. Such incidents are generally categorised as incidents with Level 4–5 safety, health, environment or social consequences. Safety incidents with severe human rights impacts involved two losses of life in 2022. No severe health incidents were reported. There were no Level 4–5 environmental incidents in 2022 and there were no severe human rights impacts associated with Level 3 incidents reported. Similarly, no incidents with Level 4–5 social consequence were reported, and all Level 3 incidents were assessed for human rights impacts without any severe impacts identified.

Socio-economic contribution

We are committed to working with other businesses and organisations that support local economies. This includes, but is not restricted to, helping businesses and organisations to strengthen the skills and capabilities needed to enable an area to diversify its economic activities beyond mining and become more resilient. Partnering with governments, communities, other private sector companies, academia, financial development institutions and NGOs through our CRD work, we jointly identify opportunities for long term social and economic development, which we then collectively deliver.

Our approach and policies

The socio-economic contribution we make to the communities in which we operate takes various forms:

- The royalties and taxes we pay (and collect on behalf of governments) add economic value to a country
- Business operations that deliver economic value to communities, enhanced by policies on inclusive procurement, local recruitment and supporting local suppliers
- Long-running socio-economic development interventions, in collaboration with local partners, which address local needs, building and strengthening sustainable local economies that are less dependent on our mines.

Taking a long term view, we design our operations and community development initiatives so that communities and economies continue to thrive, particularly after our mines have closed.

Sustainable job creation

Our operations are often located in remote or rural areas with limited alternative economic activities and high levels of unemployment, particularly youth unemployment. Joblessness dominates many domestic policy agendas and is a frequently cited issue in community consultations. It also represents a major financial pressure on the fiscal resources of many countries in which we operate.

We seek to ensure residents in host communities have access to employment opportunities that will allow them to improve their standard of living and their livelihoods. The nature of mining, involving the stewardship of finite resources, means that transitions are an integral part of our work, especially with respect to mine closure. Creating off site non-mining-related job opportunities is also particularly important to address the long term trend of increasing labour productivity, leading to a requirement for fewer but higher skilled jobs.

The Thriving Communities pillar of our Sustainable Mining Plan includes a livelihoods stretch target to create or support five jobs off site for every job on site by 2030. We have an interim target to achieve three jobs off site for every job on site by 2025. The type of off site job supported depends significantly on the local context and the economic opportunities that exist in a particular region. For example, for sites in Limpopo, South Africa, there may be more agriculture and tourism-related opportunities, while in Chile support is likely to be more focused on manufacturing or services. In areas which will continue to have significant mining activity into the future, jobs supported in mining-related business are still of great value. In general, we aim to support jobs in sectors with growth potential and, therefore, conduct spatial and value chain analyses as part of our CRD work.

By the end of 2022, we had supported 114,534 jobs through socio-economic development programmes since the launch of our Sustainable Mining Plan in 2018. In 2022, we supported 1.8 off site jobs (excluding induced jobs) for every on site job (2021: 1.8). Including induced jobs, we supported 6.5 off site jobs for every on site job (2021: 6.9).

Cash value distributed to stakeholders[1]

	$ billion	
Employees	3.7	12%
Taxes and royalties	5.9	19%
Suppliers (including capital investment)	14.8	48%
Community social investment	0.2	1%
Providers of capital	6.0	20%
Total	**30.6**	

[1] Computational discrepancies may occur due to rounding.

Community health and well-being

Our approach to community health is informed by technical normative guidance and investment targeting that is aligned to the World Health Organization's (WHO's) approach to community health, which is a whole of society approach to health. Community health programmes involve, but extend beyond, our workforce and their dependants to support the wider community, which means that targeted individuals do not necessarily have a connection to Anglo American, as these initiatives view our communities holistically and strive to achieve equitable access.

A robust process of prioritisation of relevant SDG 3 sub-goals was undertaken in each host community and three priorities per community were identified. By the end of 2021, strategies were developed, and relevant programmes put in place to support the improvement of the associated health outcomes linked to the SDG 3 priorities. This allowed us to meet our 2022 target of having baselines established and strategies in place at every site. We continue to review, assess and monitor our pathways to delivering on this commitment.

Driving proactive education programmes

Our ultimate target is for schools in host communities to perform within the top 20% of state schools nationally by 2030, consistent with the ambition of the Sustainable Mining Plan.

To achieve this goal, we continue to focus on improving literacy, numeracy, mathematics and English levels by addressing some of the underlying reasons for poor education outcomes. Our education programmes in South Africa and Chile are in their fifth year, while we launched programmes in Brazil, Canada, Peru, the United Kingdom and Zimbabwe in 2021 and 2022. We continue to review, assess and monitor our pathways to delivering on this commitment.

The economic value we add

By employing people, paying and collecting taxes and spending money with suppliers, we make a significant positive contribution to both our host communities and their regional and national economies. Most of these are in developing countries. Thanks to the multiplier effect, our total economic contribution extends far beyond the direct value we add.

In 2022, we distributed $30.6 billion of cash value to our stakeholders, as detailed in the chart.

Social investment

In 2022, our Community Social Investment (CSI) reached $175 million (2021: $138 million), which represents 2% of underlying earnings before interest and taxes (EBIT), less underlying EBIT of associates and joint ventures.

Since the beginning of the pandemic in 2020, we have increased our CSI investment and slightly readjusted our funding priorities, investing more in health.

Anglo American Foundation

The Anglo American Foundation is focused on empowering youth to create sustainable and inclusive communities, through catalysing green jobs, strengthening green value chains and building resilience, placing a particular importance on women and vulnerable groups. By working in partnership and taking a participatory approach, the Anglo American Foundation aims at accelerating progress towards the UN SDGs.

Supply chain

Our approach to responsible sourcing is aligned to our Purpose. We expect all suppliers to meet applicable laws – while sharing our commitment to improve people's lives, society and our environment. Our programme defines minimum sustainability requirements and decent work principles required by our more than 17,000 suppliers. This allows us to prioritise ethical decision making when selecting and managing the suppliers we work with, and to support and uphold fundamental human rights through our supply chain.

Increased consumer awareness about sustainability is driving growing demand for responsibly sourced products. Mining and metals are no exception to this trend. To demonstrate the high standards to which we operate, we have been at the forefront

Global CSI expenditure by type[1]

	$m	
Community development	88	50%
Education and training	33	19%
Health and welfare	13	7%
Water and sanitation	13	7%
Other	11	6%
Disaster and emergency relief	7	4%
Institutional capacity development	5	3%
Environment	3	2%
Sports, art, culture and heritage	2	2%
Total	**175**	

[1] Discrepancies may occur due to rounding.

Global CSI expenditure by region[1]

	$m	
Africa	109	62%
Americas	57	33%
Rest of World	6	3%
United Kingdom	2	1%
Australia	1	1%
Total	**175**	

[1] Discrepancies may occur due to rounding.

of developing and adopting some of the most trusted sustainability certification programmes for the mining sector, including IRMA and the Responsible Jewellery Council.

By 2022, we had met our Sustainable Mining Plan interim target of having half of our operations undergo third-party audits against recognised responsible mine certification systems and having our Responsible Sourcing Standard for Suppliers fully implemented. We continue to work towards our 2025 target for audits of all operations.

Our approach and policies

As a condition of working with us, suppliers must comply at a minimum with all relevant laws and industry regulations, and we expect them to meet the Anglo American policies, site requirements and other supply conditions, including our Responsible Sourcing Standard for Suppliers.

Managing sustainability risk

Global supply chains can generate economic growth and contribute significantly to social development – many businesses, therefore, seek to diversify sources of supply or further integrate into new jurisdictions or local economies. However, as some markets or regions may not have safe workspaces and labour protection as a non-negotiable imperative, there is an increased risk of potential for human rights violations, including the use of child labour, modern slavery, forced labour and human trafficking.

To guide our business in making ethical decisions when purchasing goods and services, we require our centrally procured suppliers to comply with our responsible sourcing programme. This enables us to identify potential sustainability risks, including unwanted safety events, industry-specific factors mapped across more than 120 procurement categories, country risks that emanate from the supplier's location, as well as our transaction volume and expenditure profile.

Anglo American is committed to inclusive procurement and developing local supply chains that can support resilient communities. We aim to build these supply chains by supporting small-business growth in host communities, stimulating job creation, building manufacturing capacity and focusing on creating economic opportunities for previously excluded groups.

In 2022, our operations spent approximately $14.8 billion (2021: $11.4 billion) with suppliers, of which $13.6 billion was with local suppliers (2021: $10.0 billion). Our expenditure with designated suppliers (Black Economic Empowerment in South Africa, Indigenous communities in Canada and Aboriginal Suppliers in Australia) was $3.4 billion (2021: $2.6 billion), representing 23% of total supplier expenditure, including $1.9 billion with host communities in the direct vicinity of our operation (2021: $0.9 billion).

Engaging with suppliers

We use our supplier self-assessment questionnaire tool to supplement our Responsible Sourcing Standard. During the year, we received assessments from 216 suppliers. This process is further corroborated with select on site assessments to confirm aspects of the self-assessment questionnaires. We have completed more than 1,100 supplier assessments since 2018.

People

Our people are critical to all that we do. The partnerships we build, both within Anglo American and with our stakeholders – locally and globally – are central to maintaining our regulatory and social licences to operate and our commercial success.

At our Los Bronces copper mine in Chile, drones and other wireless robotic technologies are opening up areas that in the past were considered to be too hazardous or inaccessible for mining operations.

Case study

Advancing safety through technology

Central to Anglo American's Purpose of re-imagining mining to improve people's lives is a constant focus on keeping our people safe and well. This is always front of mind as we embed FutureSmart Mining™ – our innovation-led approach to sustainable mining where technology, digitalisation and sustainability work together to change the nature of mining.

Los Bronces becomes a testing ground
Our Copper operations in Chile are playing a leading role in the automation and remote control of mining activities. At Los Bronces, our modernisation pathway includes autonomous haulage and drilling systems. The first 22 vehicles of a fleet of 62 autonomous heavy haul trucks that we plan to have in operation by 2024 are already up and running. Automation of the haulage fleet means a safer working environment – with a central control room, rather than a driver, controlling all vehicle movements.

The mine is also deploying five autonomous drilling rigs, with a further three planned, and is using robotics technology in remotely controlling the placing of explosives for blasting. Managing drilling and blasting activities remotely from the safety of a control centre allows us to extract targeted ore safely and efficiently, while keeping colleagues literally out of the line of fire. Furthermore, because Los Bronces lies in mountainous terrain, remote control – which also includes the deployment of drones – enables drilling and blasting to take place in areas that were previously inaccessible.

Meanwhile, for our conventional driver-controlled haul truck fleet, we have built into each vehicle a range of advanced driver assistance systems (ADAS), including operator-assist auto braking, prevention of vehicle movement, fatigue sensors and breathalysers. These enhanced safety features, accompanied by a comprehensive driver training programme, are further improving safety performance.

At Los Bronces, major services operator Hector Rojas Soto monitors drilling and blasting operations from the safety of a control centre.

IROC – the nerve centre
Our new Integrated Remote Operation Centre (IROC) uses artificial intelligence (AI), augmented reality and remote-operation technology to enable Los Bronces to be run remotely and in real time from Santiago, 67 kilometres away from the mine itself. In the past, over 80% of IROC's c.100 operators regularly had to make the journey to the Los Bronces site in the mountains, but they can now work in the city, reducing their time spent commuting, improving their work/life balance, as well as lowering energy use and CO_2 emissions.

The digital brain of IROC's operation has 32 working stations that receive information from Los Bronces, where more than 700 cameras capture the different processes required to extract and process the copper-bearing ore. These images and the information obtained are sent through secure fibre optic connections to the IROC, where they are distributed via 150 state-of-the-art technology screens, a video wall and a range of computer systems that analyse the data and processes. The team working in the IROC then uses this information to make better, faster and safer decisions. The result is a robust operational system which has quality and dependability at its core and that reduces risk, eliminates hazards and keeps people safe.

Collaboration across the Group
In a global business such as Anglo American, with operations stretching from the Americas to Africa and Australia, it is important that experiences, learnings and ideas are shared across the Group and we avoid a silo mentality. This thinking prompted a recent exchange when colleagues from our Kumba Iron Ore and PGMs businesses in South Africa travelled to Chile to visit Los Bronces, to learn more about the benefits and challenges of deploying autonomous drill and truck technologies.

The South African colleagues met principally with Los Bronces' Mine Modernisation Team. This team is made up of specialists who focus on developing modernisation technologies for deployment across the Group's open pit and underground mines, as well as colleagues who are working on the Los Bronces Integrated Project, which includes the potential to take operations underground to access higher grade ore and extend the life of the mine.

The three-day visit included autonomous mining workshops, an extensive tour of the Los Bronces mine and a lengthy visit to the IROC in Santiago.

"The Chile and South Africa teams were able to get a much better idea of how each other was managing the implementation of cutting-edge technologies in a more integrated, safer and inclusive working environment – and how this is delivering an improved work experience for people by raising skills standards and, more generally, helping to generate new jobs and opportunities for specialisation through training and education."

Patricio Hidalgo
CEO Anglo American, Chile

Safety comes foremost in everything we do; we train, equip and empower our people to work safely every day. We believe, too, that creating an inclusive and diverse working environment and culture that supports high performance and innovative thinking gives our business a competitive advantage.

Adopting a zero mindset

At Anglo American, we believe everybody, everywhere should come home safe at the end of their working day. 'Always safe' is our vision and safety is our number one value.

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 and making specific safety interventions when we see deficiencies in our operations.

As part of our continuous practice of safety interventions, we continued to focus on CEO safety summits with senior leaders from across the business units; observing and continuously 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.

Our approach and policies

Our approach to safety is governed by our Safety, Health and Environment (SHE) Policy and the management framework that we use to implement the policy – the SHE Way V2. A refreshed SHE Policy was published in 2022, which includes additional external SHE expectations and provides clarity on Group deliverables.

— For more information on the SHE Policy
See page 49

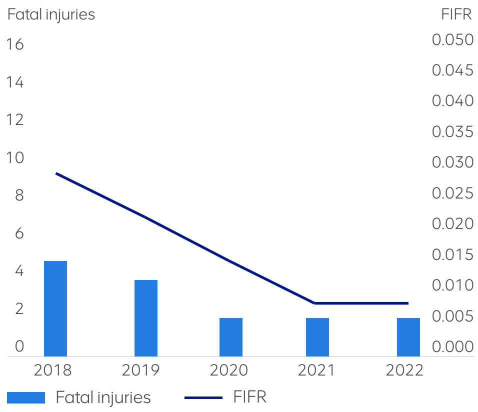
Anglo American's safety, health and environment results affect the performance-based remuneration of all employees in the business, and health and safety targets are included within the annual performance incentives for executive directors and senior management.

Group safety performance

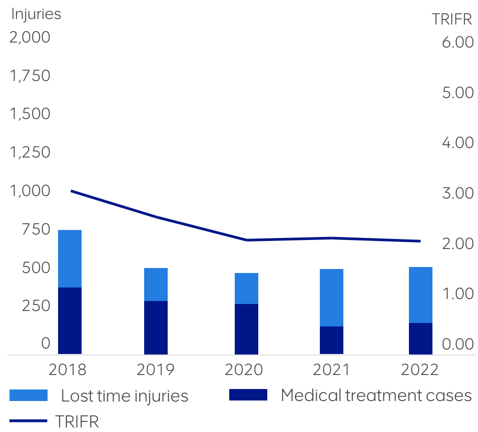
It is with deep sadness that we report two work-related loss of life incidents at our managed operations in 2022, as well as the loss of a colleague who was injured in an incident in 2021. We also lost a colleague at a non-managed PGMs operation. These losses leave a lasting impact on many lives and remind us of the need to continue to press for the elimination of fatalities across our operations.

In March, Gavin Feltwell, an underground services contractor was fatally injured at our Steelmaking Coal business in Australia during a lifting operation underground. In November 2021, Julian Sesinyi, an engineering assistant, sustained a serious spinal injury following a fall while working on the acid absorption tower at our PGMs' Anglo Converter Plant (ACP). Although his condition had improved while he was in hospital, sadly he succumbed to a complication in April 2022 and passed away. The incident has been restated and included in our 2021 fatality statistics. In June, construction crew member, Phasoana Rheina Malatji, was fatally injured when she

Total number of fatal injuries and fatal injury frequency rate (FIFR) 2018–2022



Lost time injuries, medical treatment cases and total recordable injury frequency rate (TRIFR) 2018–2022



was struck by a runaway tyre in a decline incident at our non-managed Modikwa (PGMs) joint operation. In September, a contractor heavy equipment technician* was fatally injured at De Beers' Gahcho Kué mine in Canada while conducting maintenance work on a haul truck.

In 2022, our total recordable injury frequency rate (TRIFR) decreased by 2% to 2.19 (2021: 2.24), reflecting the urgent safety reset and calls to action undertaken 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 recorded 564 occupational injuries, an increase of 2% (2021: 554). We remain absolutely committed to working towards a step-change in the reduction of injuries.

Health

Our concern for employee health extends throughout and beyond the workplace. While we continued our comprehensive response to the global pandemic in 2022, we also built on the important lessons learned around enhancing resilience to future health threats.

A crucial aspect of our work in 2022 has, therefore, been a focus on strengthening individual health, including the physical and mental well-being and quality of life of every employee, their families and host communities.

Our approach and policies

Our overarching approach to health is covered by the SHE Policy and SHE Way V2, our Safety, Health and Environment management framework.

*At the request of the family, the deceased's name has not been published.

In 2022, we commenced the implementation of our Health and Well-being strategy in line with WHO principles, covering employee health.

We understand there is a continuum between the workplace and home and host community. 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 Workplace Health Standard defines the minimum requirements to effectively manage workplace health and wellness. All of our operations are in the process of closing out identified gaps and are expected to be in full compliance with the standard.

Performance

Our ongoing response to Covid-19

We continued to work to prevent the spread of Covid-19 among our employees and in host communities, primarily through testing and providing access to vaccines and boosters.

Alongside the continued deployment of testing, we also focused on vaccine access. Where appropriate to do so, depending on applicable government policies, we worked in close partnership with national and local governments to help deliver vaccinations to our employees, contractors and host communities. In South Africa, we contributed to the national vaccine roll-out.

Case study

At PGMs' Amandelbult hospital, nurse Nontlahla Emmerentia Ngwane prepares to take a medical sample from patient Edward Nteya.

Focusing on heart health

At Anglo American, we take our responsibility to look after the health of our people seriously. From providing a safe and healthy workplace to managing the risk of occupational disease and injury, we strive to ensure that employees have access to the medical care they need. We also provide programmes that support them to lead longer, safer, more fulfilling and healthier lives.

During the past decade, we have made great strides forward in terms of our health and safety performance, while ever conscious of continuing challenges.

We are now turning our attention to another pressing health concern: reducing the burden caused by heart disease. It is the main cause of premature death and shortened life expectancy in many of our operating countries.

Adopting a preventative approach

By providing our colleagues with regular workplace health checks, raising awareness of the risk of experiencing heart disease and advising on the behaviour changes needed to reduce the risk where necessary, we believe we are taking a significant step forward in health improvement across our business. This is part of a broader shift in the focus of our Group Health activity towards a more preventative health-based, employee-owned approach.

The heart health score and report that form part of our employee health check are based on the latest cardiovascular disease risk charts from the WHO. Data on gender, age, blood pressure, body mass index and tobacco use that is collected during our current workplace health checks is used to create the score and report. The resulting score predicts whether one is at low, moderate or severe risk of a heart attack or stroke over the next 10 years and is provided as a one-page summary report, with recommended actions where needed. This helps to ensure that identified risk factors can be managed through counselling, behaviour change and/or treatment where necessary.

Each risk level has a set of recommendations, ranging from maintaining healthy lifestyle choices for people at very low risk to having a formal discussion with a healthcare provider and working out an intervention and treatment plan for those at severe risk. A simple lifestyle self-assessment tool and information booklet is also provided to help employees assess opportunities for improvement across key lifestyle factors – such as physical activity, diet, alcohol and tobacco use.

As our health and well-being impact our Safety – one of Anglo American's core Values – it is important that we do what we can to help colleagues to live long, safe, fulfilled and healthy lives. The healthier our employees are, the safer our workplaces will be.

In 2022, we also mobilised resources to manage 'long Covid', where people continue to feel symptoms of the disease for weeks or even months after its typical course. We have deployed remote support to employees reporting such symptoms, such as Cognitiva in Chile, that allows them to get help within their own communities through our Regional Health Operation Centres.

Occupational exposure

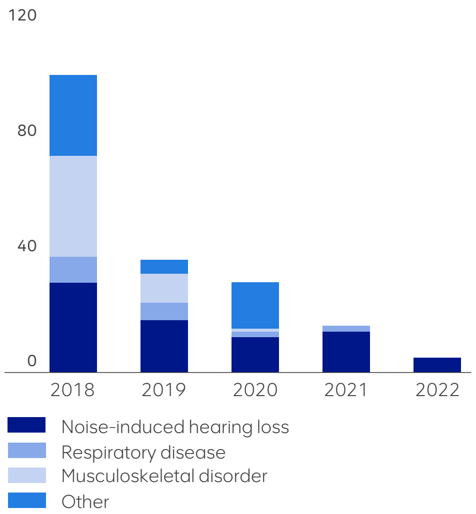
In 2022, there were five reported new cases of occupational disease, all related to noise exposure (2021:16). Reducing exposure to noise, which remains our single greatest occupational health risk, is a significant challenge. While all our employees are issued with and trained in the use of PPE, there are still as many as 23,000 employees in the workplace where noise levels can exceed applicable exposure levels, rendering 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.

Non-communicable diseases

Pandemics clearly illustrate that the state of health of employees and their families impacts both workplace performance and their quality of life and livelihoods.

In 2022, we launched our non-communicable disease programme, with the goal of assessing 62.5% of the global workforce for risk factors, including smoking, heart health and obesity. Now, in addition to HIV and TB, we have the mandate to investigate and report on coronary health factors.

New cases of occupational disease 2018–2022



Managing HIV and TB

As a corporate leader in the fight against HIV/AIDS for more than 30 years, we are committed to The Joint United Nations Programme on HIV/AIDS (UNAIDS) aimed at accelerating the fight against HIV and ending the AIDS epidemic by 2030. One of the top-line pathways towards meeting this goal includes the 95-95-95 treatment target: 95% of people living with HIV knowing their HIV status; 95% of people who know their status on treatment; and 95% of people on treatment with suppressed viral loads.

We have seen infection numbers continue to rise in many of the countries where we operate and we recognise that the collective effort of also addressing social issues can help to decrease this trend. Under our community health and well-being programme, there are multiple initiatives designed to increase access to treatment and testing that are being implemented across geographies. These initiatives are guided by the SDG framework, prioritising the SDG 3 goals which are relevant to each host community.

In 2022, 90% of our employees in southern Africa knew their status (2021: 88%). We recorded 157 new cases of HIV and 1 HIV/AIDS-related death. This translates into an incidence rate of 0.69%. Notwithstanding the limitations posed by the pandemic, 89% of our employees living with HIV were on anti-retroviral therapy at the end of 2022.

In 2022, the TB incidence rate was 154 per 100,000, compared with 152 per 100,000 in 2021.

Helping our people thrive

We aim to attract the best people in the industry, putting them into the right roles to suit their talents, and meet our business objectives – now and into the future. Empowering our employees through professional and personal development opportunities, we give them the support they need to thrive and, by continuously engaging with our employees, we are able to build relationships based on trust. Living our Values, we aim to be an inclusive workplace where everyone – without exception – can bring their whole selves to work.

Attracting, retaining and developing our talent

Organisation Model

As a company, we firmly believe that how we deliver results is inextricably linked to the outcomes we deliver. Our Organisation Model ensures we have the right people in the right roles doing the right work, with clear accountabilities and minimal duplication of work. This increases our overall organisational effectiveness. Along with our Values and our Operating Model, the Organisation Model supports the delivery of positive outcomes through a set of structures, systems and processes. The model creates consistency in how we approach organisational issues, by providing a common language and approach about organisations and management.

To support Organisation Model capability development, we have created enhanced learning materials that are available for everyone through our Learn+ platform, complemented by tailored workshops with leaders across the business. To ensure the long term sustainability of our Organisation Model, its key concepts are being embedded in all major systems, including our Operating Model, Organisation and Role Design, Talent Management, Reward Philosophy and our performance management framework, Team+.

A focus on continuous learning

We remain focused on growing a continuous, self-driven learning culture. Enhanced emphasis has been placed on meeting learning requirements of our employees at their own point of need, developing on-the-job learning opportunities and reaching more of our employees who do not have access to a desktop computer. We strive to enable a continuous learning culture and a passion for breakthrough performance and innovative thinking, driven by agile people development approaches that unlock the full capabilities of our people.

Learn+, our main learning platform, offers a single, user-friendly interface that makes it easy for our employees to access a growing range of online learning resources. This learning experience platform feeds from other areas to provide learning experiences, with a focus not only on what people learn, but how learning can be delivered in the line of work, at the time of need.

Drawing on expertise from across the business, our Technical Academy looks to transform our technical skills and capabilities using the latest approaches – from immersive technologies to scenario-based training – to create uniquely engaging learning content.

Our Leadership Academy is a talent and development engine designed to accelerate the development of our most talented people. Within our leadership development programmes, we create approaches that enable our people to succeed in the new future of mining. These programmes and content offer a clear pathway to leadership and personal success within the wider business.

Case study

Project specialist Michelle Herandien, at the newly opened Living with Dignity Hub in Johannesburg, South Africa.

Our South African Living with Dignity Hub

Keeping our workforce safe and well is always front of mind at Anglo American. We are determined to provide a safe, inclusive and diverse work environment where we act with integrity, treat each other with care, respect and dignity, in a workspace free from violence and harassment.

Over the past decade, we have made great strides in physical safety, but a key finding that came to our attention following our first global employee engagement survey in 2017 is that we need to do more to create an environment of psychological safety, where people feel safe and confident enough to speak up if they see something they think is wrong.

Our Living with Dignity Hub, based in Johannesburg, South Africa, is an important element in the effort to embed an environment free from harmful behaviour that includes sexual harassment and gender-based violence, bullying, harassment and victimisation (collectively referred to as 'dignity harms'). The Hub is a centralised channel that receives reports of dignity harms and appropriately addresses them through effective case management and end-to-end support for victims. It is an additional reporting channel for our employees and contractors in South Africa who may require advice and assistance regarding dignity harms.

Although it is financially supported by Anglo American and works closely with our human resources teams and business units, the Hub acts as an independent channel. It has a core staff of five experienced professionals who respond to incidents raised with them, and talk victims through the available support, complaints processes, investigation procedures, and options available to resolve a complaint. It also has an independent Ambassador, Nozipho January-Bardill, who provides an oversight function. Vanessa Doble, who heads the South African Living with Dignity Hub says, "The Hub is underpinned by three fundamental characteristics: it is independent, victim-centric and adopts a zero-tolerance approach to dignity harms. Everyone's journey in this space is individual, and we want to ensure we can help people in a trusted and empathetic way."

How the hub works

The Hub takes an evidence-based approach to complaints. Keeping an open mind at all times, the Hub looks at ways in which such complaints can be resolved to provide the most effective intervention in addressing dignity harms. In keeping with its zero-tolerance approach, the Hub logs and responds to all matters brought to its attention. No misconduct is excluded or excused, and all matters are taken seriously and dealt with.

Looking ahead

Anglo American has implemented the Hub as a pilot concept which, if proven to be successful, may be implemented globally. Vanessa observes: "The Hub has dealt with 139 cases since it opened and has established itself as the place to get help when it is most needed. It continues to build upon integration and collaboration already developed across the Group to further learning and appropriate interventions."

In 2022, Anglo American invested $69 million in direct training activities (2021: $65 million).

Users of our Learn+ platform conducted 51,339 searches during the year, the large majority of which targeted non-role specific skills. Of those, there was a heavy skew towards user-level technical skills, such as support for commonly used office software applications. In addition, a total of 607,659 learning course completions (comprised e-learning, virtual classroom and classroom learning) were recorded on our global Learning Management System, covering a range of topics across technical, non-technical and compliance courses – a 29% increase on 2021.

An inclusive and diverse environment

Our goal is to create an inclusive workplace where every colleague can bring their whole self to work and fulfil their potential. We have a robust strategic approach in place which focuses on valuing and respecting our diverse colleagues, inclusive leadership, providing an involving, fair and supportive workplace and having a safe, effective and enabling work environment.

Our zero-tolerance approach

We are committed to eliminating all forms of bullying, harassment and victimisation across our organisation, through our global policy and Stand Up for Everyone campaign. All reported incidents are anonymised and shared with the highest level of the organisation. Our zero-tolerance approach extends to include domestic violence and abuse that might occur outside the immediate workplace. We provide mandatory bullying, harassment and victimisation training for our colleagues to ensure they are aware of our zero-tolerance approach, are familiar with our reporting structures, and feel confident to act as inclusion and diversity advocates.

In 2022, we continued to build on the significant progress we have made within inclusion and diversity over the last five years. While there is always more to do, we have made a positive difference in key areas, such as psychological safety; domestic violence; bullying, harassment and victimisation; and mental wellness. We will continue to embed and launch initiatives that will allow us to realise our vision of a truly inclusive workplace where each of us can reach our full potential.

Diversity performance

We report on our gender pay gap in UK operations, in line with legislative requirements. As of 5 April 2022, our UK average (mean) gender pay gap for Anglo American Services Ltd (UK) was 39% and our median pay gap was 29% (2021: 44% mean and 33% median). This was primarily due to the high representation of men in the most senior management roles in our UK head office – an issue mirrored across our sector, and one that we continue to address.

We continue to make progress against our gender representation goal of 33% female representation by 2023 at all management levels, in every business unit and Group function. We have set a similar target for 33% of our Group Management Committee and those reporting to the Committee to be women by 2023.

At 31 December 2022, there were three female directors and six male directors serving on the Board. In 2022, on average, the Group had 29 female senior managers and 71 male senior managers and 14,938 female and 47,303 male employees. The proportion of women at management level grew to 32% (2021: 31%), while the percentage of women at senior management level was 29% (2021: 29%).

At year end, the proportion of our permanent employees aged under 30 was 11%, 70% were aged between 30 and 50, and the remaining 19% were over 50 years of age.

In South Africa, historically disadvantaged South Africans held 71% of our management positions (2021: 73%).

Employee engagement and workplace relations

We recognise that there are many different aspects to employee engagement. These include our success in building a diverse and inclusive working environment, and the steps we take to engage employees directly.

Established in 2019, our Global Workforce Advisory Panel helps the Board to better understand the views of our workforce, in line with the recommendations of the UK Corporate Governance Code. The Panel is made up of 11 employee representatives from each country where we have a significant presence, and is chaired by non-executive director, Marcelo Bastos.

We shared the results from our global employee engagement survey undertaken in October 2022 with all colleagues, and the findings were presented to the Group Management Committee and Board. Almost 30,000 employees answered questions in the survey, which covered engagement, culture and values, physical and psychological safety, sustainability, purpose, leadership, and inclusion and diversity. The survey suggested an employee engagement score of 90%.

Our employee voluntary turnover rate for the year was 4% (2021: 4%). New hires represented 14% of our permanent employees in 2022, compared with 8% in the prior year.

Supporting labour rights

We have signed the United Nations Global Compact, and our Human Rights Policy commits us to the labour rights principles set out in the core conventions of the International Labour Organization. These include the right to freedom of association and collective bargaining, non-discrimination, and the eradication of child and forced labour.

Our Responsible Sourcing Standard stipulates that all suppliers shall respect all labour and human rights throughout their own value chain.

Approximately 67% of our permanent workforce was represented by worker organisations and covered by collective bargaining agreements. During the year, there were no recorded incidents of industrial action at our managed operations. There were also no reported incidents of under-age or forced labour at our operations during 2022.

Future of work

The accelerated pace of global change is shaping a transition in the nature of work, and the workforce, that presents opportunities and challenges for us all. We are committed to being a leader in the public debate and to addressing the expectations concerning our industry. This includes working together with our stakeholders to achieve technological advancements and step-changes in the approach that our industry takes to sustainability.

Through our Future of Work programme, we embrace the evolution of this change by taking a long term approach to planning for the roles and skills that we will need in the future. We seek to actively engage and shape the outcomes for our workforce and wider stakeholders. Throughout this journey, we are guided by our deep responsibility to society and our commitment to work with our employees and communities to create sustainable positive impact.

As the pace of change in our industry, and indeed the world, continues to increase, this organisational capability will help us to be proactive, giving us a competitive advantage. We can apply this insight to ensure we have the appropriate people and strategies in place to deliver business expectations, today and into the future. Our objective is to provide our people with the tools they will need to step up to roles that have evolved, as well as completely new ones.

Building a purpose-led culture

We understand that ethical reputation is a critical asset for building trust with our stakeholders. We expect our employees and business partners alike to behave ethically and consistently show care and respect for colleagues, communities and the environment in which we operate. These non-negotiable foundations are central to our Code of Conduct and Business Integrity Policy.

Our Code of Conduct is an example of our Values in action. Serving as a single point of reference for everyone associated with us, it brings together in one place, and in a clear way, the commitments and standards that determine how we conduct business. It explains the basic requirements and behaviours we all need to live up to every day. Our Code of Conduct also serves as a guide that directs us to policies, standards and further information sources that can support us, and all those associated with us, to choose to do the right thing.

During 2022, we carried out our biennial in-depth review and update of our Code of Conduct. Furthermore, we assessed and updated nearly 40% of the Group's policies that underpin the Code of Conduct in line with their standard review cycle. The assessment process includes the subject matter experts performing policy risk management effectiveness reviews, facilitated by the Group's risk specialists and Ethical Business Conduct team, to ensure that the policies and associated implementation programmes remain fit for purpose.

We continued to support the embedding of the Group's policies across the business units and Group Functions responsible for their implementation. Inherent in the policy review process is the provision of advice and guidance on programme improvement opportunities. We regularly communicate our Values to our employees and provide training on the Code of Conduct and underpinning Group policies.

Business integrity

Our Business Integrity Policy sets out the standards of ethical business conduct that we require at every level within our business – including our subsidiaries and those joint operations we manage – in combating all types of corrupt behaviour. Industry associations of which we are a member are also required to align with our policy positions, or an equivalent approach.

The Institute of Internal Audit Three Lines Model is used to bolster adherence to our Business Integrity Policy by obtaining assurance on our mitigation programmes, including an annual risk-based internal audit. This model helps to ensure that risks are dealt with at the appropriate level within the business, and minimises the chance of risks being missed.

We developed and launched new training material on our Code of Conduct, intermediary risk management, and social investments and donations. We also developed several awareness communications, including mini modules on intermediaries and conflicts of interest.

We engage with our industry on business ethics in order to both share and learn from best practices. We are also a member of the board of the Extractive Industries Transparency Initiative (EITI).

Benchmarking anti-corruption initiatives

We continue our collaboration with the Transparency International Corporate Anti-Corruption Benchmark and use the result of the annual benchmarking to focus improvement efforts. These included reviewing and updating intermediary risk management processes and bolstering our internal investigation team and capabilities.

We are a signatory of the UN Global Compact and are committed to their 10 principles of business, including fighting corruption, extortion and bribery. We also use our annual performance in the Business Conduct and Ethics categories of the Dow Jones Sustainability Index (DJSI) and Sustainalytics as an opportunity to benchmark best practice and continuously improve our internal processes and level of disclosure.

Whistleblowing

During 2022, we received 1,089 reports through YourVoice, a 37% increase from 2021. We attribute the increase to a heightened awareness of the channel as a result of our proactive engagement with stakeholders, a growing culture of trust to raise concerns with confidence, and the promotion of this channel through other relevant Group-wide initiatives.

Of those allegations closed, 29% were substantiated or partially substantiated. Corrective actions were taken against allegations substantiated in accordance with our policies.

Capital allocation

Underpinning our strategy, we have a value-focused approach to capital allocation, with clear prioritisation: first to sustaining our operations and maintaining asset integrity (including Reserve Life); secondly to the base dividend to our shareholders, determined on a 40% underlying earnings-based payout ratio.

A strong focus on capital discipline

All remaining capital is then allocated to discretionary capital options, which include organic and inorganic growth options, as well as additional shareholder returns. In all cases, discretionary projects are robustly assessed against financial and non-financial metrics, including their delivery of net-positive benefit to our shareholders and the communities in which we operate, and their ability to improve and upgrade our portfolio in line with the transition to a low carbon economy and global consumer demand trends.

Capital allocation is prioritised to ensure we maintain balance sheet flexibility, with our near term objective to ensure the Group's net debt does not exceed 1.5 x underlying EBITDA, using bottom of the cycle pricing, without there being a clear plan to recover. Further detail on balance sheet discipline and our credit can be found on page 83.

Capital is allocated in support of the execution of our strategy. Our Sustainable Mining Plan outlines ambitious targets that our projects must support to ensure a healthy environment, thriving communities and Anglo American's position as a trusted corporate leader.

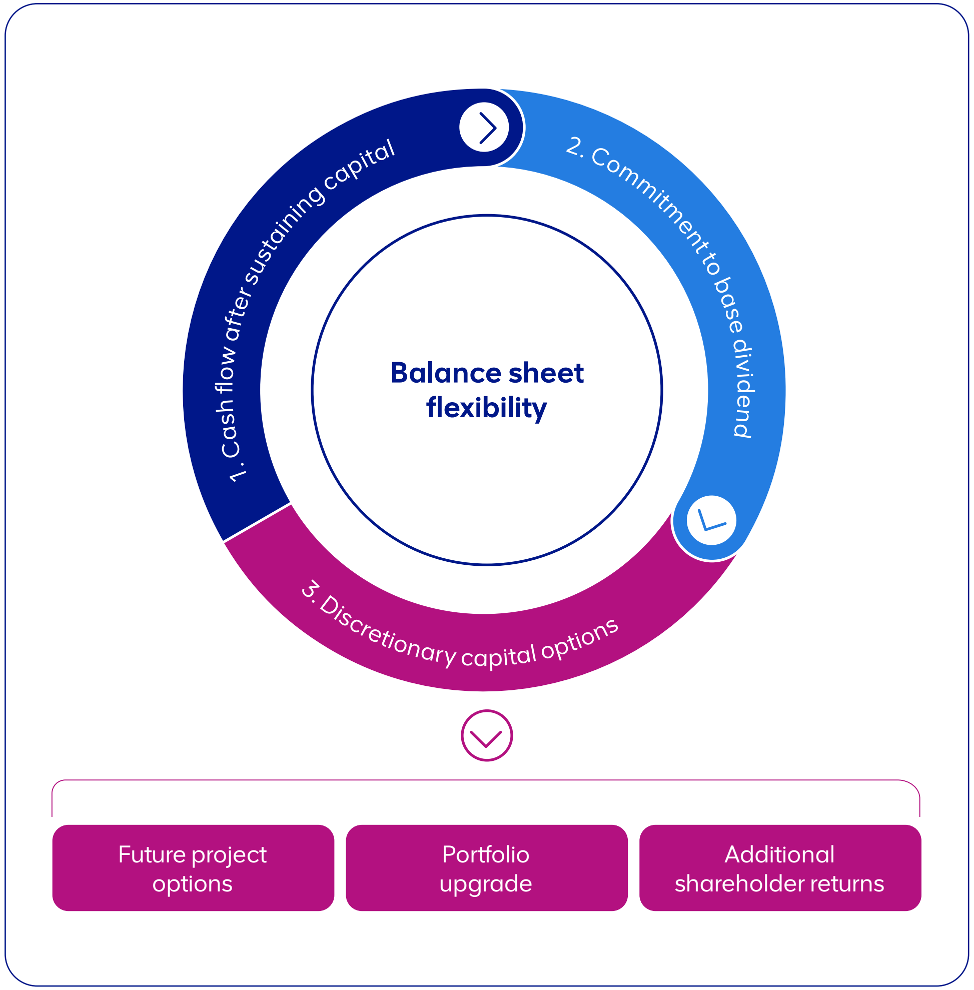
— For more on our Sustainable Mining Plan
See page 42

Surplus capital is returned to shareholders in the form of either special dividends or through a share buyback programme.

Sustaining capital

We continue to focus on capital discipline and sustaining capital efficiency, while maintaining the operational integrity of all our assets. Sustaining capital comprises stay-in-business, capitalised development and stripping, and life-extension expenditure, less the proceeds from disposals of property, plant and equipment.

For 2023–2025, we expect baseline sustaining capital expenditure to be within a range of \$3.1–4.0 billion per annum. In addition, c.\$1.0 billion is being allocated to the Collahuasi desalination project across 2023–2025, and \$0.5–0.7 billion per annum is allocated to life-extension expenditure, primarily driven by the Venetia Underground project at De Beers, Kolomela's Kapstevel South project at Kumba and the Der Brochen project at our PGMs' Mototolo mine.



Commitment to base dividends

Our clear commitment to a sustainable base dividend remains a critical part of the overall capital allocation approach and is demonstrated through our dividend policy of a 40% payout ratio based on underlying earnings, paid each half year.

Our dividend policy provides shareholders with increased cash returns upon improvement in earnings, while retaining balance sheet flexibility during periods of lower earnings.

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).

Discretionary capital options

Strict value criteria are applied to the assessment of Anglo American's growth options giving special emphasis to our sustainability commitments.

For major greenfield projects, we expect to sequence their development and consider including partners where appropriate. The Group will continue to maintain optionality to progress with holistic, value-accretive projects.

The Quellaveco copper project in Peru delivered its first production of concentrate in July 2022 and commercial operations began in September 2022. Ramp-up of the processing plant is ongoing and is expected to reach nameplate capacity around mid-2023. Total project costs, which were syndicated with our partner, Mitsubishi, are estimated at $5.5 billion (100% basis), in line with the 2020 budget to accommodate Covid-19 requirements. The Group's share of total estimated capex is $2.8 billion.

The Woodsmith project – the world's largest known deposit of high grade polyhalite – adds greater diversity to the portfolio and additional support to the low carbon world due to the minimal processing required compared to equivalent conventional fertilisers, enabling a more efficient, sustainable and environmentally responsible crop nutrition solution. Critical path construction activities of shaft sinking and tunnel boring continue to progress well, while studies are progressing on other areas of the project, some of which are planned to be expanded in scope to allow for a larger future operating footprint to be developed in line with market demand and to 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 overall. Capital expenditure for 2023 is expected to be $0.8 billion.

We continue to progress studies on organic growth opportunities to improve the existing business. For example, expansion options are currently being considered for the Mogalakwena PGMs complex to expand production of the mine through technology development and deployment, and the optimal mine plan to deliver feed to the concentrators. At the Collahuasi independently managed joint operation (Copper), the implementation of the approved fifth ball mill is progressing to plan with ramp-up expected to commence in the fourth quarter of 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, delivering over 100 ktpa (44% basis).

Allocating capital for a sustainable future

Our capital allocation process underpins the execution of our strategy and our goal to become a leader in sustainable mining – with over 90% of our growth capex allocated to future-enabling products.

In many cases, operational improvements underpin enhanced sustainability outcomes and create value for our shareholders. We are investing $0.2–0.5 billion per annum of discretionary capital in technology and innovation to drive improvements in both efficiency and the sustainability of our business, including bulk ore sorting, coarse particle recovery, hydraulic dewatered stacking, our South African regional renewable energy ecosystem and the nuGen™ ZEHS, discussed in more detail below.

Our major investment evaluations embed forward-looking carbon price assumptions (between $10–60 per tonne* by 2030), which are developed in conjunction with leading external providers, to reflect our best estimate of the level of carbon pricing likely to prevail in the respective jurisdictions over time. This approach ensures that project returns are evaluated on a realistic basis alongside consideration of the project's impact on carbon abatement and portfolio resilience to the effects of climate change.

Ensuring the continued resilience of our portfolio to the physical impacts of a changing climate is a key priority in our allocation of capital. These investments, for example in infrastructure related to managing water where it is expected to become scarcer, or where there is a risk of future disruption due to flooding, are driven by our risk management processes. These investments are subject to the Group's investment evaluation criteria, and to independent technical and financial assurance.

*2022 real terms.

An example of how we tailor our approach to capital allocation for our decarbonisation goals is the sourcing of electricity. In jurisdictions where there is a plentiful supply of renewable power, we have negotiated renewable power purchase agreements with suppliers. More than 60% of our global electricity supply will be renewably sourced from 2025 without significant capital expenditure on power generation infrastructure. The transition to these renewable arrangements not only contributes to our emissions reduction targets, but also represents a significant source of economic value given the increasingly competitive cost of renewable energy and volatility of fossil-based energy supply.

Where we deploy capital in pursuit of sustainability goals, we seek to do so in a way that, wherever possible, generates economic returns, and we consider syndicating our investment where appropriate. For example, in partnership with EDF Renewables, we have formed Envusa Energy to develop a regional renewable energy ecosystem (RREE) in South Africa. The ecosystem is expected to meet our operational electricity requirements in South Africa through the supply of 3–5 GW of 100% renewable electricity (solar and wind) and storage by 2030, with excess electricity supplied to the grid to help improve its resilience. The investment, which is expected to generate financial returns for us and our partners, will be syndicated, with additional empowerment partners providing equity financing for the ecosystem, and debt financing that is typical for high quality energy infrastructure projects. This syndicated structure will help manage both our risk and total capital deployed, while enabling a significant reduction in our Scope 2 emissions.

In addition, we have combined our nuGen™ ZEHS with our partner in its development, First Mode, to accelerate the development and commercialisation of this hydrogen truck technology. We are contributing a further $0.2 billion in equity funding through the course of 2023 to help fund the ongoing development of ZEHS. In addition, c.$0.3 billion of capex annually (2023-2025) is expected to be invested across the South African RREE and nuGen™ programmes (includes the Group's proportionate share of capex incurred by Envusa Energy).

— For more on Quellaveco
See page 29

— For more on decarbonising our operations
See pages 47–48

Group capital expenditure

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.

Capital expenditure

$ million	2022	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

Managing risk effectively

The effective management of risk is integral to good management practice and fundamental to living up to our Purpose and delivering our strategy. By understanding, prioritising and managing risk, Anglo American safeguards our people, our assets, our Values and reputation, and the environment, and identifies opportunities to best serve the long term interest of all our stakeholders. As understanding our risks and developing appropriate responses are critical to our future success, we are committed to an effective, robust system of risk identification, and an effective response to such risks, in order to support the achievement of our objectives.

How does risk relate to our strategy?

Risks can arise from events outside of our control or from operational matters. Each of the risks described on the following pages can have an impact on our ability to deliver our strategy.

Viability statement

Context

An understanding of our business model and strategy is key to the assessment of our prospects. Our strategy is to:

- Secure, develop and operate a portfolio of high quality and long life assets that deliver sustainable shareholder returns
- Implement an innovation-led approach to sustainable mining from discovery to delivering products to customers
- Create an inclusive and diverse working environment to encourage and support a high performance culture and innovative thinking.

Details of our business model are found on pages 8–9 and more on our strategy is provided on page 10.

Continued geopolitical and macro-economic uncertainty were the key drivers of the price volatility experienced across our diversified product portfolio in 2022, resulting in a 6% decrease in the Group's realised basket price across all commodities. Against that background, the Board maintains a cautious appetite for major new projects and investments. Large greenfield projects are likely to be considered for syndication with other investors at the appropriate stage of a project's development, and for value, as a means of reducing our risk profile and capital requirements.

The assessment process and key assumptions

Assessment of the Group's prospects is based upon the Group's strategy, its financial plan and principal risks. During 2022, the focus was on driving efficiencies through regaining operational stability and targeted incremental performance improvement, upgrading the quality of our portfolio in order to improve cash flow generation, maintaining a strong balance sheet and creating sustainable value through disciplined allocation of capital.

A financial forecast covering the next three years is prepared based on the context of the strategic plan and is reviewed on a regular basis to reflect changes in circumstances. The financial forecast is based on a number of key assumptions, the most important of which include product prices, exchange rates, estimates of production, production costs and future capital expenditure. In addition, although planned as part of the ordinary course of business, the forecast does not assume the renewal of existing debt or the raising of new debt. A key component of the financial forecast and strategic plan is the life of asset plans created for each operation, providing expected annual production volumes over the anticipated economic life of mine.

The principal risks are those that we believe could prevent the Group from delivering its strategic objectives. A number of these risks are deemed catastrophic to the Group's prospects, including the impacts of a tailings dam failure, fire and slope wall failure risks, and have been considered as part of the Group's viability.

Assessment of viability

The assessment of viability has been made with reference to the Group's current position and expected performance over a three-year period, using budgeted product prices and expected foreign exchange rates. Financial performance and cash flows have then been subjected to stress and sensitivity analysis over the three-year period using a range of severe, but plausible, downside scenarios. Scenarios were selected for stress testing based upon an assessment of the Group's principal risks, and each includes a risk deemed catastrophic to the Group. Risks chosen for modelling were those considered to have the greatest financial impact upon the Group's financial statements, and have been linked to the principal risks below. The scenarios tested include:

- Product price reductions of up to 30% from conservative budget prices over three years, with no offsetting foreign exchange rate improvement (Principal Risk 2)
- Operational incidents that have a significant impact on production at key sites in the Group (Principal Risks 1, 7 and 8)
- The impact of a cyber attack upon the Group's key information technology systems (Principal Risks 3 and 8)
- Market and product developments affecting demand for diamonds (Principal Risks 2 and 13)
- Technology developments in the automobile industry affecting demand for PGMs (Principal Risks 2 and 13)
- The impact of a reduction in water supply in Chile, being a physical risk associated with climate change (Principal Risks 9 and 12).

The Group's liquidity (defined as cash and undrawn committed facilities) was $16.1 billion, comprising cash and cash equivalents of $8.4 billion (see note 20 to the Consolidated financial statements), and undrawn committed facilities of $7.7 billion (see note 23 to the Consolidated financial statements) as at 31 December 2022. The most 'severe' scenario considered by management, albeit unlikely, considers the financial impact of economic pricing downsides throughout the assessment period, and two operational incidents materialising in a single year at the start of the assessment period, with no mitigating actions taken by management. This scenario would create both an immediate and prolonged adverse impact, resulting in negative attributable free cash flows throughout the assessment period. The Group has a range of management actions available in such a scenario to preserve resilience, including accessing lines of credit (including bank and debt capital markets), reducing capital expenditure, reviewing capital allocation and production profiles, and raising debt while maintaining the shareholder return policy.

Viability statement

The directors confirm they have a reasonable expectation that the Group will continue in operation and meet its liabilities as they fall due for the next three years. This period has been selected as the volatility in commodity markets makes confidence in a longer assessment of prospects highly challenging.

Emerging risks

We define an emerging risk as a risk that may become a principal risk in time but is not expected to materialise in the next five years. Emerging risks that are currently being monitored are:

- Future demand for metals and minerals deviating from assumptions as a result of efforts to reduce global warming
- Failure to replace Ore Reserve depletion in key business units through exploration, projects or acquisitions
- Liabilities incurred as a result of environmental impairments
- Failure to deliver certain elements of the Sustainable Mining Plan, which could cause reputational damage, threaten the organisation's licence to operate, affect future growth, and may also result in increased costs and a negative effect on the Group's financial results
- Unexpected mine-closure liabilities that have the potential to increase costs.

The above risks are closely monitored and actively managed to minimise their threat.

Principal risks

We define a principal risk as a risk or combination of risks that would threaten the business model, future performance, solvency or liquidity of Anglo American. In addition to these principal risks, we continue to be exposed to other risks related to currency, inflation, community relations, environment, litigation and regulatory proceedings, changing societal expectations, infrastructure and human resources. These risks are subject to our normal procedures to identify, implement and oversee appropriate mitigation actions, supported by internal audit work to provide assurance over the status of controls or mitigating actions. These principal risks are considered over the next three years as a minimum, but we recognise that many of them will be relevant for a longer period.

— For more on principal risks
See pages 69–73

Catastrophic risks

We also face certain risks that we deem catastrophic risks. These are very high severity, very low likelihood events that could result in multiple fatalities or injuries, an unplanned fundamental change to strategy or the way we operate, and have significant financial consequences. We do not consider likelihood when assessing these risks, as the potential impacts mean these risks must be treated as a priority. Catastrophic risks are included as principal risks.

— For more on catastrophic risks
See page 69

Risk appetite

We define risk appetite as 'the nature and extent of risk Anglo American is willing to accept in relation to the pursuit of its objectives'. We look at risk appetite from the context of severity of the consequences should the risk materialise, any relevant internal or external factors influencing the risk, and the status of management actions to mitigate or control the risk. A scale is used to help determine the limit of appetite for each risk, recognising that risk appetite will change over time.

If a risk exceeds appetite, it will threaten the achievement of objectives and may require a change to strategy. Risks that are approaching the limit of the Group's risk appetite may require management actions to be accelerated or enhanced to ensure the risks remain within appetite levels.

For catastrophic and operational risks, our risk appetite for exceptions or deficiencies in the status of our controls that have safety implications is very low. Our internal audit programme evaluates these controls with technical experts at operations and the results of that audit work will determine the risk appetite evaluation, along with the management response to any issues identified.

— For more on the risk management and internal control systems and the review of their effectiveness
See pages 157–159

Summary

Our risk profile evolved in 2022, mainly due to external factors. Macro-economic uncertainty increased as a result of Russia's invasion of Ukraine, global inflation and economic slowdowns in key markets. The regulatory environment in which we operate remains impacted by political and societal changes in key countries, which could affect future production and delay the deployment of new technologies to support future production and sustainability objectives. Operationally, we have identified reliance on third-party infrastructure and power supply as a heightened risk, particularly in South Africa. Climate change remains one of the defining challenges of our time and our unequivocal commitment to being part of the global response presents both opportunities and risks. A number of our principal risks are directly or indirectly related to climate change and our strategies to reduce its impact on our business, and the planet.

Our catastrophic risks are the highest priority risks, given the potential consequences.

Principal risks

Pillars of value: Safety and health, Socio-political, Production, Financial, Environment, People, Cost

1. Catastrophic and natural catastrophe risks

We are exposed to the following risks we deem as potentially catastrophic: tailings dam failure; geotechnical failure; mineshaft failure; and fire and explosion.

Root cause: Any of these risks may result from inadequate design or construction, adverse geological conditions, shortcomings in operational performance, natural events such as seismic activity or flooding, and failure of structures or machinery and equipment.

Impact: Multiple fatalities and injuries, damage to assets, environmental damage, production loss, reputational damage and loss of licence to operate. Financial costs associated with recovery and liability claims may be significant. Regulatory issues may result and community relations may be affected.

Mitigation: Technical standards exist that provide minimum criteria for design and operational performance requirements, the implementation of which is regularly inspected by technical experts. Additional assurance work is conducted to assess the adequacy of controls associated with these risks.

Risk appetite: Operating within the limits of our appetite.

Commentary: These very high impact but very low frequency risks are treated with the highest priority.

Pillars of value:

2. Product prices

Global macro-economic conditions leading to sustained low product prices and/or volatility.

Root cause: Factors that could contribute to this risk include a deep and protracted slowdown in economic growth, armed conflict involving major world powers, trade war between major economies and a disrupted recovery from the Covid-19 pandemic as a result of new variants being resistant to vaccines.

Impact: Low product prices can result in lower levels of cash flow, profitability and valuation. Debt costs may rise owing to ratings agency downgrades and the possibility of restricted access to funding. The Group may be unable to complete any divestment programme within the desired timescales or achieve expected values. The capacity to invest in growth projects is constrained during periods of low product prices – which may, in turn, affect future performance.

Mitigation: Maintaining a conservative balance sheet and proactive management of debt facilities and the delivery of cash improvement and operational performance targets are the key mitigation strategies for this risk. Regular updates of economic analysis and product price assumptions are discussed with executive management and the Board.

Risk appetite: Operating within the limits of our appetite.

Commentary: Macro-economic conditions remain uncertain; that may result in price volatility in the products mined, and marketed, by Anglo American.

Pillars of value:

3. Cyber security

Loss or harm to our technical infrastructure and the use of technology within the organisation from malicious or unintentional sources.

Root cause: Attacks motivated by fraud, ransomware, and/or access to sensitive data or information.

Impact: Theft or loss of intellectual property, financial losses, increased costs, reputational damage, operational disruption and compromise of safety systems.

Mitigation: We have a dedicated Global Information Management Security team with appropriate specialist third-party support to oversee our network security. We have aligned to the internationally recognised NIST Cyber Security Framework, as well as ISO27001 in sensitive areas. Additionally, we employ the IRAM2 risk assessment methodology to large scale projects and maintain an ongoing cyber awareness programme across the Group.

Risk appetite: Operating within the limits of our appetite.

Commentary: During 2022, we further strengthened our control environment. Our controls responded as planned and no cyber attack attempt resulted in negative impacts for Anglo American.

Pillars of value:

4. Political

Global, regional and national political tensions and disputes may negatively impact our business.

Root cause: Geopolitical disputes between major economic countries, regional and national political tensions. The effectiveness of national governance in countries in which we operate may be compromised by corruption, weak policy framework and ineffective enforcement of the law.

Impact: Global supply chains may be impacted by the threat of or actual disputes between major economies. Regional and national political tensions may result in social unrest affecting our operations and employees. Uncertainty over future business conditions leads to a lack of confidence in making investment decisions, which can influence future financial performance. Increased costs can be incurred through additional regulations or resource taxes, while the ability to execute strategic initiatives that reduce costs or divest assets may also be restricted, all of which may reduce profitability and affect future performance. These may adversely affect the Group's operations or performance of those operations.

Mitigation: Anglo American has an active engagement strategy with governments, regulators and other stakeholders within the countries in which we operate, or plan to operate, as well as at an international level. We make significant efforts to contribute to public policy objectives such as socio-economic development to demonstrate the broader value of our presence. We assess portfolio capital investments against political risks and avoid or minimise exposure to jurisdictions with unacceptable risk levels. We actively monitor regulatory and political developments at a national level, as well as global themes and international policy trends, on a continuous basis. See page 16 for more detail on how we engage with our key stakeholders.

Risk appetite: Operating within the limits of our appetite.

Commentary: Global economic conditions can have a significant impact on countries whose economies are exposed to commodities, placing greater pressure on governments to find alternative means of raising revenues, and increasing the risk of social and labour unrest.

Pillars of value:

5. Community and social relations

Failure to maintain healthy relationships with local communities and society at large.

Root cause: Failure to identify, understand and respond to community and societal needs and expectations.

Impact: A breakdown in trust with local communities and society at large threatens Anglo American's licence to operate, potentially leading to increased costs, future growth being impacted, business interruption and reputational damage.

Mitigation: The Anglo American Social Way 3.0 is our integrated management system for social performance, adopted and implemented at all managed sites. In addition, the commitments we have made as part of the Thriving Communities pillar of our Sustainable Mining Plan will deliver tangible and valued benefits to host communities.

Risk appetite: Operating within the limits of our appetite.

Commentary: Through the Social Way 3.0, we ensure that policies and systems are in place at all Anglo American managed sites to support effective engagement with communities, avoid or minimise adverse social impacts, and maximise development opportunities. For further information on how we engage with key stakeholders, see pages 16–19. For more information on our Sustainable Mining Plan commitments, see page 42.

Pillars of value:

Pillars of value				
	Safety and health	Socio-political	Production	Financial
	Environment	People	Cost	

6. Regulatory and permitting

Failure to comply with permitting and other mining regulations.

Root cause: Regulations impacting the mining industry are evolving as a result of political developments, changes in societal expectations and the public perception of mining activities. Failure to comply with management processes will threaten the ability to adhere to regulations and permits.

Impact: Delays to projects and disruption to existing operations may impact future production, delays in deploying new technologies that support future growth and sustainability objectives, legal claims and regulatory actions, fines and reputational damage.

Mitigation: All operations must comply with our Minimum Permitting Requirements, which is a management system to ensure necessary permits and other regulatory requirements are identified and embedded in life of asset plans and management routines. Through our Sustainable Mining Plan, we make considerable efforts to meet community aspirations for socio-economic development and carefully manage the environmental impacts of our business to avoid causing harm and nuisance.

Risk appetite: Operating within the limits of our appetite.

Commentary: Annual assessments of compliance with the Anglo American Minimum Permitting Requirements are undertaken, as well as periodic independent audits.

Pillars of value:

7. Operational performance

Unplanned operational stoppages affecting production and profitability.

Root cause: We are exposed to risks of interruption to power supply and the failure of critical third-party-owned and -operated infrastructure; e.g. rail networks and ports. Failure to implement and embed our Operating Model, maintain critical plant, machinery and infrastructure, and operate in compliance with Anglo American's Technical Standards, will affect our performance levels. Our operations may also be exposed to natural catastrophes and extreme weather events.

Impact: Inability to achieve production, cash flow or profitability targets. There are potential safety-related risks associated with unplanned operational stoppages, along with a loss of investor confidence.

Mitigation: We maintain ongoing engagement with critical power and infrastructure suppliers and maintain appropriate business continuity and emergency preparedness plans. Implementation of our Operating Model and compliance with Technical Standards, supported by operational risk management and assurance processes, are key to the mitigation against this risk. Regular tracking and monitoring of progress against the underlying production plans is undertaken.

Risk appetite: Operating within the limits of our appetite.

Commentary: There were no material unplanned operational incidents in 2022, although power outages in South Africa impacted our operations.

Pillars of value:

8. Safety

Failure to eliminate fatalities.

Root cause: Fatalities may result from operational leaders, employees and contractors failing to apply safety rules and poor hazard identification and control, including non-compliance with critical controls.

Impact: A fatal incident is devastating for the bereaved family, friends and colleagues. Over the longer term, failure to provide a safe working environment threatens our licence to operate.

Mitigation: All operations continue to implement safety improvement plans, with a focus on: effective management of critical controls required to manage significant safety risks; learning from high potential incidents and hazards; embedding a safety culture; and leadership engagement and accountability. Our Elimination of Fatalities Taskforce oversees targeted improvement initiatives to further improve safety performance.

Risk appetite: Operating within the limits of our appetite.

Commentary: During 2022, there were two work-related fatalities in our managed operations. Management remains fully committed to the elimination of fatalities.

Pillars of value:

9. Climate change

Climate change is the defining challenge of our time and our commitment to being part of the global response presents both opportunities and risks.

Root cause: We are committed to the alignment of our portfolio with the needs of a low carbon world in a responsible manner; however, different stakeholder expectations continue to evolve and are not always aligned. Long term demand for metals and minerals mined and marketed by Anglo American may deviate from assumptions based on climate change abatement initiatives. Changing weather patterns and an increase in extreme weather events may impact operational stability and our local communities. Our Scope 1 and 2 carbon emission reduction targets are partly reliant on new technologies that are at various stages of development, and our Scope 3 reduction ambition is reliant on the adoption of greener technologies in the steelmaking industry.

Impact: Potential loss of stakeholder confidence, negative impact on reputation, financial performance and valuation.

Mitigation: We have articulated our climate change plans, policies and progress and engage with key stakeholders to ensure they understand them. Our Sustainable Mining Plan includes operation-specific and Group targets for reductions in carbon emissions, power and water usage.

Risk appetite: Operating within the limits of our appetite.

Commentary: For more information on our Sustainable Mining Plan and approach to climate change, see pages 42 and 45–49, and for further information on how we engage with key stakeholders, see pages 16–19. For more on the extreme weather events that have affected the operating performance of our business units, see pages 84–111.

Pillars of value:

10. Pandemic

Large scale outbreak of infectious disease increasing morbidity and mortality over a wide geographic area.

Root cause: Human population growth, urbanisation, changes in land use, loss of biodiversity, exploitation of the natural environment, viral disease from animals, and increased global travel and integration are all contributory causes of health pandemics.

Impact: As has been witnessed by the Covid-19 pandemic, widespread consequences include the physical and mental health and well-being of our people and local communities; economic shocks and disruption; social unrest; an increase in political stresses and tensions, a rise in criminal acts; and the potential for increased resource nationalism.

Mitigation: Anglo American actively monitors global pandemic-potential diseases. In the event of a pandemic, our Group Crisis Management Team is activated at an early stage to direct the Group's response, prioritising the well-being of our people, their families and host communities, and ensuring the continuity of the operations.

Risk appetite: Operating within the limits of our appetite.

Commentary: For more information on our response to the Covid-19 pandemic, see pages 59–60.

Pillars of value:

11. Corruption

Bribery or other forms of corruption committed by an employee or agent of Anglo American.

Root cause: Anglo American has operations in some countries where there is a higher prevalence of corruption.

Impact: Potential criminal investigations, adverse media attention and reputational damage. A possible negative impact on licensing processes and valuation.

Mitigation: A comprehensive anti-bribery and corruption policy and programme, including risk assessment, training and awareness, with active monitoring, are in place.

Risk appetite: Operating within the limits of our appetite.

Commentary: A Group Compliance Committee oversees the organisation's anti-bribery management system to ensure its continuing suitability, adequacy and effectiveness.

Pillars of value:

Pillars of value				
	Safety and health	Socio-political	Production	Financial
	Environment	People	Cost	

12. Water

Inability to obtain or sustain the level of water security needed to support operations over the current life of asset plan or future growth options.

Root cause: Poor water resource management or inadequate on site storage, combined with reduced water supply at some operations as weather patterns change, can affect production. Water is a shared resource with local communities and permits to use water in our operations are at risk if we do not manage the resource in a responsible and sustainable manner.

Impact: Loss of production and inability to achieve cash flow or volume improvement targets. Damage to stakeholder relationships or reputational damage can result from failure to manage this critical resource.

Mitigation: Various projects have been implemented at operations most exposed to this risk, focused on: water efficiency; water security; water treatment; and discharge management; as well as alternative supplies. New technologies are being developed that will reduce water demand.

Risk appetite: Operating within the limits of our appetite.

Commentary: This continues to be a risk to the majority of our operations. For more information on our Sustainable Mining Plan, see page 42.

Pillars of value:

13. Future demand

Demand for metals and minerals produced and marketed by Anglo American may deviate from our assumptions.

Root cause: Technological developments and/or product substitution leading to reduced demand, growth in the circular economy and shifts in consumer preferences.

Impact: Potential for negative impact on revenue, cash flow, profitability and valuation.

Mitigation: Regular reviews of production and financial plans, as well as longer term portfolio decisions, are based on extensive research. Our businesses invest in marketing and other activities to enhance the inherent value of the products we produce, including building consumer confidence in the ethical provenance of our products.

Risk appetite: Operating within the limits of our appetite.

Commentary: We monitor new business opportunities in line with our strategy to secure, develop and operate a portfolio of high quality and long life mineral assets, from which we will deliver leading shareholder returns. Our ethical value chain commitments within the Trusted Corporate Leader pillar of our Sustainable Mining Plan ensure we operate in line with stakeholder expectations for responsible mining. For more information on our ethical value chains and responsible mining certification, see page 54.

Pillars of value:

Key performance indicators

Safety and health

Strategic element: Innovation, People

Work-related fatal injuries[8]

Target: Zero ER

Number of work-related fatal injuries

2022	2
2021	2
2020	2
2019	4
2018	5

Total recordable injury frequency rate[8]

Target: Year-on-year reduction ER

TRIFR

2022	2.19
2021	2.24
2020	2.14
2019	2.21
2018	2.66

New cases of occupational disease[8]

Target: Year-on-year reduction

NCOD

2022	5
2021	16
2020	30
2019	39
2018	101

Workforce noise exposure[8]

Target: Year-on-year reduction

Employees and contractors potentially exposed to noise > 85 dBA

2022	23,179
2021	30,832
2020	33,253
2019	29,958
2018	29,016

Workforce inhalable hazard exposure[8]

Target: 5% year-on-year reduction

Employees and contractors potentially exposed to inhalable hazards over OEL

2022	317
2021	1,796
2020	1,994
2019	2,151
2018	2,249

Environment

Strategic element: Innovation

GHG emissions[8]

Target: Reduce by 30% by 2030 ER

Measured in million tonnes of CO_2 equivalent emissions

2022	13.3
2021	14.5
2020	15.4
2019	16.9
2018	15.2

Energy consumption[8]

Target: Improve energy efficiency by 30% by 2030 ER

Measured in million GJ

2022	83
2021	84
2020	78
2019	83
2018	80

Fresh water withdrawals[8]

Target: Reduce the withdrawal of fresh water in water scarce areas by 50% ER

Measured in ML

2022	35,910
2021	36,888
2020	37,247
2019	42,527
2018	49,188

Level 4-5 environmental incidents[8]

Target: Zero

Number of Level 4-5 environmental incidents

2022	0
2021	0
2020	0
2019	0
2018	1

— For full description and calculation methodology **see pages 308–315**

ER KPIs with this symbol are linked to executive remuneration; for more information, see the Remuneration report on pages 160–203.

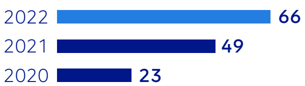
Socio-political

Strategic element: Innovation

Social Way 3.0 implementation[9]

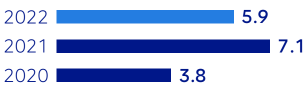
Target: Full implementation of the Social Way 3.0 by end 2022

In 2022, 66% of Social Way 3.0 requirements fulfilled



Taxes and royalties borne and taxes collected[3]

Spend in $ billion

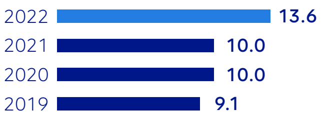


Jobs supported off site[10] ER

Cumulative number of jobs supported off site

Local procurement[4]

Spend in $ billion



People

Strategic element: People

Voluntary labour turnover

Target: <5%

Percentage of full-time employees

Women in management

Target: 33% by 2023

Women in management (B5 and above) (%)

Women in workforce

Women as a percentage of total workforce

Production

Strategic element: Portfolio, Innovation

Production volumes

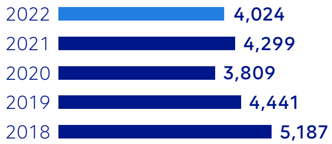
Copper equivalent production 2022 vs 2021 2% decrease

De Beers – million carats

Copper – thousand tonnes

Nickel – thousand tonnes

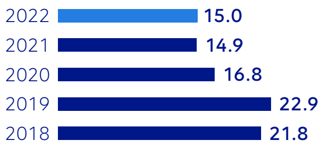
PGMs – thousand ounces (5E+Au)



Iron ore (Kumba) – million tonnes (wet basis)

Iron ore (Minas-Rio) – million tonnes (wet basis)

Steelmaking coal (export coking and PCI) – million tonnes



Cost

Strategic element: Portfolio, Innovation

Unit cost of production

Copper equivalent unit cost 2022 vs 2021: 15% increase in $ terms

De Beers – $/carat

2022	59
2021	58
2020	57
2019	63
2018	60

Copper – c/lb

2022	154
2021	120
2020	113
2019	126
2018	134

Nickel – c/lb

2022	513
2021	377
2020	334
2019	380
2018	361

Kumba – $/tonne (wet basis)

2022	40
2021	39
2020	31
2019	33
2018	32

Iron ore Brazil – $/tonne (wet basis)

2022	35
2021	24
2020	21
2019	21
2018	n/a

Steelmaking coal – $/tonne

2022	107
2021	105
2020	86
2019	63
2018	64

PGMs – $/PGM ounce

2022	937
2021	868
2020	713
2019	705
2018	731

Financial

Strategic element: Portfolio, Innovation

Attributable return on capital employed (ROCE)

ER

Group attributable ROCE (%)

2022	30
2021	43
2020	17
2019	19
2018	19

Underlying earnings per share (EPS)

ER

Group underlying EPS – $

2022	4.97
2021	7.22
2020	2.53
2019	2.75
2018	2.55

Attributable free cash flow[11]

ER

Group attributable free cash flow ($ million)

2022	1,585
2021	7,803
2020	1,209
2019	2,324
2018	3,157

Marketplace review

Review of 2022

Inflation, conflict and zero-Covid

The global macro-economic environment has been marked by the interaction of trade dislocations arising from Russia's invasion of Ukraine, surging inflation in the West, and curtailed demand activity in China due to its zero-Covid policy. Despite these challenges, global economic growth was 3.4% in 2022, according to the IMF's last estimate, which compares to 6.2% in 2021, as the effects of re-opening following Covid-19 restrictions faded and monetary policy in all major advanced economies shifted from easing to tightening.

In the US, the Federal Reserve pivoted sharply in 2022 – increasing interest rates by 425 basis points during the year – in response to sharply rising consumer price inflation, which hit 9.1% in June. Europe has been particularly exposed to the inflationary effects of trade disruptions as a result of Russia's invasion of Ukraine, with oil and gas prices sharply higher year on year. In China, economic growth has been hindered by recurring Covid-19 lockdowns, as well as financing issues in the real estate sector. Covid-19 restrictions have weighed particularly heavily on consumption and service sectors.

Demand for many mined commodities held up well, buoyed by the positive effects of pent-up post-pandemic consumer demand, strong labour markets (and accompanying wage growth), as well as easing supply chain conditions. These trends have contributed, for example, to robust production and consumer demand for automotives, benefiting PGMs.

Progress in the global energy transition continues to drive growth in related sectors, providing support to copper and nickel demand in particular. Renewables' share of global primary energy demand rose to an estimated 3.3% in 2022 from 2.7% in 2021, while vehicle production continued to become more electrified: the pure electric share of global light duty vehicle production increased from 6% to 10%, while share of PGMs containing hybrids rose from 13% to 16%.

The year saw a strengthening of the dollar against a number of major currencies on the back of high US interest rates, and weaker global risk appetite. In particular, the dollar firmed against the South African rand and Australian dollar by 7% and 6% respectively over the course of 2022, countering to a degree the effects of local currency cost inflation and moderating commodity prices since the second quarter. Our operations in South America, however, most notably in Brazil and Peru, have been adversely affected by stronger local currencies, arising in part from earlier interest rate rises by their central banks.

Markets review

Diamonds

The year started well for the diamond industry, with strong restocking demand following the 2021 holiday season. While the start of Russia's invasion of Ukraine and imposition of related sanctions on Russian diamonds created uncertainty, healthy consumer demand, tightness in supply and De Beers' focus on provenance assurance all translated into robust demand for both rough diamonds and diamond jewellery in the first half.

In the second half, with a wavering economic outlook, US consumer demand for diamond jewellery softened, though remained above pre-pandemic levels. In China, Covid-19 restrictions from the second quarter onwards impacted diamond jewellery sales there, resulting in negative demand growth for 2022.

Amidst the economic uncertainty in the second half, retailers restocked cautiously, leading to increased cutting centre polished diamond inventories, which, in turn, led to a softening in polished prices and rough demand towards the end of the year.

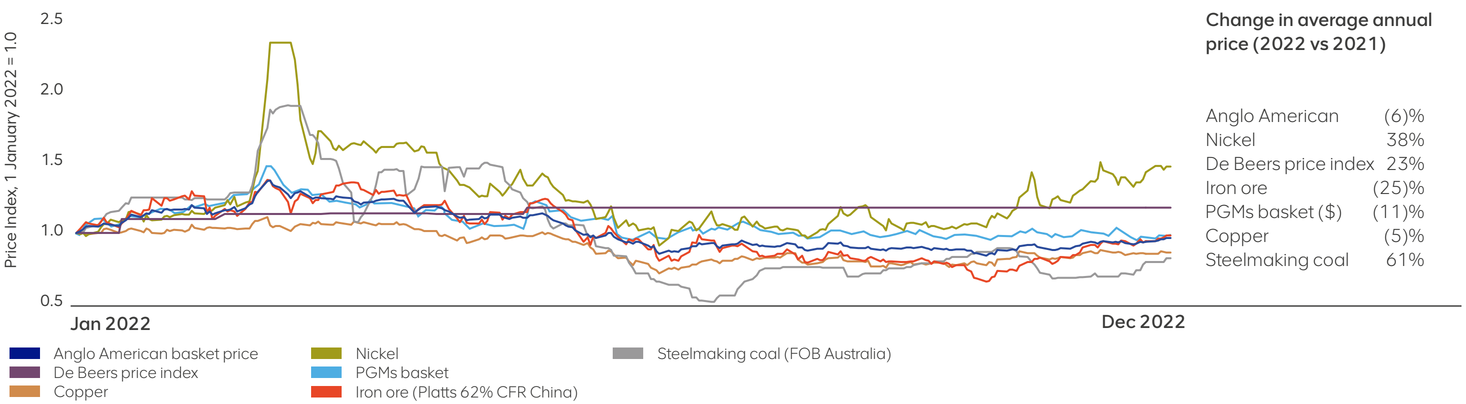
A deterioration in the macro-economic outlook for 2023 could impact consumer spending and, hence, demand for diamond jewellery in the near term; however, longer term, the outlook for demand continues to be positive and supply is expected to remain below pre-pandemic levels, supporting value growth for natural diamonds.

Platinum Group Metals (PGMs)

2022 was another strong year for PGMs pricing, underpinned by robust trends in global vehicle production (light duty vehicles rose by 7% year on year) and constraints in supply – albeit averaging below the record price levels of 2021, with platinum, palladium and rhodium softening by 12%, 12% and 23% respectively.

Positive trends in vehicles (platinum consumption rose 16% year on year, for example) more than offset generally

Indexed 2022 prices



Source: Anglo American Commodity Research softer demand developments elsewhere. Industrial consumption of palladium fell by 9%, as capacity expansion in the chemical industry slowed and the ongoing shift from dental alloys continued, while platinum offtake reduced by 7%, largely due to a particularly strong previous year. Rhodium, in contrast, saw a 21% uplift in industrial consumption, benefiting from its preferential qualities in glass and chemicals applications. Global demand for platinum in jewellery contracted by around 4%, despite uplifts in key Western markets and India.

Mined supply of platinum, palladium and rhodium declined in 2022. Platinum and rhodium decreased by 10% and 9% respectively, as South African output was affected by a number of factors including increased electricity load-shedding. North American production came under pressure due to flooding, while Russian supplies, despite the impact of Russia's invasion of Ukraine, were largely steady, providing support to palladium volumes, which overall eased by 6% on the prior year. Zimbabwe was the only key PGMs production region to register meaningful growth in primary mined volumes in 2022.

Key structural shifts in PGMs consumption patterns that have emerged over recent years were reinforced in 2022: substitution of palladium for more affordable platinum persisted in light-duty petrol vehicles; share of PGM-loaded internal combustion engine (ICE) vehicles fell back, albeit finding some support from continued growth in hybrids; and platinum containing fuel cell electric vehicles (FCEVs) continued to gather pace, with production growth in the heavy-duty sector. Due to their superior catalytic properties and stability in high temperature processes, PGMs will continue to serve a diverse set of industrial and chemical applications that are needed to support future economic and technological development.

Base metals

The central role of base metals in the energy transition resulted in strong copper and nickel markets, despite extended Covid-19 lockdowns in China and inflation-driven economic slowdowns in Europe and North America. After rising to record levels in 2021, copper prices continued to fluctuate around the 450 c/lb mark for the majority of the first half of the year, before weaker macro-economic conditions caused prices to ease in the second half. The average copper price for the year was 400 c/lb (2021: 423 c/lb).

Despite the significant economic headwinds, global copper demand is estimated to have increased by 0.8% and exchange inventories remained very low throughout the year. Mined supply continued to be constrained by difficult operating conditions – most notably in South America. Furthermore, the lack of large, high quality mines coming online continues to limit supply growth.

Nickel is a key beneficiary of the global shift towards battery electric vehicles (BEVs), with most battery technology remaining nickel based. Global primary nickel demand increased by 4.8% in 2022, with a 39% surge in nickel consumed in BEVs more than offsetting a slight decrease in stainless steel production. This helped to drive nickel prices to average $11.61/lb (2021: $8.39/lb), the highest level in 15 years.

Bulk commodities

Despite falling demand, substantial inflationary pressures and geopolitical tensions, bulk commodity pricing has been resilient. At 1,879 million tonnes, global crude steel production dipped below the record level of 2021 (down 4.2% year on year) as strong growth in India and the Middle East partially offset production declines elsewhere.

The economic uncertainty in China resulting from the ongoing and often widespread local lockdowns weighed on iron ore demand. However, with supply constrained as many miners faced operational issues, the benchmark iron ore price (CFR China 62% Fe) averaged $120/tonne in 2022 – the third consecutive year of iron ore prices averaging above the $100/tonne mark (2021: $160/tonne).

Russia's invasion of Ukraine contributed to record natural gas and thermal coal prices, in turn supporting steelmaking coal prices at historically high levels. The benchmark premium hard coking coal price (FOB Australia) peaked at $671/tonne in March, a record high, and averaged $364/tonne for the year, a 61% increase.

Steel is a critical enabler of economic development and is an essential material for the build out of renewables energy infrastructure, such as wind turbines. Efforts to reduce carbon emissions are leading to the gradual transformation of the steel industry, where numerous producers are shifting towards direct reduced iron production (requiring high quality lump and pellet products) and increasing use of less-carbon-intensive scrap. This evolution of the steel industry will impact the total demand for iron ore and steelmaking coal, as well as increase the relative demand and pricing for the higher grade, lower emitting products, such as the lump and high grade concentrate that Anglo American produces.

Fertilisers

Fertiliser prices saw significant increases during 2022, as Russia's invasion of Ukraine and very low global stocks drove crop prices higher. Notably, phosphate and potash prices rose 49% and 60% respectively. Like many commodity price increases, this impacted affordability, leading to a subsequent softening in fertiliser demand in the second half of the year.

Over the longer term, continued growth in both the world's population and its wealth means that more crops must be produced to meet growing food requirements. This will occur despite flat to declining availability of agricultural land globally. Crop yield and quality, and soil health, will therefore become increasingly important, with the balanced use of sustainable, low carbon, organically certified fertilisers being increasingly important to meet industry challenges.

Outlook

In the near term, economic growth in many key markets is expected to slow owing to the effects of high interest rates and rising living costs, while a more positive period for economic activity may be seen in China as the country re-opens after Covid-19 restrictions and focuses on stimulating domestic demand. Key uncertainties shaping the near term include the degree to which China's re-opening exacerbates global inflationary pressures, policymakers' response to above-target inflation, more harmful Covid strains emerging, and any escalation in the Russia-Ukraine conflict.

In the longer term, at Anglo American, consideration of possible pathways and interactions between key external factors, including geopolitical fracture, demographics, climate change and technological innovation, is an ongoing process. The demand outlook for our products is positive, even in divergent and challenging future worlds, underpinned by their essential role in the global energy transition, building resilient supply chains, and enabling economic development. We continue to monitor, analyse and adapt, with our diversified portfolio of future-enabling products, and our commitment to sustainable mining, positioning Anglo American well to capitalise on global trends and deliver enduring value.

Group financial review

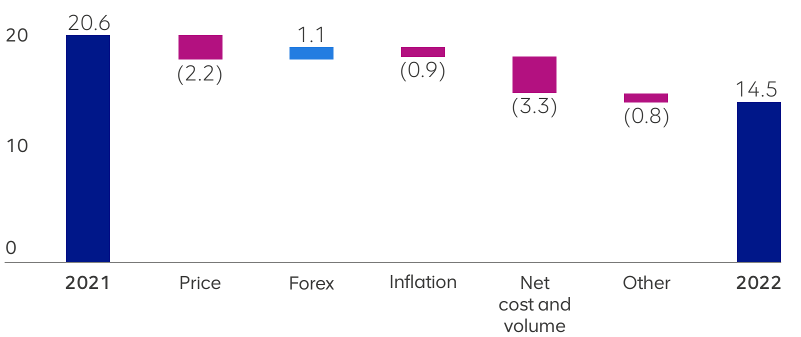
Anglo American's profit attributable to equity shareholders decreased to $4.5 billion (2021: $8.6 billion). Underlying earnings were $6.0 billion (2021: $8.9 billion), while operating profit was $9.2 billion (2021: $17.6 billion).

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[12]. 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.

Financial performance

	2022	2021
Underlying EBITDA◊ ($ billion)	**14.5**	20.6
Operating profit ($ billion)	**9.2**	17.6
Underlying earnings◊ ($ billion)	**6.0**	8.9
Profit attributable to equity shareholders of the Company ($ billion)	**4.5**	8.6
Basic underlying earnings per share◊ ($)	**4.97**	7.22
Basic earnings per share ($)	**3.72**	6.93
Total dividend and buyback per share ($)	**1.98**	4.99
Group attributable ROCE◊	**30%**	43%

Underlying EBITDA◊ reconciliation 2021–2022
$ 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, unfavourable 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 2 to the Consolidated financial statements.

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.

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%.

Underlying EBITDA◊ by segment

	2022	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

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 8.0%, compared with 5.0% 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◊

	2022	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 8 to the Consolidated 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. For more information please refer to note 20 to the Consolidated financial statements.

(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 39 to the Consolidated 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.

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.

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.

Net debt◊

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%).

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

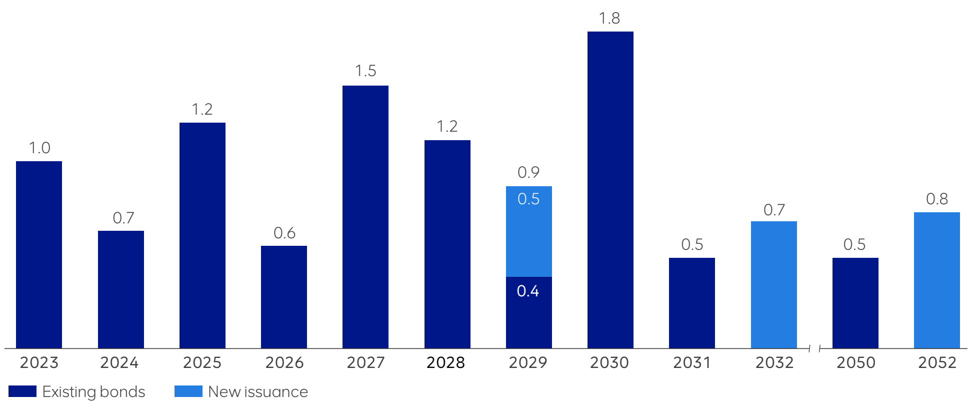
Group liquidity stands at $16.1 billion (2021: $17.1 billion), comprising $8.4 billion of cash and cash equivalents (2021: $9.1 billion) and $7.7 billion of undrawn committed facilities (2021: $8.0 billion).

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, the Group issued €745 million 4.75% sustainability-linked Senior Notes due 2032. This sustainability-linked bond includes performance targets to reduce GHG 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 Group not meet specific sustainability targets.

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.

Bond maturity profile[1]

$ billion



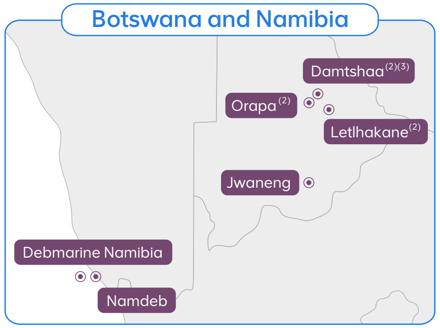
[1] Bond maturity profile based on contractual repayments at hedge rates.

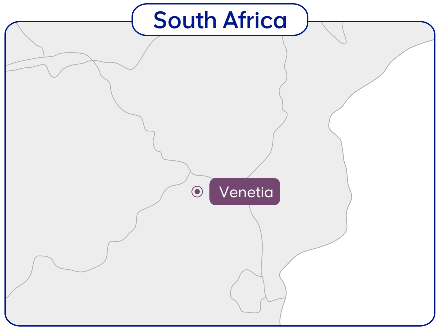
De Beers

Anglo American owns 85% of De Beers, a world leading diamond company. The balance of 15% is owned by the Government of the Republic of Botswana (GRB). De Beers and its partners produce around one-third of the world's rough diamonds, by value.

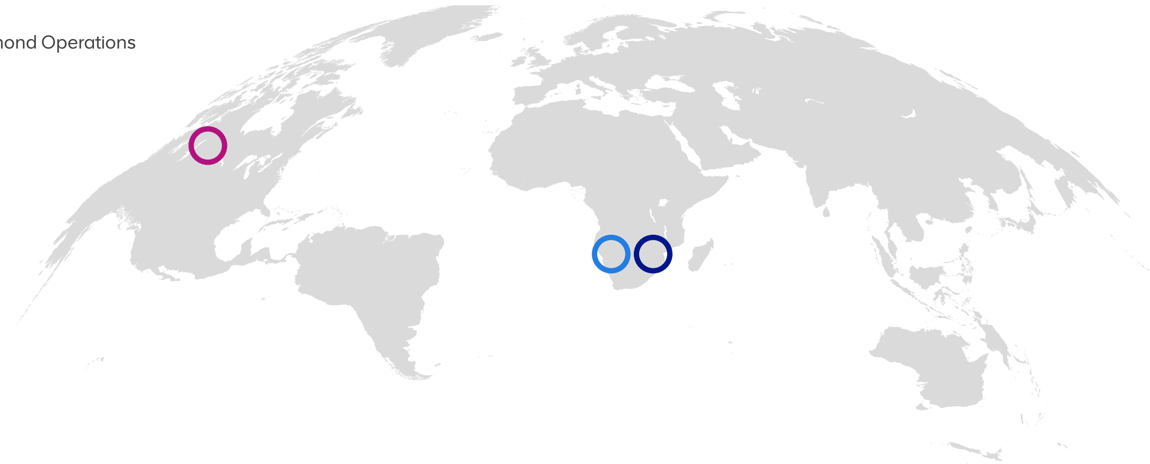
2022 summary

1 Fatality	2.19 TRIFR(1)
$1,417 m Underlying EBITDA	
52% Mining EBITDA margin	34,609 Production volume ('000 carats)





Key
Diamond Operations



Management team

Bruce Cleaver
CEO, De Beers

Al Cook*
CEO, De Beers

* Bruce Cleaver was CEO of De Beers until 19 February 2023. Al Cook joined as CEO of De Beers on 20 February 2023.

(1) TRIFR relates to managed operations only.
(2) All managed as one operation, the 'Orapa Regime'.
(3) Damtshaa was placed onto extended care and maintenance in 2021.
(4) Refer to Anglo American plc Ore Reserves and Mineral Resources Report 2022 for additional information.

Our business

De Beers sells the majority of its rough diamonds through 10 Sight sales each year to Sightholders, with the balance being sold via its Auctions business to registered buyers. It licenses its diamond brand De Beers Forevermark and markets and sells polished diamonds and diamond jewellery via its De Beers Forevermark and De Beers Jewellers businesses.

De Beers recovers diamonds from four countries: Botswana, Canada, Namibia and South Africa.

In Botswana, via a 50:50 joint operation with the GRB – known as Debswana – diamonds are recovered from three mines(3), including Jwaneng, one of the world's richest diamond mines by value. This mine's high grade ore contributes around 75% of Debswana's revenue. The $2 billion Cut-9 expansion of Jwaneng will extend the life of the mine to 2036 and is expected to yield an estimated 59 million carats(4) of rough diamonds. De Beers and the GRB have agreed to a further 12-month extension to June 2023 to the existing sales agreement.

In Namibia, De Beers operates via a 50:50 joint operation with the Namibian government, recovering both land-based diamonds (Namdeb) and offshore diamonds (Debmarine Namibia). Namibia has the richest known marine diamond deposits in the world, with Diamond Resources estimated at approximately 76 million carats(4) in approximately 1.1 million k(m^2) of seabed. Marine diamond deposits represent around 78% of the partnership's total diamond production and 94% of its Diamond Resources.

In South Africa, the Venetia operation is the country's largest producer of diamonds, contributing about half of South Africa's annual diamond production, by volume. Open pit mining was completed, as

Case study

Gemfair™ is empowering artisanal miners by establishing a diamond's fair value and creating a secure and transparent route to market for ASM diamonds.

Gemfair™: empowering artisanal miners

The diamond industry has been focused on issues of provenance assurance ever since the formation of the Kimberley Process in 2000.

But De Beers, a founding member of the Kimberley Process, has always had a wider agenda: to take the lead in establishing high social, ethical and environmental standards not only at its own operations, but at those involved in the wider diamond pipeline, or value chain – from mine to trading, cutting and polishing, and marketing, to retail.

That pipeline, however, continues to comprise thousands of informal miners in the largely unregulated and unprotected artisanal and small-scale mining (ASM) sector.

Improving the working conditions and livelihoods of miners 'outside the fence' of the major diamond mining companies is an ongoing concern for De Beers, and particularly in Sierra Leone, which has rich resources of diamonds and other minerals, but also the challenge of effectively building a more formalised diamond sector that can deliver sustainable socio-economic benefit to its population.

De Beers' senior VP of corporate affairs, Feriel Zerouki, observes: "Since the ending of its civil war two decades ago, the government of Sierra Leone has made great strides in formalising the ASM sector, so it makes sense to work with them in taking this process forward to the next level. We have been doing so since 2018, principally through our in-house-developed programme called GemFair™, which elevates standards, underpins fair value and creates a secure and transparent route to market for ethically sourced ASM diamonds via our Auctions business."

GemFair™ has developed dedicated technology – including an app, along with a dedicated tablet and toolkit – so that an ASM miner can digitally log and track any diamond found. It also gives them the option to sell their diamonds via De Beers' distribution channel.

GemFair™ backs up the technology by providing training and capacity-building guidance to help raise the miners' working and business standards, including training miners on safer and more environmentally responsible mining practices, as well as training on diamond valuation. Participating mine sites abide by the GemFair™ ASM Standard, which is aligned with the OECD's Due Diligence Guidance for Responsible Mineral Supply Chains.

The GemFair™ programme is further improving working conditions and livelihoods of miners through ensuring that they receive fair value for their diamonds, have access to easy-to-understand finance, and are provided with tools and personal protective equipment.

We continued to expand GemFair's membership in 2022. At the end of 2022, there were 263 mine sites participating in the programme (2021: 221 mine sites), covering 3,933 individual workers (2021: 3,165 individual workers).

scheduled, in 2022 and the transition is already well under way to convert to underground mining. The $2.1 billion Venetia Underground project is expected to extend the life of the mine to 2047 and yield an estimated 88 million carats[4].

In Canada, De Beers has a 51% interest in, and is the operator of, Gahcho Kué open pit mine in the Northwest Territories. It began commercial production in 2017 and has an eight-year remaining life, producing an average of 5 million carats a year, yielding an estimated total of 39 million carats (100% basis)[4].

De Beers also develops industrial supermaterials through Element Six, which includes the production of laboratory grown diamonds for Lightbox Jewelry. De Beers offers diamond grading and testing services through the De Beers Institute of Diamonds.

Safety

De Beers recorded one work-related loss of life when, in September, a contractor heavy equipment technician was fatally injured at the Gahcho Kué mine in Canada while conducting maintenance work on a haul truck. Following the incident, a remedial technical solution was implemented throughout Anglo American via an Immediate Call to Action to prevent the occurrence of a similar incident. Learnings were also shared across the industry and with the manufacturer of the truck.

The Total Recordable Injury Frequency Rate (TRIFR) was 2.19 (2021: 2.03). The Pioneering Brilliant Safety (PBS) framework roll-out was successfully implemented at three operations (Venetia mine, Namdeb Land and De Beers Marine Namibia), while Orapa was close to completing its roll-out by year end. The programme delivered a significant improvement in hazard identification and monitoring the effectiveness of the critical controls and remains a key enabler in the journey to 'Beyond Zero Harm'.

De Beers also initiated the Safety in Design programme under the Technology for Safety workstream. The programme focuses on integrating safety standards and industry best practices into plant design and technical solution development, ensuring that systems are inherently safe and hazards are eliminated. De Beers' safety programme is integrated with, and is part of, the Anglo American Group Elimination of Fatalities initiative.

Environmental performance

Energy use decreased by 1% to 4.2 million GJ (2021: 4.2 million GJ), while GHG emissions were in line with the prior year at 0.5 Mt CO_2e, despite the increase in production. The improvement in energy intensity was due to the progress made in implementing energy-efficiency projects at Venetia and Gahcho Kué, by the switch to renewable electricity purchases in the UK and US, and by rooftop solar power installations at a number of sites.

Financial and operational review

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.

2022 results

	2022	2021
Production volume ('000 cts)[1]	**34,609**	32,276
Sales volume ('000 cts)[1][2]	**30,355**	33,357
Price ($/ct)[1][3][4]	**197**	146
Unit cost ($/ct)[1][4][5]	**59**	58
Revenue – $m[1][6]	**6,622**	5,602
Underlying EBITDA – $m[1][4]	**1,417**	1,100
Mining EBITDA margin[1][7]	**52%**	47%
Trading margin	**10%**	11%
Underlying EBIT – $m[1][4]	**994**	620
Capex – $m[1][4]	**593**	565
Attributable ROCE[1]	**11%**	7%
Fatalities[8]	**1**	0
TRIFR[8]	**2.19**	2.03
Energy consumption – million GJ[8]	**4.2**	4.2
GHG emissions – Mt CO_2 equivalent[8]	**0.5**	0.4
Total water withdrawals – million m^3[9]	**7.2**	11.6
Employee numbers[10]	**10,500**	10,000

(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) Results by country can be found in the Summary by operation on pages 299–300.
(5) Unit cost is based on consolidated production and operating costs, excluding depreciation and operating special items, divided by carats recovered.
(6) Includes rough diamond sales of $6.0 billion (2021: $4.9 billion).
(7) 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.
(8) Data is for De Beers' managed operations.
(9) Data is for De Beers' managed operations and other managed entities.
(10) Average number of employees, excluding contractors and associates' and joint ventures' employees, and including a share of employees within joint operations, based on shareholding.

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.

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.

Operational performance

Mining and manufacturing

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.

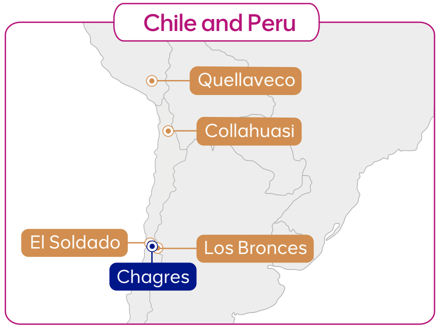
Production guidance for 2023 is 30–33 million carats (100% basis), subject to trading conditions. 2023 unit cost guidance is c.$80/ct.

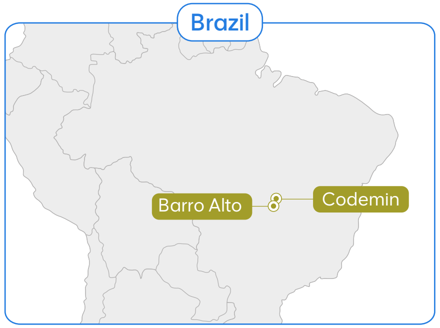
Base Metals

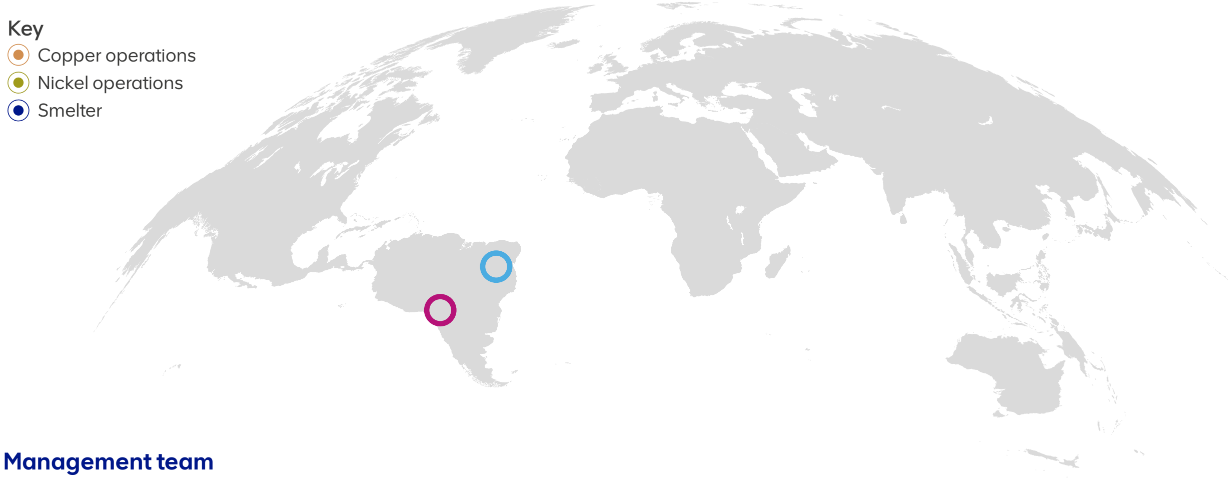
Our Base Metals business comprises our copper and nickel assets, all located in South America.

From our three mining operations in Chile and our newly commissioned Quellaveco mine in Peru, we produce copper, essential to modern living and the future of clean energy and transport. Our products include copper concentrate, copper cathode and associated by-products such as molybdenum and silver.

Our nickel assets, based in Brazil, produce ferronickel – a key ingredient in the production of stainless steel.







Management team

Ruben Fernandes
CEO, Base Metals

Patricio Hidalgo
CEO, Anglo American, Chile

Adolfo Heeren
CEO, Anglo American, Peru

Bill Bruijn
CEO, Anglo American, Brazil

Copper

2022 summary – Copper

0 Fatalities Copper Chile	1.42 TRIFR Copper Chile	0 Fatalities Copper Peru	2.23 TRIFR Copper Peru

$2,182 m Underlying EBITDA[1]	39% Mining EBITDA margin[1]	664 kt Production volume[1]

[1] Includes Copper Chile and Copper Peru.

Our business
In Chile, we have interests in two major copper operations: a 50.1% interest in Los Bronces mine, which we manage and operate, and a 44% share in the independently managed Collahuasi mine; we also manage and operate the El Soldado mine and the Chagres smelter (50.1% interest in both).

In Peru, we have a 60% interest in the Quellaveco mine, which was successfully delivered on time and on budget during 2022. One of the largest mines to be developed across the mining industry in many years, it is ramping up to produce 300,000 tonnes of copper equivalent per year on average over the first 10 years of production, with a 35-year Reserve Life.

Uses of copper
Copper's unique properties make it a vital material for urban and industrial growth, as well as a critical component in the efforts to move to a cleaner, greener world – in terms of both renewable energy and electric transport.

Around 60% of total global demand is for electrics – wire, cables and connectors, including in vehicles and consumer electronics. A further 20% is used in construction; for example, water pipes and roof sheets benefit from copper's resistance to corrosion. Copper's thermal conductivity and malleability mean it is used extensively in air conditioning and refrigeration. It may also be used in places such as in hospitals, owing to its anti-bacterial qualities. Its visual qualities account for many other applications – in buildings and everyday objects.

In the future, a growing volume of copper will likely be used in low emission vehicles; battery electric, hydrogen fuel cell and hybrid electric vehicles all contain substantially more copper than conventional vehicles.

60%
of total global copper demand is for electrics

Case study

Innovation in action: a student builds a model vehicle using state-of-the-art electronics and other components.

Innovating education

Following a number of dialogues, in-depth interviews and information collecting with focus groups and representatives of the local communities surrounding our Chile operations, we were keen to help deliver a transformative vision for Chile's schools – an area of concern among our local communities. To help develop this vision, we focused on four principal stakeholders: Anglo American's community development specialists; the schools community, including teachers, students and parents; partners such as universities; and the Ministry of Education and local government.

Having laid the groundwork, we developed the Modelo Pionero (Pioneers Education Model) to help bring about a radical shift in emphasis in education. The initial target was an under performing school in Los Andes within the Valparaiso region, the Liceo America High School. Here, enrolment had dropped considerably, with few students moving on to higher education; the student body was demotivated and disenchanted; while its traditional learning systems were no longer fit for purpose in an increasingly technology-driven world.

Having identified the root causes that were preventing the development of quality education, we needed people who had intimate knowledge of the nature and scale of the problems ahead – and who had a clear pathway to achieving better outcomes. As well as putting financial resources behind recruiting teachers of quality, we also had to make the school a place where students wanted to connect with each other to try and solve key problems. This created a new way of teaching whereby students became empowered and far more 'hands on' in whatever discipline they were studying – but especially in science and technical subjects.

Today, the prototype school is an exciting innovation centre at the heart of the local community. It has become the exemplar model as we work with another 20 schools to turn around their performance, and we are aiming for over 100 schools by 2030. As Pamela Sanchez – a teacher at the school who was recently nominated for a Global Teacher Award – puts it: "We didn't just create a model at our school, we created a new education movement that has seen our school transformed into an innovation centre – and a pathway that others can follow."

Safety

Copper Chile

Copper Chile experienced no fatalities in 2022. The TRIFR decreased by 8% to 1.42 (2021: 1.55). All of Chile's Covid-19 related restrictions were removed by the government in the third quarter. Moreover, approximately 95% of Anglo American's Chilean workforce is now fully vaccinated.

A number of safety initiatives continued to be implemented, including improvements to the reporting of high potential hazards and the quality of Learning from Incidents investigations, a digital control monitoring project and the ongoing integration of the Group's Operational Risk Management process and Elimination of Fatalities programme, which was completed ahead of schedule in December.

Copper Peru (Quellaveco)

During 2022, Quellaveco recorded no fatalities and a 24% decrease in the TRIFR to 2.23 (2021: 2.93). This improvement in safety performance was driven by positive and sustained progress in relations between the workforce and management, the fulfilment of action plans resulting from safety inspections and incident investigations, as well as the return to face-to-face training and co-ordination activities.

The installation of Advanced Driver Assistance Systems (ADAS) devices in 531 vehicles has been completed and the focus is now on the adoption of technology and driver training to strengthen safe driving behaviours through road safety education and awareness campaigns. The implementation of the Elimination of Fatalities programme, the Group's technical standards, and training of safety staff in the Anglo American Operating Model continues to progress.

Despite an increase in Covid-19 cases towards the end of 2022, the Peruvian government relaxed Covid-19 prevention measures due to the low severity of the cases. More than 90% of Quellaveco's workforce (including contractors) has been fully vaccinated.

Environmental performance

Copper Chile

At Copper's Chilean operations, energy use increased by 2% to 13.0 million GJ (2021: 12.8 million GJ), while GHG emissions were in line with prior year at 0.4 Mt CO_2e (2021: 0.4 Mt CO_2e). Energy use increased in line with efforts to maintain copper production while the operations processed planned lower average copper grades. While GHG emissions were steady year on year, they have decreased by more than 60% compared with 2020, with all Chilean copper operations now being wholly supplied by renewable power sources.

Copper Peru (Quellaveco)

Energy use increased to 3.4 million GJ (2021: 1.6 million GJ), and GHG emissions increased to 0.2 Mt CO_2e (2021: 0.1 Mt CO_2e), reflecting the start of operations as well as the process plant commissioning and ramp-up. We have signed a contract that will result in 100% of the power requirements for Quellaveco mine being supplied from renewable sources from 2023.

2022 results – Copper Chile

	2022	2021
Production volume (kt)	562	647
Sales volume (kt)[(1)(2)]	563	641
Unit cost (c/lb)[(1)(3)]	157	120
Group revenue – \$m[(1)(4)]	4,991	6,433
Underlying EBITDA – \$m[(1)]	1,952	4,011
Mining EBITDA margin[(5)]	40%	62%
Underlying EBIT – \$m[(1)]	1,387	3,428
Capex – \$m[(1)]	1,217	996
Attributable ROCE	32%	81%
Fatalities	0	0
TRIFR	1.42	1.55
Energy consumption – million GJ	13.0	12.8
GHG emissions – Mt CO_2 equivalent	0.4	0.4
Total water withdrawals – million m^3	34.9	33.5
Employee numbers	4,400	4,300

(1) Results by asset and the consolidated results for Copper can be found in the Summary by operation on pages 299–300.
(2) Excludes 422 kt third-party sales (2021: 432 kt).
(3) C1 unit cost includes by-product credits.
(4) Group revenue is shown after deduction of treatment and refining charges (TC/RCs).
(5) Excludes impact of third-party sales.

2022 results – Copper Peru

	2022	2021
Production volume (kt)	102	–
Sales volume (kt)[(1)]	78	–
Unit cost (c/lb)[(1)(2)]	136	–
Group revenue – \$m[(1)(3)]	608	–
Underlying EBITDA – \$m[(1)]	230	–
Mining EBITDA margin	38%	–
Underlying EBIT – \$m[(1)]	208	–
Capex – \$m[(1)(4)]	814	777
Attributable ROCE	2%	–
Fatalities	0	1
TRIFR	2.23	2.93
Energy consumption – million GJ	3.4	1.6
GHG emissions – Mt CO_2 equivalent	0.2	0.1
Total water withdrawals – million m^3	8.7	0.7
Employee numbers	1,000	750

(1) The consolidated results for Copper can be found in the Summary by operation on pages 299–300.
(2) C1 unit cost includes by-product credits.
(3) Group revenue is shown after deduction of treatment and refining charges (TC/RCs).
(4) 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 review – Copper

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.

Financial and operational review – 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.

Financial and operational review – 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

	2022	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	n/a

(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.

Operational performance – 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 – 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.

Operational outlook – 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

2022 summary – Nickel

0	3.67	$381 m	44%	39,800t
Fatalities	TRIFR	Underlying EBITDA	Mining EBITDA margin	Production volume

Our business
Our nickel assets are wholly owned, consisting of two ferronickel production sites: Barro Alto and Codemin. Our Nickel business has the capacity to produce around 45,000 tonnes per annum of nickel, whose primary end use is in the global stainless steel industry.

Uses of nickel
The stainless steel industry uses two-thirds of the world's nickel production and virtually all ferronickel produced each year. The balance is used mainly in the manufacture of alloy steel and other non-ferrous alloys.

Stainless steel is a key input in high-tech construction, and most stainless steels contain about 8–10% nickel. As an alloying element, nickel enhances important properties of stainless steel such as formability, weldability and ductility, while increasing corrosion resistance in certain applications.

Safety
Our Nickel business has not had a fatal incident since 2012. In 2022, the TRIFR more than doubled to 3.67 (2021: 1.26). An in-depth analysis of the causes has indicated that our Nickel operations were significantly affected by the changes required to continue operating safely through the pandemic period, including the impact on workforce qualification, quality of planning, and interactions between leaders and teams, particularly in peripheral and low risk activities. While the effects of the pandemic continue to lessen, we are redoubling our efforts to improve workforce training and engagement, as well as other actions to ensure the quality of safety controls. Nickel has also placed a strong focus on improving safety culture and more effective planning through the integration of the Anglo American Operating Model and Operational Risk Management process. The Elimination of Fatalities programme has shown significant advances, particularly around actions to ensure its sustainability. The ongoing integration of contractors into the Anglo American Safety Management System remained a priority in the year and will continue through 2023.

Case study

Asphalt based on ferronickel slag from our smelters at Barro Alto and Codemin is now being used to surface sections of highway in Goiás state.

Paving the way towards sustainability

Ore processing and smelting generates substantial quantities of unwanted matter – commonly known as slag. How to treat and dispose of slag in a more sustainable way is an important focus for Anglo American, and for several years we have been applying circular-economy principles to the management for value of slag which would previously have been regarded as non-hazardous, albeit problematic, waste.

Eduardo Caixeta, Operational director at Barro Alto, explains: "Slag amounts to around 85% of the smelting process – so, in the past, treating 3 million tonnes (Mt) of ore would have left us with more than 2.5 Mt of waste material. So, in our search for a more sustainable solution, we approached Brazil's prestigious Military Engineering Institute (IME), which around 10 years ago had found that using slag in asphalt production offered better physical and chemical features compared to natural and industrial products. We then covered an area of road at the mine with a new slag-added asphalt – and it's still in excellent condition to this day."

Further studies have demonstrated that slag has benefits beyond structural stability: it can improve drainage and help prevent potholes. Eduardo comments: "The technical and commercial viability of our slag in road surfacing was confirmed recently when we successfully used 10,000 tonnes of ferronickel-slag-based asphalt paving on a highway in Goiás state, as well as on road-toll plazas. We are now working with road-management company, EcoRodovias do Araguaia, to see if the product can have more widespread use on Brazil's roads, such as the Belém-Brasilia highway, and also in railroad ballast."

And the story does not end here. Another exciting development is slag's possible use in making fertiliser. Studies are already well advanced into transforming what has formerly been a headache for the mine into something that benefits agriculture, which is a very important activity in the neighbourhood of Barro Alto. And further down the line, we may see slag being used in civil construction, and in applications such as cement blocks.

Environmental performance

In 2022, 100% of our Nickel operations' electricity requirements came from renewable energy sources (wind and solar), representing around 200,000 tonnes CO_2e of GHG emission savings in the year. A number of initiatives are currently under development to replace the coal and heavy fuel oil used in Barro Alto's kilns. We are also examining a project to construct a biochar pyrolysis processing facility that will deliver carbon credits and create a soil additive product using biomass (eucalyptus, forestry or agricultural waste). The project is expected to deliver 80,000 CO_2e per year of carbon credits by 2030.

2022 results – Nickel

	2022	2021
Production volume (t)	39,800	41,700
Sales volume (t)	39,000	42,100
Unit cost (c/lb)[(1)]	513	377
Group revenue – $m	858	710
Underlying EBITDA – $m	381	320
Mining EBITDA margin	44%	45%
Underlying EBIT – $m	317	261
Capex – $m	79	29
Attributable ROCE	24%	21%
Fatalities	0	0
TRIFR	3.67	1.26
Energy consumption – million GJ	20.3	20.8
GHG emissions – Mt CO_2 equivalent	1.1	1.3
Total water withdrawals – million m^3	7.0	7.0
Employee numbers	1,400	1,400

(1) C1 unit cost.

Financial and operational review

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

	2022	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

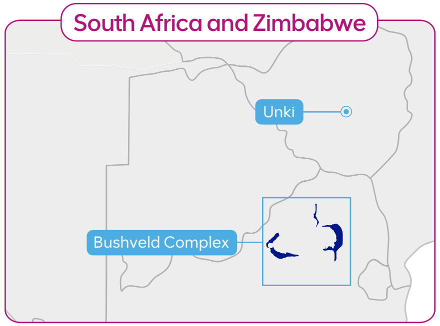
Production guidance for 2023 is 38,000–40,000 tonnes. C1 unit cost guidance for 2023 is c.515 c/lb.

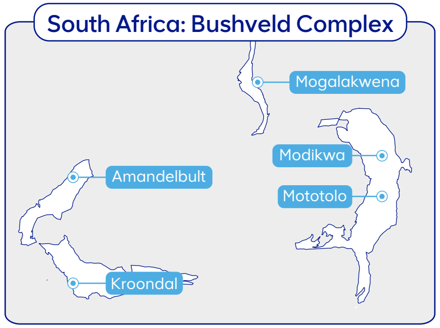
Platinum Group Metals (PGMs)

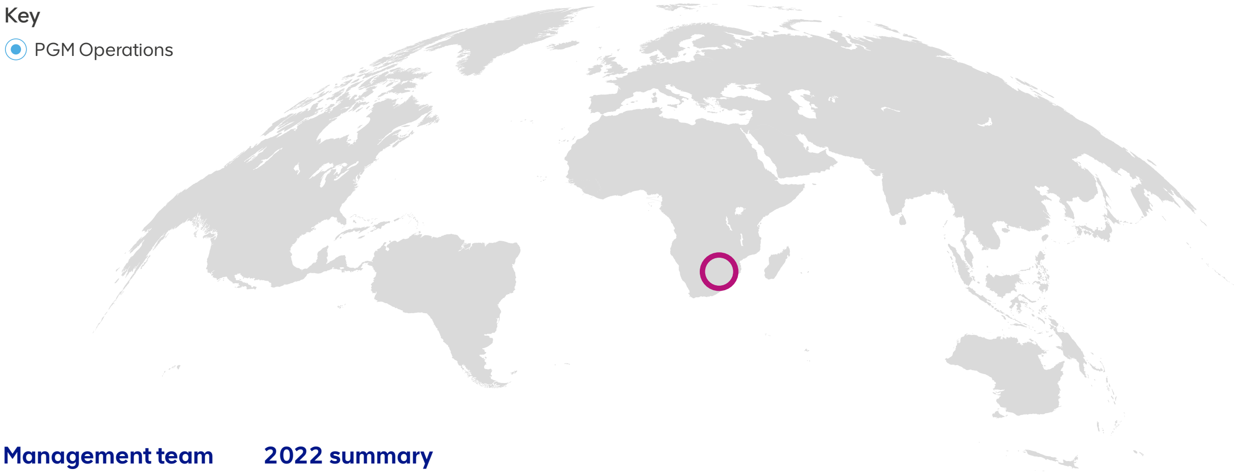
Our PGMs business (held through an effective 79.2% interest in Anglo American Platinum Limited) is a leading producer of PGMs, essential metals for cleaning vehicle exhaust emissions and as the catalyst in electric fuel cell technology.

Our business

We wholly own and operate three mining operations in South Africa's Bushveld complex: Mogalakwena – the world's largest open pit PGMs mine – Amandelbult and Mototolo. We also own and operate Unki mine – one of the world's largest PGM deposits outside of South Africa, on the Great Dyke in Zimbabwe. We own smelting and refining operations, located in South Africa, which treat concentrates from our wholly owned mines, joint operations and third parties. In 2022, we also have an interest in two jointly owned, non-managed platinum mines – Modikwa and Kroondal, both located in South Africa.







Management team

Natascha Viljoen
CEO, Platinum Group Metals

2022 summary

0	2.34	$4,417 m	54%	4,024 koz
Fatalities	TRIFR	Underlying EBITDA	Mining EBITDA margin	Production volume – PGMs 5E+Au[(1)]

(1) PGMs production is shown on a 5E+Au basis; i.e. platinum, palladium, rhodium, ruthenium and iridium plus gold.

Uses of PGMs

PGMs are used in an extensive range of applications. In the automotive industry, they are used in catalytic converters and in FCEV technology. Platinum, palladium and rhodium enable catalytic converters to reduce pollutants from car exhaust gases. FCEVs provide a zero emissions powertrain technology, particularly well suited to heavy duty, long range and fleet vehicles. Demand for PGMs from the car industry is expected to continue to grow, supported by stricter emissions regulations. While we recognise that increased demand for battery electric vehicles poses a downside risk to demand for the PGM-containing catalytic converters used in internal combustion engine vehicles, it is partly offset by hybrids, which require similar quantities of PGMs and, longer term, FCEVs.

With rising concerns about the environment and energy costs, there is also growing interest in platinum-based fuel cells as an alternative energy source. Fuel cell mini-grid electrification technology is an attractive, cost-competitive alternative to grid electrification in remote rural areas and could accelerate access to electricity.

Platinum is also widely used in jewellery owing to its purity, strength, resistance to fading and ability to hold precious stones securely.

Platinum, palladium and rhodium each have a wide range of other uses in the chemical, electrical, medical, glass and petroleum industries. PGMs enable efficient production of goods, ranging from glass to fertilisers, as well as a diverse range of other products, such as cancer-treatment drugs. Ruthenium is used as a catalyst in many chemical and electro-chemical processes, with properties that make it widely used in

Case study

Zero waste to landfill is an initiative of our PGMs business to ensure non-mineral waste does not go to landfill and that, as part of our circular economy programme, as much of it as possible is recycled or re-used. Here, local resident Malose Jerry Kekana is turning wooden pallets donated by Mogalakwena into furniture, which is then sold to the neighbouring Leruleng community.

Waste has value – avoiding landfill

Mining produces a great deal of mineral waste from its mining, ore-processing and smelting operations. It also generates substantial amounts of non-mineral waste – and the vast majority of this needs to be disposed of in a far more sustainable way in the future. As with other operations such as our Nickel business, at PGMs we are not only removing greater amounts of disposable material, or 'gangue', from the ore before it reaches the processing plant, but are managing the commercial recycling and re-use of an array of non-mineral material that was formerly disposed to landfill.

Exemplifying our long term approach towards embedding the thinking around waste as a valuable resource across all the Group's activities is the 'zero waste to landfill' approach adopted by our PGMs business. Since 2013, PGMs has targeted both its hazardous and non-hazardous non-mineral waste for re-using or recycling. This includes all manner of 'waste', such as single-use plastics, chemicals containers, tins, glass, food and clothing, all of which have a value that can be recovered through recycling and re-use efforts. Some of these endeavours are substantial in scale, while others are quite small. Examples of best practice include:

- Unki's new biodigester plant is successfully transforming waste into a resource by generating biogas fuel from organic waste, which is used in its canteen for cooking purposes. This has inspired widespread uptake of this environmentally friendly waste-to-energy solution, within and outside the mine, replacing non-renewable and fossil sources of energy, such as liquefied natural gas
- Twickenham and Der Brochen have created jobs by donating bicycles with trailers to community members to collect waste for recycling purposes
- Mogalakwena is contributing to the circular economy by donating wooden pallets to local manufacturers, who re-use them to make furniture
- Mogalakwena has identified an opportunity to produce compost from materials generated at its sites. It also has a bioremediation facility that treats hydrocarbon contaminated soil that can subsequently be used for concurrent rehabilitation.

By putting in the work to understand the waste streams and quantities generated at each site, and to identify potential further value in 'waste' resources, PGMs has been able to set meaningful targets and monitor them. It has enabled the diversion of all non-mineral waste streams with re-use and/or recycled solutions – more than 82 in total – away from landfill, from 22,000 tonnes to landfill in 2013 to zero by end-2022.

semiconductors and hard disks. Iridium is also widely used as a chemical and electro-chemical catalyst, for instance in chloralkali electrodes. Being highly corrosion-resistant, it is also used to make crucibles, in which crystals for the electronics industry are grown.

We are committed to developing demand for PGMs and invest both directly and through AP Ventures, an independent venture capital fund with a mandate to invest in the development of new applications for the full suite of PGMs. We are also a major participant in the Platinum Guild International, which plays a key role in supporting and growing platinum jewellery demand.

Safety

PGMs tragically had one work related fatality at its managed operations in April 2022, when Boitshepo 'Julian' Sesinyi succumbed to complications from a serious spinal injury following a slip and fall incident while working on the ACP's acid absorption tower in November 2021. In line with reporting protocols, this fatality is retrospectively recorded for the 2021 reporting period. At our independently managed joint-operations, a fatality occurred in June when Phasoana Rheina Malatji was fatally injured after being struck by a tyre at Modikwa mine.

The TRIFR for PGMs' own-managed operations improved by 10% to 2.34 (2021: 2.60), with Amandelbult recording a stand-out 23% improvement. A human centric, data-driven, leading safety approach is being adopted across all sites, supported by technology. Process safety risk fundamentals are being fully integrated into all PGMs' operations.

Environmental performance

Total energy consumption decreased by 9% to 18.9 million GJ (2021: 20.8 million GJ) and GHG emissions decreased by 10% to 4.1 Mt CO_2e (2021: 4.5 Mt CO_2e), driven by lower electricity consumption owing to the extended Polokwane smelter shutdown, as well as an 8% reduction in energy intensity across all operations.

PGMs continues to invest in energy reduction and efficiency projects across all operations, switching to low carbon energy sources and renewable energy projects to transition the energy mix. PGMs will benefit from the Group's partnership with EDF Renewables, to develop a regional renewable energy ecosystem in South Africa. Large scale solar, wind and hydro-generation plants are currently at various stages of study and development for commercial roll-out.

Financial and operational review

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.

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

(1) Based on sold ounces (own mined and purchased concentrate). Excludes the impact of the sale of refined metal purchased from third parties.

Markets

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.

2022 results

	2022	2021
PGM production volume (koz)[(1)(2)]	**4,024**	4,299
PGM sales volume (koz)[(2)(3)]	**3,861**	5,214
Unit cost ($/PGM oz)[(2)(4)]	**937**	868
Group revenue – $m[(2)]	**10,096**	14,502
Underlying EBITDA – $m[(2)]	**4,417**	7,099
Mining EBITDA margin[(5)]	**54%**	62%
Processing and trading margin	**24%**	24%
Underlying EBIT – $m[(2)]	**4,052**	6,753
Capex – $m[(2)]	**1,017**	894
Attributable ROCE	**86%**	140%
Fatalities	**0**	1
TRIFR	**2.34**	2.60
Energy consumption – million GJ	**18.9**	20.8
GHG emissions – Mt CO_2 equivalent	**4.1**	4.5
Total water withdrawals – million m^3	**42.2**	42.6
Employee numbers	**32,100**	31,400

(1) Production reflects own-mined production and purchase of metal in concentrate. PGM volumes consists of 5E metals and gold.
(2) Results by asset can be found in the Summary by operation on pages 299–300.
(3) Sales volumes exclude the sale of refined metal purchased from third parties and toll material. PGMs is 5E metals and gold.
(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.

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.

Bulk Commodities

Our Bulk Commodities business comprises our iron ore and steelmaking coal assets, and our shareholding in Samancor's manganese assets.

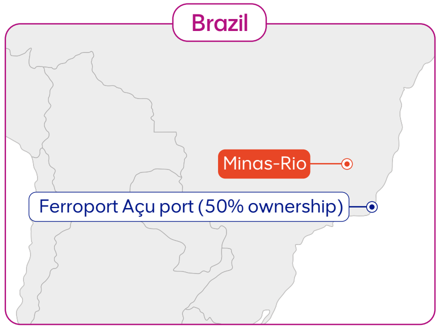
Anglo American's iron ore operations provide customers with high grade iron ore products which help our steel customers meet ever-tighter emissions standards. In South Africa, we own 70% of Kumba Iron Ore, while in Brazil we own the integrated Minas-Rio operation.

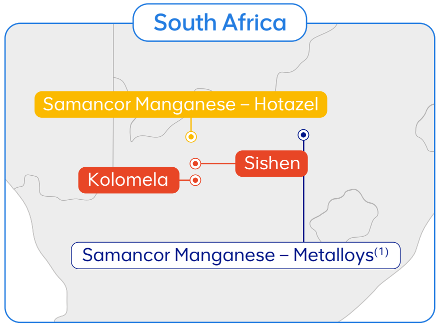
Our high quality steelmaking coal assets, located in Australia, produce premium quality hard coking coal for our customers in the steelmaking industry.

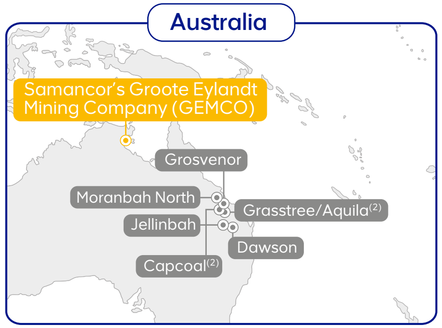
In Manganese, we have a 40% shareholding in the Samancor joint venture (managed by South32, which holds 60%). The manganese operations are located in South Africa and Australia, producing ore products for the steel industry.

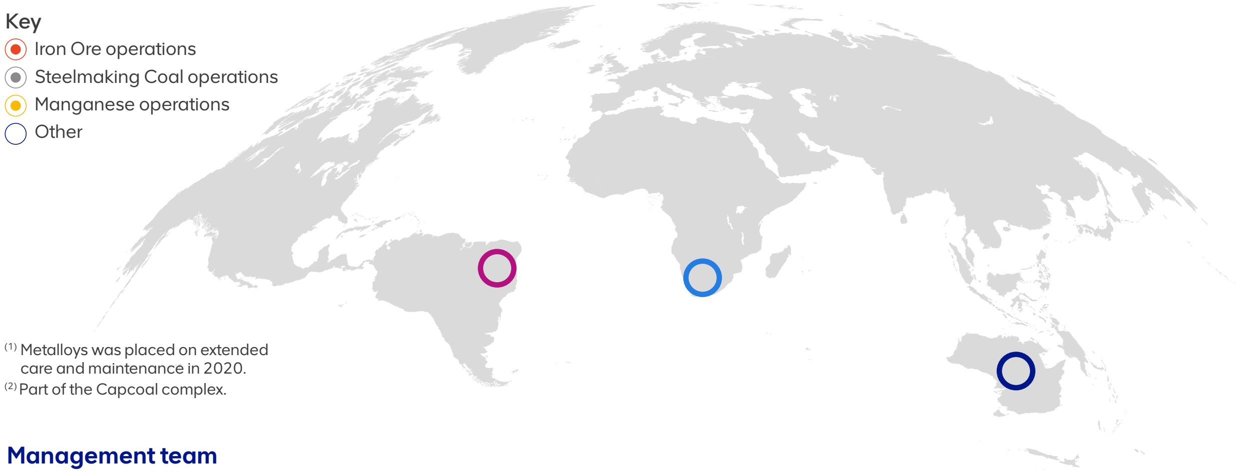
Steel is the world's most important engineering and construction material. Over half of the world's steel is consumed by the construction industry, which includes buildings and infrastructure, such as railways and roads. Steel is also used to manufacture vehicles, machinery, household appliances and many other items associated with everyday life.

The world's largest steel-producing country is China, making it easily the biggest importer of iron ore.









(1) Metalloys was placed on extended care and maintenance in 2020.
(2) Part of the Capcoal complex.

Management team

Themba Mkhwanazi
CEO, Bulk Commodities

Bill Bruijn
CEO, Anglo American, Brazil

Daniel van der Westhuizen
CEO, Anglo American, Australia

Mpumi Zikalala
CEO, Kumba Iron Ore

Kumba Iron Ore

2022 summary – Kumba

0 Fatalities	1.55 TRIFR
$2,211 m Underlying EBITDA	
48% Mining EBITDA margin	37.7 Mt Production volume

Our business

Kumba operates two open pit mines – Sishen and Kolomela – both located in the Northern Cape of South Africa, producing high grade (63–65% average Fe content) and high quality lump ore and a fine ore. Around 67% of Kumba's production is lump, which commands a premium price, owing to its excellent physical strength and high iron content. Kumba is serviced by an 861 km rail line to the Atlantic coast at Saldanha Bay, managed by Transnet, the third-party rail and port operator.

Our Marketing teams work closely with our customers to blend and match our products with their needs – before shipment from Saldanha Bay to China, Japan, Europe, the Middle East and the Americas.

Case study

Field technician Johan Burden activates a blast movement monitor before inserting it into a drillhole to track the movement of the ore following a blast.

Shifting the focus from grade to value

Historically, the mining industry has focused principally on tonnes and grade in deciding what material is transported to processing plants. But using grade as the main measurement does not ensure we get the maximum value out of our mineral assets.

Across the Group, we are therefore applying value-based ore control (VBOC) to shift the focus from grade to delivering value. This enhances our understanding of the composition of every rock that journeys through the mining value chain. Consequently, we now have a more comprehensive picture of the characteristics of our orebodies and are better able to predict and extract the ore that will deliver the most value.

Using VBOC to deliver optimal value

To consistently deliver the high value, low-impurity iron ore products essential for cleaner steelmaking, we need detailed knowledge of the orebody to create comprehensive plans that are executed during mining to maximise value delivery. So, as a premium-quality iron ore producer, Kumba has implemented VBOC at Sishen and Kolomela, leveraging geo-metallurgical analysis, 3D modelling, physics engines, sensors and scanners to deliver a high-resolution, real-time picture of the ore body.

It's all about the data

Stuart MacGregor, Kumba's Head of Geosciences, observes: "Getting the most out of an orebody is all about the volume and quality of data. In the past, drilling was not optimised in terms of data collection and spatial coverage. Within the VBOC family of processes and technology, we now drill on a much closer spacing and collect information that allows us to better understand more characteristics of the orebodies, giving us far better resolution and the ability to interpret results with much greater accuracy, leading to more informed decision making.

"We have also co-ordinated another VBOC process with GPS systems and drone technology to determine the material shape and movement following blasting. All of this helps drastically reduce the amount of ore we lose to waste – from 8% to 4%. Over the past two years, this has delivered over $100 million in additional value at Sishen alone."

Broader benefits

VBOC can be applied right across the mining value chain from life of asset planning through resource modelling, short term mine planning, in-pit ore control, mining, processing and marketing.

Notably, a key benefit is the enhanced safety that the VBOC approach can bring. Through automation, improved blasting techniques and remote working, as well as introducing remote cameras, drones and robotics, employees no longer need to enter high risk areas when ore blocks are being mined.

2022 results – Kumba Iron Ore[1]

	2022	2021
Production volume (Mt)[2]	**37.7**	40.9
Sales volume (Mt)[2]	**36.7**	40.3
Unit cost ($/t)[3]	**40**	39
Group revenue – $m	**4,580**	6,958
Underlying EBITDA – $m	**2,211**	4,311
Mining EBITDA margin	**48%**	62%
Underlying EBIT – $m	**1,894**	3,960
Capex – $m	**674**	417
Attributable ROCE	**66%**	140%
Fatalities	**0**	0
TRIFR	**1.55**	0.80
Energy consumption – million GJ	**9.0**	8.7
GHG emissions – Mt CO_2 equivalent	**1.0**	1.0
Total water withdrawals – million m^3	**11.4**	11.2
Employee numbers	**6,700**	6,100

(1) Sales volumes and realised price differ to Kumba's stand-alone reported results due to sales to other Group companies.
(2) Production and sales volumes are reported as wet metric tonnes. The comparative has been restated as Kumba previously reported on a dry basis. Product is shipped with c.1.6% moisture from Kumba.
(3) Unit costs are reported on an FOB wet basis.

Safety
In 2022, Kumba's TRIFR increased to 1.55 (2021: 0.80); this, however, remained in line with the three-year average of 1.55. Kumba is reinvigorating its focus on safety through increased safety leadership visibility, high risk work verifications and other risk reduction initiatives.

The elimination of fatalities remains a key priority and Kumba has reached 99% compliance with critical control monitoring and high risk work verifications. The design and implementation of formal rhythms and routines are driving a sustained and structured safe way of work. Technology enhancements continue to play an important role in monitoring and managing safety behaviour.

Environmental performance
In 2022, Kumba's GHG emissions were in line with the prior year at 1.0 Mt CO_2e (2021: 1.0 Mt CO_2e) and energy consumption increased by 3% to 9.0 million GJ (2021: 8.7 million GJ). Despite an 8% decrease in production, energy consumption increased owing to changing mining conditions, mainly as a result of mining deeper pits.

Financial and operational review
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: 40.9 Mt), 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, also contributed to the decrease in production, as well as a 9% decrease in sales volumes to 36.7 Mt (2021: 40.3 Mt). 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.

Markets

	2022	2021
Average market price (Platts 62% Fe CFR China – $/tonne)	**120**	160
Average realised price (Kumba export – $/tonne) (FOB wet basis)	**113**	161

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.

Operational performance
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).

Operational outlook
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

2022 summary – Minas-Rio

0 Fatalities	1.60 TRIFR
$1,244 m Underlying EBITDA	
41% Mining EBITDA margin	21.6 Mt Production volume (wet basis)

Our business

Our integrated iron ore operation in Brazil, Minas-Rio, consists of an open pit mine and beneficiation plant, which produces a high grade (c.67% Fe) pellet feed product, with low levels of contaminants. The iron ore is then transported through a 529 km pipeline to the iron ore handling and shipping facilities at the port of Açu.

Case study

Since 2014, Anglo American has spent more than $11 million on the conservation and restoration of native forest in the Minas-Rio region.

Minas-Rio – conserving a precious resource

Our Minas-Rio mine is in the state of Minas Gerais, which is noted for its rich biodiversity hotspots and stunning array of fauna and flora species. It is situated in one of Brazil's priority conservation areas (the Buffer and Transition Zone of the Espinhaço Range Biosphere Reserve), which is a transition area between the Atlantic rainforest and Cerrado (Brazilian Savanna) biomes.

We are investing in biodiversity offsets at several sites in the region around Minas-Rio to combat ongoing deforestation. These offset sites cover more than 15,330 hectares, of which around 12,000 hectares are legally constituted forest and are managed directly by Anglo American. The remaining hectares will be donated to the Minas Gerais state government to help conserve protected land by creating a 'green buffer' that connects these areas.

Between 2014 and 2022, Anglo American made several substantial biodiversity investments, including $4.0 million dedicated to conservation of the 12,000 hectares of legally constituted forest, while $7.2 million was invested in the restoration of a further 1,500 hectares. And we have expended $4.4 million on monitoring fauna in the region.

We have also donated $5.1 million to the production of seedlings of native trees for reforestation of degraded areas. Minas-Rio's own seedlings nursery, located in Conceição do Mato Dentro, has already produced more than 350,000 seedlings.

Our biodiversity partnerships

Our conservation initiatives in Brazil are wide ranging and are increasingly integrated with the demands of host communities and the expectations of civil society more generally. They include building and maintaining a Science Centre and, on a wider canvas, partnerships with NGOs such as the World Wide Fund For Nature (WWF) and Fauna & Flora International for the restoration of wetlands, and with universities for scientific research, environmental education, and assessment of livelihood alternatives.

350,000
seedlings produced by Minas-Rio's own seedlings nursery

With Brazil continuing to lose vast tracts of rainforest every year, the country's major biodiversity initiative is the Amazon Protected Areas Program (ARPA), a federal government programme managed by Funbio, the Brazilian fund for diversity. Anglo American is the only corporate donor participating in the programme and has invested $5 million in ARPA, which aims to permanently protect 62.5 million hectares of the Amazon rainforest, along with Amazonia's fauna, by 2039.

2022 results – Minas-Rio

	2022	2021
Production volume (Mt)[1]	21.6	22.9
Sales volume (Mt)	21.3	23.0
Unit cost ($/t)	35	24
Group revenue – $m	2,954	4,146
Underlying EBITDA – $m	1,244	2,560
Mining EBITDA margin	41%	61%
Underlying EBIT – $m	1,068	2,399
Capex – $m	160	211
Attributable ROCE	18%	42%
Fatalities	0	0
TRIFR	1.60	2.24
Energy consumption – million GJ	5.1	5.1
GHG emissions – Mt CO_2 equivalent	0.2	0.3
Total water withdrawals – million m^3	41.4	32.2
Employee numbers	2,600	2,600

(1) Production is Mt (wet basis). Product is shipped with c.9% moisture.

Safety
Minas-Rio has not had a fatal incident since 2015. In 2022, the TRIFR decreased by 29% to 1.60 (2021: 2.24). Covid-19 protocols were carefully relaxed in line with vaccination progress and a reduction in the number of new cases. These changes enabled the resumption of face-to-face workforce training and engagement, along with other important actions to improve the quality of safety controls. The business has also placed a strong focus on improving safety culture and more effective planning through the integration of the Anglo American Operating Model and Operational Risk Management process. The Elimination of Fatalities programme continues to advance, particularly around actions to ensure its sustainability. The ongoing integration of contractors into the Anglo American Safety Management System remained a top priority in the year and will continue through 2023.

Environmental performance
In 2022, 100% of Minas-Rio's operational electricity requirements came from renewable energy sources (wind and solar), representing around 105,000 tonnes CO_2e of GHG emission savings in the year. Minas-Rio is continuing to examine the possibility of using hydro-treated vegetable oil (HVO) as an alternative to diesel fuel. HVO is a sustainable alternative to diesel, with the potential to reduce carbon emissions by up to 90%. A mixed forestry project is also under review to develop native and commercial forestry. Potentially this could generate 0.65 Mt CO_2e of carbon credits per year.

Financial and operational review
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

	2022	2021
Average market price (MB 66% Fe concentrate CFR – $/tonne)	145	185
Average realised price (Minas-Rio – $/tonne) (FOB wet basis)	108	150

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
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
Production guidance for 2023 is 22–24 Mt. 2023 unit cost guidance is c.$32/tonne.

Steelmaking Coal

2022 summary – Steelmaking Coal

1	5.63	$2,749 m	55%	15.0 Mt
Fatalitiy	TRIFR	Underlying EBITDA	Mining EBITDA margin	Production volume

Our business
We are the world's third largest exporter of steelmaking coal and our operations serve customers throughout Asia, Europe and South America. Our Tier 1 assets include the Moranbah and Grosvenor (both 88% ownership) steelmaking coal mines, located in Queensland, Australia.

Uses of steelmaking coal
Steelmaking coal is used principally in blast-furnace steelmaking production; around 70% of global steel output is produced using this method and, currently, there are no viable at scale substitutes for metallurgical coal in the steelmaking process.

Emerging markets, particularly in the Asia-Pacific region, continue to drive demand for steelmaking coal – helping to generate the steel needed for infrastructure, housing, transport and machinery.

Safety
Regrettably, during 2022, our Steelmaking Coal business recorded one loss of life when Gavin Feltwell, an underground services contractor, was fatally injured during a lifting operation underground. Steelmaking Coal's TRIFR increased by 37% to 5.63 (2021: 4.12).

Steelmaking Coal launched a safety transformation programme, designed to support a step-change in safety performance by focusing on four critical areas: Safety Leadership Practices (SLP) and culture; the Anglo American Operating Model; risk management, and people and organisation. The programme has started to support an improvement in safety and operational stability in our operations.

Steelmaking Coal is also the first Anglo American business to implement the Group's SLP Live approach and recently completed the onboarding and training of dedicated coaches to each site. Their focus is to work closely with site teams to transform safety culture and effectively embed SLP Live.

Throughout the year, Steelmaking Coal has had a renewed focus on learning from incidents to identify the human factors involved to understand underlying behaviours and causes. High potential incidents that have occurred in the business are reviewed and discussed in our ongoing endeavour to prevent repeats.

Case study

Coal technician John Taylor is one of several colleagues who have benefited from Heart of Australia.

Supporting health services in rural Queensland

Anglo American has a long history of helping to uplift regional economies in the countries where it operates. Over the years, we have made particularly telling interventions in the health arena – from our first-mover initiatives in managing HIV/AIDS to our extensive support for our workforce and to host communities during the Covid-19 pandemic. And, today, we have an ongoing focus on boosting health systems, particularly in more remote areas, which generally have poorer healthcare services and medical facilities, but where we are often able to leverage our strength as a major regional development player.

But even in a developed country like Australia, rural communities face challenges in accessing quality healthcare systems when they are most needed. To help address this, in 2014, Dr Rolf Gomes, a cardiologist, founded Heart of Australia, the first mobile medical programme to deliver frontline specialist services to Queensland's remote communities.

Heart of Australia's innovative approach involves taking specialist medical services to rural Queenslanders using a fleet of 5 now-familiar road-train customised clinics on wheels, known affectionately as Heart Trucks, specifically aimed at helping those whose lives are threatened by Australia's great distances. Every month, each community covered by the programme is visited by a Heart Truck that serves as a medical investigation and treatment clinic to the community. The onboard specialist medical services include cardiology, neurology, gastro-enterology, urology, endocrinology, and sleep and respiratory functions – and, most recently, gynaecology.

Asked to assess Heart of Australia's overall impact, Dr Gomes observes: "The programme is making a real difference – we have attended to more than 15,000 patients and potentially helped save over 600 lives – while our mobile clinics serve 40 communities and have saved patients around 33 million kilometres in travel since 2014. But we would not have been able to go as far as we have without the support of the Queensland government and, since 2019, Anglo American. I am thrilled that Anglo American has provided more than AUD1 million (c.$650,000) in support through our partnership. This buttresses our big-picture efforts while also providing direct services for the first time to the Moura, Banana, Theodore and Middlemount communities – and it will save even more lives."

Environmental performance

GHG emissions decreased by 10% to 5.8 Mt CO_2e (2021: 6.4 Mt CO_2e), primarily due to the closure of Grasstree and subsequent move to production from Aquila, as well as a decrease in emissions at Moranbah due to lower production and reduced venting.

Energy use decreased by 1% to 9.2 million GJ (2021: 9.3 million GJ), primarily as a result of lower output at Moranbah and Grosvenor mines. In November 2022, Steelmaking Coal announced the sourcing of the supply of 100% renewable electricity for all our operations in Australia from 2025, agreeing terms for a 10-year partnership with Stanwell Corporation, the Queensland government-owned provider of electricity and energy solutions.

The deal will effectively remove all Scope 2 emissions from our Steelmaking Coal business, supporting our progress towards carbon neutral operations by 2040.

Financial and operational review

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.

2022 results – Steelmaking Coal

	2022	2021
Production volume (Mt)[(1)]	**15.0**	14.9
Sales volume (Mt)[(2)]	**14.7**	14.1
Price ($/t)[(3)]	**304**	200
Unit cost ($/t)[(4)]	**107**	105
Group revenue – $m	**5,034**	2,899
Underlying EBITDA – $m	**2,749**	962
Mining EBITDA margin	**55%**	33%
Underlying EBIT – $m	**2,369**	450
Capex – $m	**648**	649
Attributable ROCE	**85%**	15%
Fatalities	**1**	0
TRIFR	**5.63**	4.12
Energy consumption – million GJ	**9.2**	9.3
GHG emissions – Mt CO_2 equivalent	**5.8**	6.4
Total water withdrawals – million m^3	**31.8**	20.9
Employee numbers	**2,000**	1,900

(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.

Markets

	2022	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

2022 summary

$378 m	45%	3.7 Mt
Underlying EBITDA	Mining EBITDA margin	Production volume – ore

Uses of manganese

The most significant use of manganese is steel production, which consumes more than 85% of all manganese mined. The ore is particularly useful in increasing steel's resistance to oxidation; it can also improve the overall strength, durability and workability of the material.

85%
of all manganese mined is consumed through steel production

2022 results – Manganese

	2022	2021
Production volume (Mt)	**3.7**	3.7
Sales volume (Mt)	**3.6**	3.7
Group revenue – $m	**840**	768
Underlying EBITDA – $m	**378**	315
Mining EBITDA margin	**45%**	41%
Underlying EBIT – $m	**312**	250
ROCE	**138%**	104%

Financial and operational review

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.

Markets

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

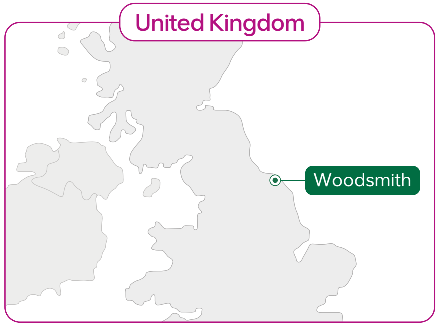
Attributable manganese ore production was flat at 3.7 Mt (2021: 3.7 Mt).

Crop Nutrients

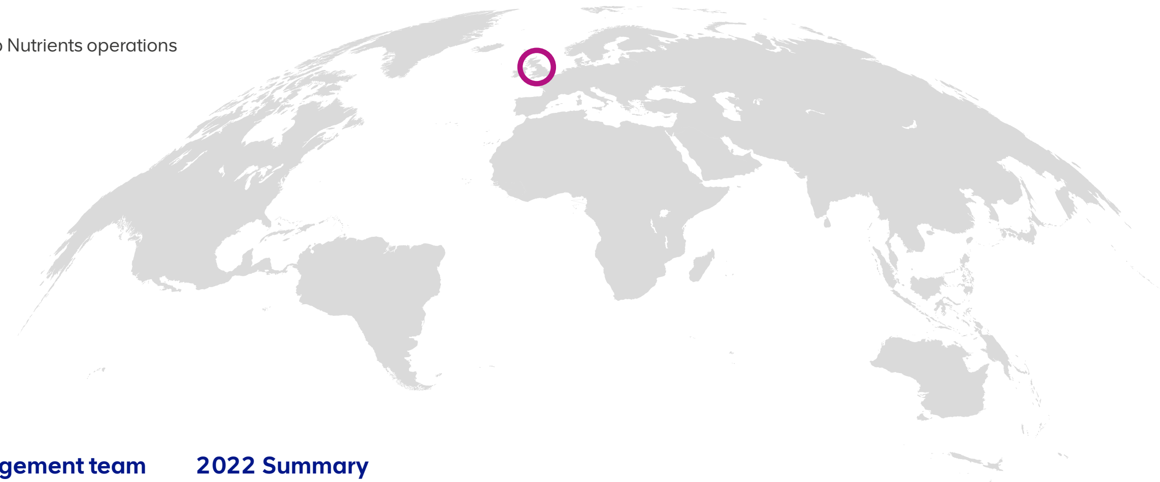
Anglo American is developing the Woodsmith project in the north east of England to access the world's largest known deposit of polyhalite, a natural mineral fertiliser product containing potassium, sulphur, magnesium and calcium – four of the six nutrients that every plant needs to grow.

Crop Nutrients
As a result of the highly efficient mine and conveyor design and the minimal processing requirements of the polyhalite ore, our POLY4 product will benefit from a very low carbon footprint, as well as being suitable for organic use.

Aside from the world class nature of the orebody and the quality of the operation we are developing, the addition of POLY4 to our product range aligns well with our portfolio trajectory towards those products that support a low carbon economy and global consumer demand – in this case, for food.



Key
Crop Nutrients operations



Management team

Tom McCulley
CEO, Crop Nutrients

2022 Summary

0	1.90	$(44)m
Fatalities	TRIFR	Underlying EBITDA

Woodsmith project

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.

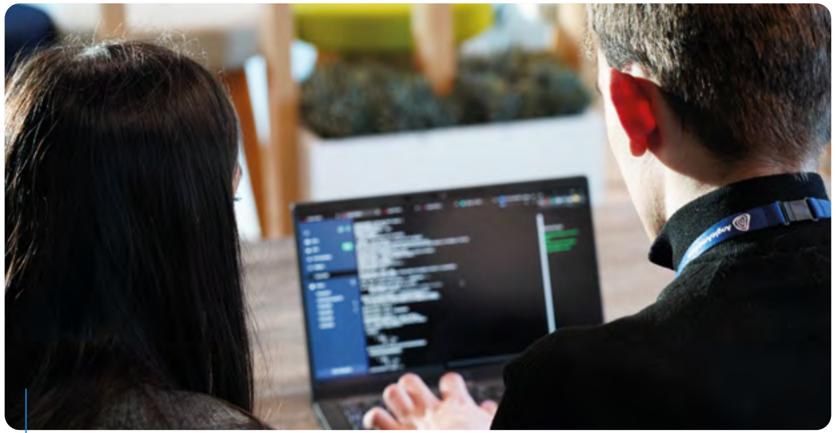
Throughout 2022, we continued with the detailed design reviews and non-critical path studies, following which a number of areas were modified to align with Anglo American's standards and optimise value for the long term. Progress has continued to plan on the core project infrastructure, with capital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

Case study



Our Crop Nutrients business is encouraging schoolchildren to look at cyber security as a possible career and has pioneered a cyber security programme for apprentices from the local area.

Playing our part in regenerating the North East's economy

We are developing the Woodsmith mine in north-east England, a part of the country that suffers from high unemployment and limited employment opportunities – making it difficult to keep talented young people within the region.

The Woodsmith project will create significant employment opportunities, but our wider aim is to be a central part of a community endeavour to diversify and regenerate the local economy. We call this our Thriving Communities Programme, in support of the Group's Sustainable Mining Plan. Recently, we launched a regional programme, as part of our Collaborative Regional Development plan, to work with local people, businesses and organisations to create jobs and a local-talent pipeline.

Our involvement in cyber security

Anglo American has identified the potential to grow a cyber security cluster in the area around the Woodsmith site, and we are determined to enhance the region's standing in the field of cyber security, one of the fastest growing areas of the technology sector. The region has some distinct advantages. Most notably, GCHQ, the UK's intelligence, security and cyber agency, has a satellite ground station near Scarborough, about 30 km from Woodsmith.

Over the past few years, our Crop Nutrients business has been supporting GCHQ's National Cyber Security Centre (NCSC), including collaborating with the NCSC to open the world of cyber security to schoolchildren and young people. Complementing this initiative, in November 2021, Coventry University Scarborough hosted a Cyberfirst course, funded by Anglo American, which engaged nearly 400 secondary school students in cyber security.

But a step-change in scale is needed to give cyber security due recognition. So, Anglo American has worked with key stakeholders, including GCHQ, Coventry University Scarborough, Scarborough Borough Council, and an innovation company, Plexal, to create a Cyber Security Steering Group. The Steering Group is working to ensure cyber security is on the curriculum at schools, colleges and universities, and that it is recognised as a Level 4 qualification in the government's apprenticeship scheme.

Beyond this, the Steering Group has set its sights on accelerating cyber security growth through creating a regional Cyber Security Cluster to work alongside the seven such clusters already operating across the UK. Collaboration began in June 2021 – and, again, this is being underpinned by GCHQ, whose national reach meant the initiative was able to engage with, and get direct support from, central government at an early stage. This alliance has already led to significant buy-in at a regional level too, with cyber security's inclusion as a priority in the central government's recently signed devolution deal with York and North Yorkshire.

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.

Safety

The Woodsmith project recorded zero fatalities (2021: zero) and a TRIFR of 1.90 (2021: 2.59).

Environmental performance

Across the Woodsmith project, energy use was marginally lower than the prior year at 0.1 million GJ (2021: 0.2 million GJ). GHG emissions were in line with the prior year. The percentage contribution of renewable energy to overall electricity use decreased to 34% (2021: 37%), owing to a change in the fuel mix of the energy supplier at one of the Woodsmith sites.

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 improves 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.

2022 results – Crop Nutrients

	2022	2021
Group revenue – $m[1]	**254**	114
Underlying EBITDA – $m[1]	**(44)**	(41)
Capex – $m	**522**	530
Fatalities	**0**	0
TRIFR	**1.90**	2.59
Energy consumption – million GJ	**0.1**	0.2
GHG emissions – Mt CO_2 equivalent	**0.0**	0.0
Total water withdrawals – million m^3	**0.1**	0.1
Employee numbers	**500**	600

[1] Includes results from the interest in The Cibra Group, a fertiliser distributor based in Brazil.

Corporate and other

	Production volume[1]	Sales volume[2]	Price[3]	Unit cost[4]	Group revenue◊ $m	Underlying EBITDA◊ $m	Underlying EBIT◊ $m	Capex◊ $m
Segment total	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 energy solutions marketing 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 sales 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.

Non-financial information disclosures and footnotes

Non-financial information

Reporting requirement	Policies and standards	Outcomes and additional information	Page reference
Environmental matters	Safety, Health and Environment (SHE) Way and Policy	Protecting our natural environment	49
	Climate Change Policy	Disclosures related to the recommendations of the TCFD	114–119
	Energy and GHG Emissions Standard	Climate change	45–49
	Water Policy and Water Management Standard	Water	50
	Mineral Residue Technical Management Standard	Mineral residue management	51
Employees	Code of Conduct	Building a purpose-led culture	63
	SHE Way and Policy	Safety	58
	HIV/AIDS Policy	Health	58
Human rights	Human Rights Policy	Human rights	53
Social matters	The Social Way 3.0	Social performance	51
	Responsible Sourcing Standard for Suppliers	Supply chain	54
	Supply Chain Local Procurement Policy	Supply chain	54
Anti-corruption and anti-bribery	Code of Conduct	Building a purpose-led culture	63
	Business Integrity Policy	Business integrity	63
Principal risks and impact of business activity		Our business model	8
		Our material matters	20–21
		Managing risk effectively	67–73
Non-financial KPIs		Key performance indicators	74–77

Footnotes

[1] Throughout this Strategic Report, 'employees' is the average number of Group employees, excluding employees of contractors, associates and joint ventures, and including a proportionate share, based on the percentage shareholding, of employees within joint operations.

[2] Wages and benefits are the payments made to the Group's employees, excluding employees of contractors, associates and joint ventures, and including a proportionate share, based on the percentage shareholding, of payments made to employees within joint operations. Includes social security costs of $193 million borne by the Group which are also included in the Taxes and royalties figure.

[3] Taxes and royalties include all taxes and royalties both borne and taxes collected by the Group. This includes corporate income taxes, withholding taxes, mining taxes 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.

[4] Local procurement is defined as in-country procurement and includes local procurement expenditure from the Group's subsidiaries and a proportionate share of the Group's joint operations, based on shareholding.

[5] With the exception of Gahcho Kué, which is on an attributable 51% basis.

[6] Copper equivalent volume growth from 2022 baseline, pre the commissioning of Quellaveco.

[7] 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.

[8] Data relates to subsidiaries and joint operations over which Anglo American has management control. Data excludes De Beers' joint operations in Namibia and Botswana. Historical GHG, energy consumption and fresh water withdrawals data has been adjusted to exclude Thermal Coal South Africa, which was demerged in June 2021.

[9] In 2020, we launched a new integrated social performance management system (Social Way 3.0) which has raised performance expectations and has resulted in continued improvement in our social performance. 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.

[10] Anglo American supports jobs through training, mentoring and capacity development. The number of jobs supported includes existing jobs (in activities supported by the intervention) and newly created jobs through the programmes. Jobs supported are measured as full time equivalent jobs. Data represents jobs supported since 2018, in line with the Sustainable Mining Plan Livelihoods stretch goal. Induced jobs – employment generated by local spending on goods and services by our employees and the employees of our suppliers – are estimated using input-output analysis, a well-established economic modelling approach.

[11] Attributable free cash flow includes expenditure on non-current intangible assets (excluding goodwill).

[12] 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.

Disclosures related to the recommendations of the TCFD

Anglo American's response to climate change is multi-disciplinary and is detailed throughout our reporting suite – including the Integrated Annual Report and our Climate Change Report. In line with the UK Listing Rules, we confirm that the disclosures included in the Integrated Annual Report 2022, the Climate Change Report 2022 and Climate Change Report 2021 are consistent with the TCFD Recommendations and Recommended Disclosures, as well as the TCFD's supplementary guidance for non-financial groups.

While we endeavour to include as much information as possible on our approach to climate change in the Integrated Annual Report, our Climate Change Report offers more comprehensive disclosure, including more detail on physical and adaptation risk and the pathway to achieving our Scope 3 GHG reduction ambition. We have not repeated our detailed scenario analysis in 2022, although we expect to do so in 2023; therefore, information on the assumptions used in our most recent scenario analysis can be found in our Climate Change Report 2021. As such, references in the table below include the Integrated Annual Report 2022, Climate Change Report 2022, and our Climate Change Report 2021, all of which are available on our website.

— For more on our Climate Change Report 2022, see **www.angloamerican.com/climate-change-2022**

— For more on our Climate Change Report 2021, see **www.angloamerican.com/climate-change-2021**

The table below offers guidance on where to find information relating to each of the TCFD's recommendations.

Governance

Disclose the organisation's governance around climate-related risks and opportunities.

Recommended disclosures	References
a) Describe the Board's oversight of climate-related risks and opportunities.	**Summary**: The Board provides leadership to the Group and is collectively responsible for promoting and safeguarding the long term success of the business, including the resilience of the business to, and the opportunities that flow from, climate change. The Board focuses on workstreams that underpin our 2040 carbon neutrality targets and considers global trends that may have a consequence on the Group's strategy, including climate change. The Board delegates powers and oversight of climate-related considerations to its various committees, including its Sustainability Committee, which oversees material policies, processes and strategy designed to manage climate-related risks and opportunities. **Integrated Annual Report 2022**: Page 14 describes the insights the Board considers when reviewing and endorsing the Group's long term strategy and related decisions. Climate change considerations are included within the material matters (pages 20–21), our analysis of global trends (pages 22–24), our capital allocation decisions (pages 64–66) and within our principal risks – specifically risks 9 and 12 (pages 69–73). Pages 26–27 show the key decisions made by the Board that will help Anglo American achieve its climate change targets and ambitions. Page 49 describes our policies and governance processes related to climate change. Page 135 describes the discussions and decisions taken by the Board in the year that relate to climate change. **Climate Change Report 2022**: Pages 35–37 describe the Board's climate change capability and give detail on the Group's climate-related governance, oversight and management structure.
b) Describe management's role in assessing and managing climate-related risks and opportunities.	**Summary**: Anglo American has a Climate Change Steering Committee, which is chaired by the Group Head of Strategy, and includes the Head of Carbon Neutrality; Head of Sustainable Development; the Head of Corporate Finance; Head of International, Government and Sustainability Relations; and the Head of the Chief Executive's Office. The Climate Change Steering Committee draws together all the climate-related workstreams across the Group and regularly reports into the Group Management Committee (GMC). The Chief Executive, with the support of the GMC, is accountable for aligning our business practices with our climate change commitments and ambitions. **Integrated Annual Report 2022**: Page 14 describes the insights the Chief Executive and senior management take into account when formulating the Group's long term strategy. Climate change considerations are included within the material matters (pages 20–21), our analysis of global trends (pages 22–24), our capital allocation decisions (pages 64–66) and within our principal risks (pages 69–73). Page 49 describes our policies and governance processes related to climate change, including climate-related targets within executive remuneration. Page 185 of the Remuneration report details progress against climate-related targets and the impact on executive remuneration in the year. **Climate Change Report 2022**: Pages 35–37 describe the Board's climate change capability and give detail on the Group's climate-related governance, oversight and management structure, including the role of the Group's Climate Change Steering Committee and the GMC. Page 35 identifies management responsible for the oversight and delivery of the Group's climate change goals and ambitions.

Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning where such information is material.

Recommended disclosures	References
a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term.	**Summary:** Climate change has the potential for significant long term impact on our world and on our industry. We expect climate change to impact the mining industry through both risks and opportunities in two broad areas: Transition impacts – the potential impact on demand for different products, given assumptions on regulatory, technological and behavioural changes in the transition to a low carbon economy; and Adaptation impacts – the potential impact on our operations and surrounding communities from both acute extreme weather events and chronic shifts in climate patterns. **Integrated Annual Report 2022**: Page 46 describes the potential impacts of climate change on both Anglo American and the mining industry, as well as the opportunities the Group believes it can realise through its strategic choices. Pages 28–35 and page 46 describe the Group's portfolio strategy and evolution and how that has been influenced by the threat of climate change. Pages 40–41 describe the technological innovations being delivered across the Group to reduce energy and water consumption and pages 43–44 describe the efforts of our Marketing business to deliver products that help enable our customers to achieve their climate change ambitions. Pages 45–49 explain our approach to managing transition and adaptation risks related to climate change. The principal risks related to climate change and water are described on pages 72–73. **Climate Change Report 2022**: Pages 15–18 describe the transitional impacts we believe climate change will have on our business, including the short, medium and long term risks and opportunities related to each of the products and commodities we produce. Pages 19–22 have more detail on the physical and adaptation climate risks facing our operations and host communities in the short, medium and long term, and our approach to them.
b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.	**Summary:** Anglo American's strategy seeks opportunities in the metal and mineral needs of the future, including, critically, the impacts of climate change and the energy transition. The resilience of our portfolio to a changing climate also forms a key part of the Group' s strategy. We draw on multiple sources to judge the contribution that individual assets would make to the portfolio under different climate scenarios and, amongst other things, this informs the way that we allocate capital. **Integrated Annual Report 2022**: Pages 28–35 and page 46 describe the Group's portfolio strategy and evolution and how that has been influenced by climate change. Pages 40–41 describe the technological innovations being delivered across the Group to reduce energy and water consumption and pages 43–44 describe the efforts of our Marketing business to deliver products that help enable our customers to achieve their climate change ambitions. Page 46 gives more detail on our strategy to deliver a future-enabling portfolio, and pages 46–47 describe our approach to capital allocation to achieve our carbon reduction targets, including the carbon pricing we use when appraising investment decisions. Pages 45–46 describe our approach to transition risk and explain how we believe Anglo American will remain resilient in a 1.5°C future. Pages 64–66 describe how broader sustainability considerations, including climate change, are embedded in our capital allocation decisions. **Climate Change Report 2022:** Page 15 explains the strategic principles that guide our portfolio choices and how we assess the resilience of our portfolio in a 1.5°C world. Page 17 gives further details on the role we believe our products have to play in a low carbon future, including the risks and opportunities related to each of the products and commodities we produce as we make that transition. Pages 19–22 describe our approach to adaptation and physical resilience in the face of a changing climate.

c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	**Summary:** Anglo American's strategy seeks opportunities in the metal and mineral needs of the future, including, critically, the impacts of climate change and the energy transition. The resilience of our portfolio to a changing climate also forms a key part of the Group's strategy. We draw on multiple sources to judge the contribution that individual assets would make to the portfolio under different climate scenarios and, amongst other things, this informs the way that we allocate capital. **Integrated Annual Report 2022:** Pages 28–35 and page 46 describe the Group's portfolio strategy and evolution and how that has been influenced by climate change. Pages 40–41 describe the technological innovations being delivered across the Group to reduce energy and water consumption, and pages 43–44 describe the efforts of our Marketing business to deliver products that help enable our customers to achieve their climate change ambitions. Page 46 gives more detail on our strategy to deliver a future-enabling portfolio and Page 65 describes our approach to capital allocation to achieve our carbon reduction targets, including the carbon pricing we use when appraising investment decisions. Pages 45–46 describe our approach to transition risk and explain how we believe Anglo American will remain resilient in a 1.5˚C future. Pages 64–66 describe how broader sustainability considerations, including climate change, are embedded in our capital allocation decisions. **Climate Change Report 2021**: Pages 15-19 give a detailed overview of Anglo American's strategic and financial resilience to a 3°C, 2°C and 1.5°C scenario, including potential impacts on cash flow (upside and downside). **Climate Change Report 2022:** Page 15 explains the strategic principles that guide our portfolio choices and how we assess the resilience of our portfolio in a 1.5˚C world. Page 17 gives further details on the role we believe our products have to play in a low carbon future, including the risks and opportunities related to each of the products and commodities we produce as we make that transition. Pages 19–22 describe our approach to adaptation and physical resilience in the face of a changing climate.

Risk management
Disclose how the organisation identifies, assesses and manages climate-related risks.

Recommended disclosures	References
a) Describe the organisation's processes for identifying and assessing climate-related risks.	**Summary**: Our risk management processes embed climate change in the understanding, identification and mitigation of risk. **Integrated Annual Report 2022:** Pages 45–46 describe our approach to climate-related risk, including both transition and physical risks. Pages 67–73 describe the Group's risk identification process and has more detail on climate change and water, both considered principal risks. **Climate Change Report 2022**: Page 14 describes our understanding, assessment and management of climate-related risks.
b) Describe the organisation's processes for managing climate-related risks.	**Summary:** Our risk management processes embed climate change in the understanding, identification and mitigation of risk. We use two key processes to guide how we manage physical climate change risks – our Operational Risk Management (ORM) programme for mining operations, and the Investment Development Model (IDM) for projects. **Integrated Annual Report 2022**: Pages 45–46 describe our approach to climate-related risk, including both transition and physical risks. Pages 69–73 describe the Group's principal risks and have more detail on climate change and water, and how we manage and mitigate those risks. Our Portfolio (pages 28–35) and Innovation (pages 36–55) sections of this report provide detail on the strategic portfolio choices we have made and the technological innovations we are delivering across the Group to reduce energy and water consumption and mitigate the impacts of climate change. **Climate Change Report 2022**: Page 14 describes our understanding, assessment and management of climate-related risks. Page 35 identifies management responsible for the oversight and delivery of the Group's climate change goals and ambitions, and pages 35–36 give details on the governance and management structure, including the role of the Group's Climate Change Steering Committee and the GMC. Pages 23–26 describe how we plan to decarbonise our operations, pages 27–31 explain the pathway to decarbonising our value chains and pages 15–22 demonstrate our approach to managing physical and transition risk.
c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management.	**Summary**: Our risk management processes embed climate change in the understanding, identification and mitigation of risk. We use two key processes to guide how we manage physical climate change risks – our Operational Risk Management (ORM) programme for mining operations, and the Investment Development Model (IDM) for projects. **Integrated Annual Report 2022**: Pages 45–46 describe our approach to climate-related risk, including both transition and physical risks, and provide an overview of how our ORM and IDM processes are embedded into our business planning. Pages 69–73 describe the Group's principal risks and have more detail on climate change and water, and how we manage and mitigate those risks. **Climate Change Report 2022**: Page 14 describes our understanding, assessment and management of climate-related risks, set within the context of the Group's wider risk identification process. Page 35 identifies management responsible for the oversight and delivery of the Group's climate change goals and ambitions, and pages 35–36 provide details on the governance and management structure, including the role of the Group's Climate Change Steering Committee and the GMC.

Metrics and targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

Recommended disclosures	References
a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	**Summary**: We use a range of metrics to assess climate-related risks and opportunities, including Scope 1, 2 and 3 GHG emissions, energy use and energy intensity per copper equivalent unit of production – a metric commonly used in the mining sector. Scope 3 emissions continue to be reported with a 12-month lag. This is due to the complexity involved in processing data at a granular level across our value chain, and continuous improvements to our extensive methodology. **Integrated Annual Report 2022**: Page 48 shows the metrics used by the Group when assessing climate-related risks and opportunities.
b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 GHG emissions and the related risks.	**Summary**: We use a range of metrics to assess climate-related risks and opportunities, including Scope 1, 2 and 3 GHG emissions, energy use and energy intensity per copper equivalent unit of production – a metric commonly used in the mining sector. Scope 3 emissions continue to be reported with a 12-month lag. This is due to the complexity involved in processing data at a granular level across our value chain, and continuous improvements to our extensive methodology. **Integrated Annual Report 2022**: Page 48 shows our Scope 1, 2 and 3 GHG emissions. Page 321 shows current and historical Scope 1 and 2 emissions by business unit. **Climate Change Report 2022**: Pages 23–26 show our Scope 1 and 2 GHG emissions and detail the ways in which we believe we will meet our GHG reduction targets. Pages 27–31 show our Scope 3 GHG emissions and explain the pathway to decarbonising our value chain so that we can meet our reduction ambition.
c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	**Summary**: We are targeting a 30% reduction in GHG emissions by 2030 on a 2016 baseline and have a goal to be carbon neutral across our operations for Scope 1 and 2 emissions by 2040. Our ambition is to reduce our Scope 3 footprint by 50% against a 2020 baseline by 2040. **Integrated Annual Report 2022**: Pages 47–49 describe our climate-related goals and ambitions. **Climate Change Report 2022**: Pages 23–26 show our Scope 1 and 2 GHG emissions and detail the ways in which we believe we will meet our GHG reduction targets. Pages 27–31 show our Scope 3 GHG emissions and explain the pathway to decarbonising our value chains so that we can meet our reduction ambition.

Streamlined energy and carbon reporting

	2022	2021	Commentary
Scope 1 emissions – Global	**8.3**	8.9	Measured in Mt CO_2e
Scope 2 emissions – Global	**5.0**	5.6	Measured in Mt CO_2e
Total Scopes 1 and 2 emissions – Global*	**13.3**	14.5	Measured in Mt CO_2e
Group emission intensity	**6.1**	6.7	Measured in tonnes CO_2e per tonne CuEq production
Scope 3 emissions – Global**	**n/a**	98.5	Measured in Mt CO_2e
Total Scopes 1 and 2 emissions from UK-based entities	**0.01**	0.01	Measured in Mt CO_2e
Energy use from UK-based entities	**90,903**	95,450	Measured in kWh
Energy use – Global***	**83**	84	Measured in million GJ

* 2021 Scope 1 and 2 emissions have been adjusted to remove emissions from Thermal Coal South Africa, which was demerged in June 2021.
** Scope 3 emissions for the year ended 31 December 2022 not available at time of publication. Scope 3 emissions continue to be reported with a 12-month lag. This is due to the complexity involved in processing data at a granular level across our value chain, and continuous improvements to our methodology.
*** Global energy use is presented in million GJ as this is the measurement the Group uses internally. The equivalent energy use figure in kWh is 22,977,777,778 (2021: 23,557,666,458 kWh).

Further information

Disclosure of our energy and Scope 1, 2 and 3 emission reduction targets can be found on page 48.

Disclosure of the principal energy efficiency initiatives deployed by the Group to meet those targets can be found on pages 48–49.

Methodologies used to calculate energy use and emissions data can be found on page 309.

Assurance of data

As a member of the International Council on Mining and Metals (ICMM), Anglo American is committed to obtaining specific assurance over specified assertions related to the Sustainability Report, including data related to GHG emissions and energy use.

IBIS ESG Consulting Africa (Pty) Ltd (IBIS) was commissioned by Anglo American to conduct an independent third-party assurance engagement in relation to its Sustainability Report for the year ended 31 December 2022. This data has been reproduced in the Anglo American plc Integrated Annual Report 2022.

See pages 93–94 of the Anglo American plc Sustainability Report 2022 for more details on the assurance process and conclusions.

— For more information, see our Sustainability Report 2022
www.angloamerican.com/sustainability-report-2022

Governance

This section of the Integrated Annual Report provides an overview of the means by which the Company is directed and controlled. The Board is there to support and challenge management and to ensure that we operate in a manner that promotes the long term success of Anglo American. In this section we describe the ways in which we seek to achieve this.

Contents

The Governance section and Financial Statements form part of the Anglo American plc Integrated Annual Report for the year ended 31 December 2022 and should be read in conjunction with the Strategic Report of the Integrated Annual Report.

Chairman's introduction

"We recognise and support the increasing focus on governance as part of shareholders' and society's analysis of companies' broader sustainability performance, helping build new levels of best practice and engender greater levels of trust between our Group and our wide range of stakeholders."

Board composition

As chairman, I believe a key aspect of my role is to seek continual improvement in both the composition and the performance of the Board. Our non-executive director appointments therefore reflect relevant expertise in many fields (such as mining, sustainability, technology) and also reflect the regional experience we need in geographies where we have significant operations, notably southern Africa, South America and Australia. These needs will continue to evolve as the business evolves.

There have been a number of changes to the composition of the Board in 2022, as part of its ongoing renewal process. In carrying out such ongoing Board refreshment, we strive to maintain the right balance of experience, skills, continuity and diversity required to sustain our success as we broaden our business from being a 'pure miner' towards being a materials solutions provider.

As we began the year, I was pleased to welcome Ian Tyler to the Board as a non-executive director and member of the Remuneration and Audit committees on 1 January 2022. Ian's wealth of boardroom experience spanning a number of industrial sectors, including as chair of audit and remuneration committees, and a distinguished executive career culminating as chief executive of Balfour Beatty plc, a global infrastructure business, provides us great breadth of insight.

Following the conclusion of our Annual General Meeting (AGM) in April 2022, Mark Cutifani stepped down as chief executive after nine years and was succeeded by Duncan Wanblad. Long-serving non-executive directors Anne Stevens and Byron Grote stepped down from the Board, 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.

In September 2022, Elisabeth Brinton stepped down from the Board and, in December, Tony O'Neill stepped down as technical director after serving on the Board for nearly eight years as an executive director.

On behalf of the Board, I would like to reiterate my thanks to all the directors who stepped down in 2022 for their commitment and extensive contributions to the Board and the committees on which they served.

The Board strongly supports the targets of the FTSE Women Leaders and Parker reviews on gender and ethnic diversity. At the beginning of 2022, females made up nearly 40% of the Board. Following Elisabeth's departure in September and Tony's retirement at the end of the year, at the date of this report, 33% of the nine Board directors are female, two are people of colour, and five different nationalities are represented, bringing experience from all of our major regions. The Nomination Committee is at an advanced stage in the process of recruiting an additional non-executive director with expertise and a deep understanding of sustainability in its broadest sense and who will further strengthen the Board's diversity.

Global Workforce Advisory Panel

To my mind, many company boards are not sufficiently connected with the people in the companies they govern – and that, as a consequence, mutual trust is something we can build on. This is one of the reasons why the Board enthusiastically embraces the board-workforce engagement recommendations contained in the UK Corporate Governance Code.

Anglo American's Global Workforce Advisory Panel (the Panel) currently comprises 11 employees drawn from across our business, and since April 2022 has been chaired by non-executive director Marcelo Bastos. To help facilitate the Board's oversight role in the evolution of the organisation's culture, the Panel enables the Board to better understand and take into account the views of the workforce, and how well the Group's desired culture, Purpose and Values are embedded. In November 2022, after having met virtually during the Covid-19 pandemic, the Panel was able to hold its first in-person sessions since 2019. I was delighted that Duncan Wanblad and myself were also able to engage directly with Panel members during these sessions. The Board and I continue to be pleased with the quality and the richness of the feedback we receive from the Panel and look forward to its continued insights.

— For more information on the Panel and the ways in which we currently engage with our workforce:
See pages 143-144

The operation of the Board in 2022

The Board has continued to operate effectively throughout 2022. I am pleased that in 2022 we were able to resume physical attendance for Board and committee meetings, albeit continuing to successfully utilise the virtual format of meetings to facilitate ongoing engagement between the Board, management and our colleagues.

I am a big believer in the importance of high quality onboarding, so that each new director gains a thorough understanding of the business to enable them to contribute meaningfully to Board discussions as quickly as possible. This process continued to take place, albeit virtually at times, during the Covid-19 pandemic. Each year, too, the Board undertakes a rigorous review of its effectiveness and performance, and that of its committees and individual directors, while at least every three years this is facilitated by an external third party. In 2022, our review was carried out internally. I am pleased to report that the overall conclusion of the internal review is that the Board and committees continue to be effective and function well.

I also consider director and Board site visits to be invaluable. They provide an opportunity for directors to learn more about the operations and understand the opportunities and challenges faced by the businesses in their local environments. Site visits are a key mechanism for the Board to directly engage with the workforce from a range of backgrounds and seniority, and also present opportunities to meet with local stakeholders and understand their interests and concerns first hand. I was therefore delighted that, in 2022, we were able to conduct two Board site visits, to our Mogalakwena PGMs mine in South Africa in June, and our new flagship Quellaveco copper mine in Peru in September.

The outcomes of our Board effectiveness review are described on pages 138–139 and our Board site visits are illustrated on pages 140–142.

Safety, health and environment (SHE) vice-president at Copper Peru, Maria Pia Garcia, with Stuart Chambers at our new Quellaveco copper mine during the Board's site visit in September 2022.

Committee governance

Starting on page 146, each Board committee chair presents a report on the activities of their committee during 2022. The effective and efficient operation of the committees and their interaction with the Board are vital to ensure that all matters receive the necessary attention in a timely manner. I am grateful to the members and the chairs of those committees in particular for their commitment and the work that they do throughout the year in this regard.

2023 Annual General Meeting

I was pleased that our 2022 AGM was held as a hybrid meeting for the first time, which afforded greater engagement opportunities with shareholders. Our 2023 AGM will again be held as a hybrid meeting and shareholders will be welcome to attend, vote, raise questions and be heard both physically in the room and via the virtual platform. The Board recognises the importance of the AGM as an opportunity for shareholders to engage with the Board and provide feedback.

I hope you find this report useful and informative. I look forward to engaging with as many of you as possible at our 2023 AGM, in person or virtually, and would encourage you to vote your shares even if you cannot attend in person, so that we gain a better understanding of the views of our shareholders as a whole.

Stuart Chambers
Chairman

Directors

Stuart Chambers
Chairman

N S

Qualifications: BSc (Applied Physics), PhD Business Administration, FIChemE
Appointed: 1 September 2017 and as Chairman on 1 November 2017

Skills and experience
Stuart contributes to Anglo American significant global executive and boardroom experience across the industrial, logistics and consumer sectors.

Stuart served as chairman of Travis Perkins plc from 2017 to 2021, and previously chaired ARM Holdings plc and Rexam plc until 2016. In his non-executive career, Stuart has served on the boards of Tesco PLC, Manchester Airport Group plc, Smiths Group plc and Associated British Ports Holdings plc. Stuart's executive career included 13 years at Pilkington plc and its subsequent parent company Nippon Sheet Glass until 2010, in a number of executive roles and ultimately as chief executive of both companies. Prior to that, he gained 10 years of sales and marketing experience at Mars Corporation, following 10 years at Shell as a chemical engineer.

Current external appointments
Member of the UK Takeover Panel, and a Visiting Fellow of Saïd Business School, Oxford University.

Nationality: British
Age: 66

Duncan Wanblad
Chief Executive

S

Qualifications: BSc (Eng) Mech, GDE (Eng Management)
Appointed: 19 April 2022 as Chief Executive

Skills and experience
Duncan brings to the Board 30 years of international mining experience and a deep understanding of the Anglo American Group, its culture and context.

Duncan is chairman of the Group Management Committee (GMC), chairman of De Beers, and a non-executive director of Anglo American Platinum and Kumba Iron Ore. From 2016 to April 2022, Duncan was Group Director – Strategy and Business Development, also serving as CEO of our Base Metals business from 2013 to 2019. Until April 2022, he chaired the Anglo American Foundation.

Between 2009 and 2013, Duncan held the position of Group Director – Other Mining and Industrial, responsible for a global portfolio of mining and industrial businesses for disposal or turnaround to maximise shareholder value. He was appointed CEO of our Copper operations in 2008, prior to which he served as joint interim CEO of Anglo American Platinum in 2007 (having served on the board since 2004). From 2004 to 2007, Duncan was Executive Director of Projects and Engineering at Anglo American Platinum. Duncan began his career at Johannesburg Consolidated Investment Company Limited in 1990.

Current external appointments
None

Nationality: South African
Age: 56

Stephen Pearce
Finance Director

Qualifications: BBus (Acc), FCA, FGIA FCG, MAICD
Appointed: 24 April 2017 as Finance Director

Skills and experience
Stephen contributes to Anglo American over 20 years of public company director experience and more than 30 years' experience in the mining, oil and gas, and utilities industries. His experience spans finance, capital markets and many of the operational and functional support areas of global mining companies and markets.

Stephen became a member of the GMC in January 2017 and joined the Board in April 2017. He is also a non-executive director of De Beers. Before joining Anglo American, Stephen served as CFO and an executive director of Fortescue Metals Group from 2010 to 2016. Prior to that, he held the positions of managing director and CEO of Southern Cross Electrical Engineering Ltd and was CFO of Alinta Ltd. Stephen previously served as a non-executive director of Cedar Woods Properties Ltd.

Current external appointments
Non-executive director of BAE Systems plc.

Nationality: Australian
Age: 58

Committee member key

Ⓐ Audit Committee
Ⓝ Nomination Committee
Ⓡ Remuneration Committee
Ⓢ Sustainability Committee
● Chair of Committee
○ Member of Committee

Ian Tyler

Senior Independent Director

Ⓡ Ⓐ Ⓝ

Qualifications: BCom, ACA
Appointed: 1 January 2022 and as Senior Independent Director on 19 April 2022

Skills and experience

Ian contributes to Anglo American a wealth of boardroom and financial experience spanning a number of industrial sectors, including as chair of remuneration and audit committees.

Until December 2022, Ian served as chairman of Amey. He has previously served as chairman of Vistry Group plc (formerly Bovis Homes Group) and Cairn Energy plc, and is a former non-executive director of BAE Systems plc, VT Group plc and Cable & Wireless Communications plc, amongst other non-executive board roles. Ian's senior executive career was at Balfour Beatty plc, a global infrastructure business, joining as finance director in 1996 and serving as chief executive from 2005 to 2013.

Current external appointments

Chairman of Affinity Water, a privately held business, and a non-executive director of Synthomer plc.

Nationality: British
Age: 62

Ian Ashby

Independent Non-executive Director

Ⓢ Ⓝ Ⓡ

Qualifications: B Eng (Mining)
Appointed: 25 July 2017

Skills and experience

Ian contributes to Anglo American substantial knowledge of the minerals industry across a wide range of commodities, combined with global operating, major projects and capital development experience.

Ian served as President of Iron Ore for BHP Billiton between 2006 and 2012, when he retired from the company. During his 25-year tenure with BHP Billiton, Ian held numerous roles in its iron ore, base metals and gold businesses in Australia, the US and Chile, as well as projects roles in the corporate office. He began his nearly 40-year mining career as an underground miner at the Mount Isa Mines base metals operations in Queensland, Australia.

Ian has previously served as chairman of Petropavlovsk plc, and a non-executive director of Alderon Iron Ore Corp, Nevsun Resources Ltd, New World Resources PLC and Genco Shipping & Trading, and in an advisory capacity with Apollo Global Management and Temasek.

Current external appointments

Independent director of IAMGOLD Corporation and Suncor Energy Inc.

Nationality: Australian
Age: 65

Marcelo Bastos

Independent Non-executive Director

Ⓝ Ⓢ

Qualifications: MBA, BSc (Hons) Mech Eng
Appointed: 1 April 2019

Skills and experience

Marcelo contributes to Anglo American more than 30 years of operational and project experience in the mining industry across numerous commodities and geographies, particularly in South America. He is designated by the Board to chair and engage with Anglo American's Global Workforce Advisory Panel.

Marcelo served as chief operating officer of MMG between 2011 and 2017, responsible for the group's copper, zinc, silver, lead and gold operations, and sales and marketing. In this role, he also led the planning and development of the Las Bambas copper mine in Peru. Prior to MMG, Marcelo served as president of the BHP Mitsubishi Alliance joint venture (metallurgical coal), president of BHP's Cerro Matoso nickel operation in Colombia, president of nickel Americas, and president of Nickel West in Australia. He had a 19-year career at Vale until 2004 in a range of senior positions in Brazil. Marcelo is a former non-executive director of Golder Associates and Oz Minerals Ltd.

Current external appointments

Non-executive director of Aurizon Holdings Ltd and Iluka Resources Ltd.

Nationality: Brazilian/Australian
Age: 60

Hilary Maxson
Independent Non-executive Director
Ⓐ Ⓝ

Qualifications: MBA, B.S. (Applied Economics & Management)
Appointed: 1 June 2021

Skills and experience
Hilary contributes to Anglo American experience in business, spanning finance, the capital markets, energy transition and technology, gained across her executive career in the US, Europe, Africa and Asia.

Hilary is CFO of Schneider Electric and a member of its executive committee, based in Paris. She previously served as CFO of their largest business unit, Energy Management, having joined the company in 2017 as CFO of the Building and IT business, situated in Hong Kong. Prior to joining Schneider Electric, Hilary spent 12 years with the AES Corporation in a variety of finance, M&A and business development roles, based across the US, Cameroon and the Philippines, ultimately as CFO for Asia. Hilary began her career at Bank of America and Citigroup, in New York.

Current external appointments
None

Nationality: American
Age: 44

Hixonia Nyasulu
Independent Non-executive Director
Ⓝ Ⓡ

Qualifications: BA Hons
Appointed: 1 November 2019

Skills and experience
Hixonia contributes to Anglo American significant global board experience drawn from the natural resources, financial services and consumer industries.

Hixonia has previously served as senior independent director of Vivo Energy plc, and as a non-executive director on the boards of Sasol, including five years as chairman, Nedbank, Unilever NV and Unilever plc. She has also served as a member of the South Africa advisory board of J.P. Morgan and on the board of the Development Bank of Southern Africa. In 2004, Hixonia founded Ayavuna Women's Investments (Pty) Ltd, a female-controlled investment holding company. Prior to that, she ran T.H. Nyasulu & Associates, a strategy, marketing and research company, after starting her career at Unilever in South Africa. Hixonia was a founder member of the Advisory Group formed by the World Economic Forum to set up a community of global chairs.

Current external appointments
A member of the board of AGRA, and chairs the Africa Economic Challenge Fund, both not-for-profit organisations.

Nationality: South African
Age: 68

Nonkululeko Nyembezi
Independent Non-executive Director
Ⓐ Ⓢ

Qualifications: MBA, MSc, BSc
Appointed: 1 January 2020

Skills and experience
Nonkululeko contributes to Anglo American great breadth of technical and strategic insights with a background in engineering and extensive experience spanning mining, steel, financial services and technology in South African and global organisations.

Until May 2022, Nonkululeko was chairman of JSE Limited. She was formerly CEO of Ichor Coal N.V., and has previously served as chairman of Alexander Forbes Group, as a non-executive director on the boards of Old Mutual plc, Exxaro Resources, Universal Coal plc and Denel, and as CEO of ArcelorMittal South Africa. In her earlier career, Nonkululeko was chief officer of M&A for the Vodacom group and chief executive officer of Alliance Capital, the then local subsidiary of a New York-based global investment management company.

Current external appointments
Chairman of Standard Bank Group, and chairs Macsteel Service Centres SA, a privately held business.

Nationality: South African
Age: 62

In addition, the following directors served during the year:

Mark Cutifani stepped down from the Board as Chief Executive on 19 April 2022 after nine years in the role.

Byron Grote stepped down from the Board as Senior Independent Director and chairman of the Audit Committee on 19 April 2022.

Anne Stevens stepped down from the Board as a non-executive director and chair of the Remuneration Committee on 19 April 2022.

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

Tony O'Neill stepped down from the Board as Technical Director on 31 December 2022, after more than nine years with Anglo American.

Board diversity: gender and ethnicity targets

The Board is committed to ensuring that it has the right balance of skills, experience and diversity, and reflects the global reach of the Group, its employees and major markets. The Board strongly supports the targets of the FTSE Women Leaders and Parker reviews on gender and ethnic diversity. In support of these aims, in leading search processes to appoint new directors, the Nomination Committee retains the services of executive search firms that are accredited under the UK Government's Voluntary Code of Conduct for Executive Search Firms.

At the date of this report, three (33%) of the nine directors are female and two (22%) are people of colour. Five different nationalities are represented, bringing experience from all of Anglo American's major regions. Over three-quarters of the Board have a nationality or place of origin outside the UK.

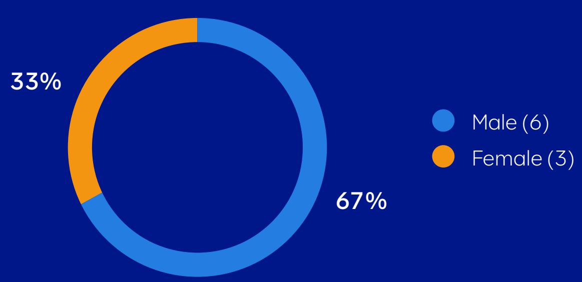
At the beginning of 2022, almost 40% of the Board were female, exceeding the prior gender diversity targets of the FTSE Women Leaders Review. During 2022, however, owing to fluctuations in the size and composition of the Board, the Board reduced in size and the female board target was not maintained throughout the year. The Nomination Committee commenced a process in 2022 to recruit an additional non-executive director, which will further strengthen the Board's diversity. We are confident that future appointments will, as a whole, continue to support the Board's diversity aims.

The diversity of our Board as at the date of this report is illustrated below.

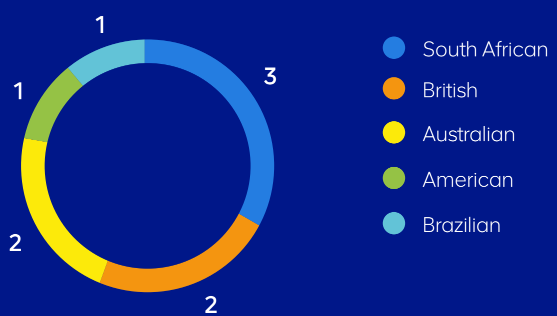
Board experience and diversity

The broad range of skills and experience and the diversity of our Board as at the date of this report are illustrated below.

Gender diversity

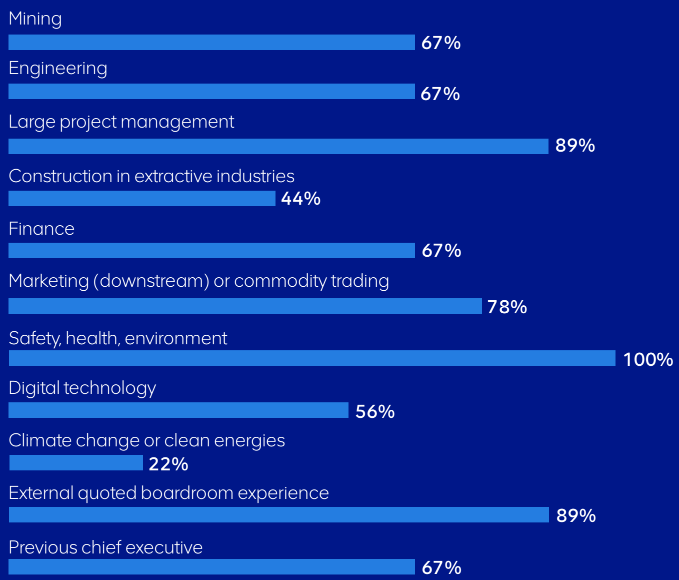


Board nationality or place of origin



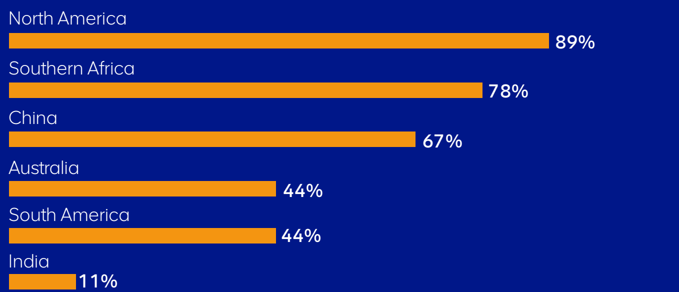
Professional experience

Percentage of Board members



Regional experience[1]

Percentage of Board members



[1] In the regions in which the Group operates or has major markets.

Executive management

Group Management Committee members

Duncan Wanblad
Chief Executive

Member since:
October 2009

Stephen Pearce
Finance Director

Member since;
January 2017

— For full biographical details of the executive directors:
See page 124

Didier Charreton
Group Director – People and Organisation

Qualifications: MSc
Member since: December 2015

Skills and experience
Didier joined Anglo American in December 2015. He has held a number of senior HR roles across his 30-year career. From 2007 until 2014, Didier was chief human resources officer for Baker Hughes, the US-based oilfield services company. Prior to 2007, he was HR director at Coats plc in the UK, and before that held a number of HR roles at Schlumberger, based in the US, Argentina, Venezuela and France.

Al Cook
CEO of De Beers Group

Qualifications: M.A. Hons (Natural Sciences)
Member since: February 2023

Skills and experience
Al joined Anglo American on 20 February 2023. Prior to joining the Group, he was executive vice president of exploration and production international for Equinor ASA, the Norway-based global energy company, with responsibility for operations in 12 countries across Africa, North America, South America and Europe.

Al previously held the role of executive vice president for global strategy and business development as Equinor created a net zero strategy and reshaped its portfolio for the energy transition. He joined Equinor after a 20-year career at BP that spanned a number of corporate, commercial, operational and major product development roles. Al is currently a trustee of The Power of Nutrition, an independent charitable foundation.

Matt Daley
Group Director – Technical

Qualifications: BEng (Mining) Hons, PgDip (Fin)
Member since: January 2023

Skills and experience
Matt leads the Safety, Discovery & Geosciences, Mining, Processing, Business Improvement, Asset Strategy & Reliability, Sustainable Development, Information Management, and Supply Chain disciplines.

Matt is a mining engineer with more than two decades of underground, open cut, smelting, refining, project and commodity trading experience. He has lived and worked in Australia, South America, North America, the UK and the Middle East. Prior to joining Anglo American in 2017 as Group Head of Mining, Matt was the executive general manager for Glencore Canada, based in Toronto, and served as a non-executive director on the board of PolyMet Mining. He has previously worked for Xstrata and Minera Alumbrera and started his career with Mount Isa Mines in Queensland, Australia.

Nolitha Fakude
Group Director – South Africa

Qualifications: BA (Hons)
Member since: September 2019

Skills and experience
Nolitha was appointed Group Director – South Africa in September 2019, and chairs Anglo American's South African management board. She is a non-executive director of Anglo American Platinum. From April 2017 to August 2019, Nolitha was an independent non-executive director on the Board of Anglo American plc.

A former executive director and executive vice president of strategy and sustainability at Sasol Limited until 2016, Nolitha has held various other senior executive positions in retail and financial services. She has previously served on boards as a non-executive director in the mining, manufacturing and retail sectors. Nolitha is currently a non-executive director of JSE Limited and is the President of the Minerals Council of South Africa.

Ruben Fernandes
CEO of Base Metals

Qualifications: MBA, MSc (Metallurgical Engineering)
Member since: March 2019

Skills and experience
Ruben was appointed CEO of Base Metals in 2019 and, in 2022, took on accountability for the Group's iron ore and nickel operations in Brazil.

Ruben previously served as CEO of Anglo American Brazil. Prior to joining the Group in 2012, he was head of mining at Votorantim Metals in Brazil, responsible for projects and exploration activities around the world, as well as operations in Peru and Colombia. Between 2009 and 2011, he was COO at Vale Fertilizers, responsible for the fertiliser operations, sales and marketing. Ruben was also CEO of Kaolin Companies – Pará Pigments and Cadam – two subsidiaries of Vale, between 2007 and 2009, and held various analysis, marketing and project roles in Vale's Base Metals business which he joined in 1999. He began his career in the special alloys industry.

Tom McCulley
CEO of Crop Nutrients

Qualifications: B.S. (Accounting)
Member since: October 2022

Skills and experience
Tom was appointed as CEO of Crop Nutrients in January 2022. He joined Anglo American in 2015 and has previously served as CEO of Anglo American in Peru and Group Head of Projects for Anglo American.

Tom brings more than 25 years of international experience in major projects across the mining, oil and gas industries, and has led the development of Anglo American's Quellaveco copper mine in Peru. Prior to joining Anglo American, he held several senior global roles at Newmont, including vice president of investment and value management and vice president of discovery and development planning and services. Tom began his career at Fluor Corporation in international oil and gas and mining projects, developing his full project lifecycle expertise.

Anik Michaud
Group Director – Corporate Relations and Sustainable Impact

Qualifications: LL.L (Law)
Member since: March 2015

Skills and experience
Anik joined the GMC in 2015. Her remit includes corporate communication (including brand and employee engagement), international and government relations, social performance and engagement, sustainability integration to drive positive impact from the Group's Sustainable Mining Plan, and the office of the chief executive. Anik is a non-executive director of Anglo American Platinum and chairs the Anglo American Foundation.

Anik joined Anglo American in 2008 as Group Head of Corporate Communication. Prior to that, she was director of public affairs for Rio Tinto Alcan, following 10 years with the Alcan group. Anik is a Visiting Fellow of Saïd Business School, Oxford University.

Themba Mkhwanazi
CEO of Bulk Commodities

Qualifications: B Eng (Chemical) Hons
Member since: August 2019

Skills and experience
Themba was appointed CEO of Bulk Commodities in January 2022. Prior to that, he was CEO of Kumba Iron Ore from 2016 to 2021, and CEO for Anglo American's Thermal Coal business in South Africa, having joined the Group in 2014.

Themba has extensive experience in the resources industry, including 18 years in his native South Africa, as well as in the US and Australia. Before joining the Group, Themba was managing director for Huntsman Tioxide in South Africa until 2007, when he was appointed COO of Richards Bay Minerals, a joint venture between Rio Tinto and BHP. In 2011, he was seconded to Rio Tinto's Australian coal business, before taking up the role of regional general manager for the Americas in 2012. Themba is currently a Vice President of the Minerals Council of South Africa.

Helena Nonka
Group Director – Strategy and Business Development

Qualifications: M.A. Hons, LL.M
Member since: October 2022

Skills and experience
Helena joined Anglo American in October 2022. Prior to joining the Group, she was executive vice president corporate development for Norsk Hydro ASA, the Norway-based global aluminium and renewable energy company with operations across 50 countries, with responsibility for group strategy, business development, sustainability and technology.

Helena's global career spans more than 20 years in the natural resources industry, professional services, consulting, and academia across Europe, Asia and North America. She previously worked as the global head of new business for natural resources at Switzerland-based SGS. From 2007 to 2019, she worked for Rio Tinto, where she held several global senior commercial leadership roles, including leading corporate strategy.

Richard Price
Group General Counsel and Company Secretary

Qualifications: LL.B, BA (Hons)
Member since: May 2017

Skills and experience
Richard joined Anglo American as Group General Counsel in May 2017 and was appointed as Company Secretary in March 2018. Prior to joining Anglo American, he was a partner at Shearman & Sterling, the international law firm working across EMEA, Asia and North America. In private practice, Richard acted for clients across the metals, mining, energy and financial services sectors, among others, assisting them with complex financing, corporate and compliance matters.

Natascha Viljoen
CEO of Anglo American Platinum

Qualifications: MBA, BEng (Extractive Metallurgy)
Member since: April 2020

Skills and experience:
Natascha was appointed CEO of Anglo American Platinum in April 2020. Prior to that, she was Anglo American's Group Head of Processing, having joined the Group in 2014. As announced on 15 February 2023, Natascha has decided to leave Anglo American in the next 12 months to take up a role externally.

Before joining Anglo American, Natascha spent six years at Lonmin, where she served on the executive committee as EVP of Processing, also with responsibility for several wider corporate functions including sustainability. Prior to that, Natascha worked for BHP's coal and chrome businesses in South Africa (including as general manager of BHP's Klipspruit Colliery), the Modikwa joint operation between Anglo American Platinum and African Rainbow Minerals, and AngloGold. Natascha began her career in 1991 at Iscor as a trainee engineer.

Peter Whitcutt
CEO of Marketing

Qualifications: MBA, Bcom (Hons), CA (SA)
Member since: October 2009

Skills and experience:
Peter has served as CEO of Marketing since January 2016. He is a non-executive director of De Beers.

Peter joined the Group in 1990 within the Corporate Finance division. He worked on the merger of Minorco with Anglo American Corporation of South Africa, the listing of Anglo American plc in 1999 and the subsequent unwinding of the cross-holding with De Beers. Peter was appointed Group Head of Finance in 2003, CFO of Base Metals in August 2008 and from 2013 to 2015, he served as Group Director – Strategy, Business Development and Marketing.

Joining the GMC in 2023:
As announced on 17 January 2023, Alison Atkinson will join the GMC as Group Director – Projects and Development in mid-2023.

In addition, the following members stepped down from the GMC:

Mark Cutifani served as Chief Executive and chairman of the GMC until 19 April 2022.

Tony O'Neill served as Technical Director and a member of the GMC until 31 December 2022.

Bruce Cleaver served as CEO of De Beers Group and a member of the GMC until 20 February 2023.

Board roles and responsibilities

The Board, through its role in setting the tone from the top, provides leadership to the Group and is collectively responsible for promoting and safeguarding the long term success of the business. The Board is supported by a number of committees, to which it has delegated certain powers.

The role of these committees is summarised below, and their membership, responsibilities and activities during the year are detailed on pages 146-203.

Some decisions are sufficiently material that they can only be made by the Board as a whole. The schedule of 'Matters Reserved for the Anglo American plc Board', and the committees' terms of reference, explain which matters are delegated and which are retained for Board approval; these documents can be found on the Group's website.

Executive structure

The Board delegates executive responsibilities to the chief executive, who is advised and supported by the GMC. The GMC comprises the chief executive, business unit CEOs, Group directors of corporate functions, and the Group general counsel and company secretary. The names of the GMC members, their roles and biographical details appear on pages 128-129.

Board composition

At the date of this report, the Board comprises nine directors: the chairman, two executive directors (our chief executive and our finance director) and six independent non-executive directors. The roles of our directors are summarised opposite, alongside the divisions of responsibility between the chairman, the executive and non-executive members of the Board.

Ian Tyler joined the Board as an independent non-executive director on 1 January 2022 and, at the Annual General Meeting in April 2022 (the 2022 AGM), succeeded Byron Grote as the Board's senior independent director (SID). At the 2022 AGM, Duncan Wanblad succeeded Mark Cutifani as chief executive and joined the Board, and non-executive directors Anne Stevens and Byron Grote stepped down from the Board, having both served for nine years. On 23 September 2022, Elisabeth Brinton stepped down from the Board. On 31 December 2022, Tony O'Neill, our technical director, stepped down from the Board after serving for nearly eight years as an executive director.

The broad range of skills and experience our Board members contribute to the long term sustainable success of the Group are set out on pages 124-126. The Board is supported by the Group general counsel and company secretary.

There is a clear separation of responsibilities at the head of the Company between the leadership of the Board (the responsibility of the chairman) and the executive responsibility for leadership of the Company's business (the responsibility of the chief executive).

Independence of the non-executive directors

At the date of this report, two-thirds of the Board are independent non-executive directors. The Board determines all the non-executive directors (other than the chairman) to be independent of management and free from any business or other relationship which could materially interfere with their ability to exercise independent judgement. The UK Corporate Governance Code (the Code) does not consider a chairman to be independent due to the unique position the role holds in corporate governance. Stuart Chambers met the independence criteria contained in the Code when he was appointed as the Group's chairman in 2017.

To ensure the continued effectiveness of the Board, the chairman and the non-executive directors meet without the executive directors present several times a year. The chairman also meets regularly with each of the non-executive directors. The SID engages with the other non-executive directors without the chairman present, at least annually, to appraise the chairman's performance. In 2022, Ian Tyler, as the SID, met with the non-executive directors on one such occasion.

Time commitment and external appointments

The Board, through the Nomination Committee, considers annually the time commitment expected from each of the non-executive directors to meet the expectations of their role. Overall, a minimum expected time commitment of 30 days per year is set out in the non-executive directors' letters of appointment; however, the SID and committee chairs devote more time as required by their roles. The chairman's annual expected time commitment is the equivalent of three days per week. Directors are expected to prepare for and attend Board and committee meetings as relevant, a full day Board Strategy meeting, the AGM and at least one operational site visit annually.

The Board acknowledges that non-executive directors have business interests other than those of the Company. Prior to their appointment to the Board, non-executive directors are required to declare any directorships, appointments and other business interests to the Company in writing. Non-executive directors are required to seek the approval of the chairman, chief executive and Group general counsel and company secretary, on behalf of the Board, before accepting additional significant commitments that might be a potential conflict of interest or affect the time they are able to devote to their role. New appointments are then reported to the full Board.

At the date of this report, none of the non-executive directors hold more than two additional external appointments. The Board has considered these external commitments, taking into account the time commitment required for each role, and is satisfied they do not impact the individual Board members' ability to discharge their responsibilities fully and effectively. As evidenced in the table on page 132, all directors on the Board at the date of this report attended 100% of the Board and committee meetings that they were eligible to do so in 2022.

Executive directors are required to seek approval from the Board, following consideration by the Nomination Committee, before accepting an external directorship. The Board would not approve executive directors holding more than one non-executive directorship in a FTSE 100 company (or other equivalent publicly quoted company), nor the chairmanship of any such company.

The Board

Chairman

Stuart Chambers leads the Board, ensuring it works constructively as a team. His main responsibilities include: chairing the Board and the Nomination Committee and setting their agendas; Board composition and succession planning; providing support and counsel to the chief executive and his team; promoting the highest standards of integrity and governance; facilitating effective communication between directors; effective dialogue with shareholders and other stakeholders; and acting as ambassador for the Group.

Senior Independent Director (SID)

Ian Tyler has served as the Board's SID since April 2022.

He acts as a sounding board for the chairman and as an intermediary between the other directors. The SID leads the annual review of the performance of the chairman and is available to shareholders on matters where the usual channels of communication are deemed inappropriate.

Independent Non-executive Directors (NEDs)

The role of the NEDs is to support, constructively challenge, and provide advice to executive management; effectively contribute to the development of the Group's strategy; scrutinise the performance of management in meeting agreed goals; and monitor the delivery of the Group's strategy.

Chief Executive

Duncan Wanblad joined the Board as chief executive in April 2022. Duncan manages the Group. His main responsibilities include: executive leadership; formulation and implementation of the Group's strategy as agreed by the Board; approval and monitoring of business plans; organisational structure and senior appointments; business development; and stakeholder relations.

Finance Director

Stephen Pearce leads the finance function and supports the chief executive in formulating and implementing strategy in relation to the financial and operational performance of the Group.

Board Committees

Audit Committee

Oversight of financial reporting, audit, internal control and risk management.

– For more information
See pages 150–159

Nomination Committee

Responsible for Board composition, appointment of directors and ensuring effective succession planning for the Board and senior management.

– For more information
See pages 148–149

Remuneration Committee

Determines the remuneration of executive directors, the chairman and senior management, and oversees remuneration policy for all employees.

– For more information
See pages 160–203

Sustainability Committee

Oversees management of sustainability issues, including safety, health, environment, climate change and social performance.

– For more information
See pages 146–147

Chief Executive

Corporate Committee

Responsible for driving operational best practices across the Group and the setting of technical standards.

Group Management Committee (GMC)

Principal executive committee. Responsible for formulating strategy, setting targets/budgets and managing the Group's portfolio.

Operational Committee

Responsible for driving operational best practices across the Group and the setting of technical standards.

Investment Committee

Responsible for making recommendations on capital investment proposals.

Marketing Risk Committee

Responsible for evaluating, monitoring, directing and controlling the management of risk associated with the sales and marketing activities of the Group.

Innovation Committee

Responsible for the governance of technology innovation projects.

Board operations

Board information and support

All directors have full and timely access to the information required to discharge their responsibilities fully and effectively. They have access to the advice and services of the Group general counsel and company secretary and his team, other members of the Group's management and employees, and external advisers. Directors may take independent professional advice in the furtherance of their duties, at the Company's expense.

Where a director is unable to attend a Board or committee meeting, they are provided with all relevant papers and information relating to that meeting and encouraged to discuss issues arising with the chairman, the respective committee chairs and other Board and committee members. In 2022, all directors on the Board at the date of this report attended 100% of the meetings they were eligible to attend, as evidenced in the table below.

All non-executive directors are provided with access to papers for each of the Board's committees, including those who do not serve as members of those committees. Non-executive directors are encouraged to regularly attend meetings of the Board's committees they do not serve on, at the invitation of the respective committee chair.

Board induction and development

The Board recognises the importance of director education and ongoing development. Following appointment, and as required, all directors receive training and development appropriate to their level of experience and knowledge. This includes the provision of a comprehensive induction programme tailored to the director's experience and background, individual briefings with GMC members and their teams to provide newly appointed directors with information about the Group's business, culture and values, meetings with external advisers and other relevant information to assist them in effectively performing their duties and contributing to Board discussions and decision making.

In addition to scheduled Board operational site visits, non-executive directors are expected to spend time at the Group's operations to meet management and members of the workforce.

Board and committee meetings in 2022 – frequency and attendance of members

The table below shows the attendance of directors at meetings of the Board and committee during the year. Attendance is expressed as the number of meetings attended out of the number eligible to attend. All directors on the Board at the date of this report attended 100% of the meetings they were eligible to do so in 2022.

	Independent	Board	Board Strategy	Audit	Nomination[5]	Remuneration	Sustainability[6]
Stuart Chambers	n/a	7/7	1/1	—	5/5	—	4/4
Mark Cutifani[1]	No	1/1	—	—	—	—	1/1
Duncan Wanblad[2]	No	6/6	1/1	—	—	—	3/3
Stephen Pearce	No	7/7	1/1	—	—	—	—
Tony O'Neill[3]	No	7/7	1/1	—	—	—	4/4
Ian Ashby	Yes	7/7	1/1	—	5/5	6/6	4/4
Marcelo Bastos	Yes	7/7	1/1	—	5/5	—	4/4
Elisabeth Brinton[4]	Yes	3/4	—	—	—	—	1/2
Byron Grote[1]	Yes	1/1	—	2/2	1/1	1/1	—
Hilary Maxson	Yes	7/7	1/1	5/5	—	—	—
Hixonia Nyasulu	Yes	7/7	1/1		5/5	6/6	—
Nonkululeko Nyembezi	Yes	7/7	1/1	5/5	—	—	4/4
Anne Stevens[1]	Yes	1/1	—	2/2	1/1	1/1	—
Ian Tyler	Yes	7/7	1/1	5/5	5/5	6/6	—

(1) Stepped down from the Board on 19 April 2022.
(2) Appointed to the Board on 19 April 2022 and as a member of the Sustainability Committee on 20 April 2022.
(3) Stepped down from the Board on 31 December 2022.
(4) Stepped down from the Board on 23 September 2022. Ms. Brinton did not attend the June Board and Sustainability Committee meetings for personal reasons.
(5) All the independent non-executive directors were invited to attend the Nomination Committee meetings in July and November, at the invitation of the chairman, where the topic of discussion was the executive succession planning. Attendance for non-Nomination Committee members is not reflected in the table above.
(6) All directors were invited to attend the Sustainability Committee meetings in June and September, which were held in South Africa and Peru respectively, at the invitation of the Committee chairman. Attendance for non-Sustainability Committee members is not reflected in the table above.

Non-executive director Ian Tyler speaking with Quellaveco site management during the Board's visit to Peru in September 2022.

Non-executive director and Panel chair Marcelo Bastos during a meeting of the Global Workforce Advisory Panel at Anglo American's head office in London in November 2022.

Highlights

- Following his appointment as an independent non-executive director in January 2022, Ian Tyler undertook a tailored and comprehensive onboarding programme. Ian has attended over 25 meetings with management and external advisers on a variety of topics related to his Board, Audit and Remuneration Committee appointments.
- In February 2022, non-executive director Marcelo Bastos undertook a site visit to our Crop Nutrients' Woodsmith project in the UK.
- Ahead of his appointment in April 2022 as the Board's designated non-executive director to chair Anglo American's Global Workforce Advisory Panel, Marcelo Bastos was provided with specific briefings and a newly designed induction for a Panel chair. As part of this programme, Marcelo attended a Panel meeting in March 2022, which was chaired by former Panel chair Byron Grote, ahead of his formal appointment.
- Ahead of his appointment to the Board as chief executive in April 2022, Duncan Wanblad was provided with training on directors' duties and UK corporate governance, in connection with being a newly appointed director of the Company.
- In June 2022, the Board held one of its scheduled meetings in Johannesburg, South Africa, and visited our Platinum Group Metals' Mogalakwena mine.
- In September 2022, the Board held one of its scheduled meetings in Moquegua, Peru, and visited our Quellaveco copper mine.

Further details of these site visits can be found on pages 140-142.

Board activity

The Board is responsible for the overall conduct of the Group's business, its strategic direction and its organisational culture, ensuring these are aligned to our Purpose and Values. The chairman is responsible for setting the agenda. The agenda of matters discussed by the Board in 2022 is described and explained below.

The Board is scheduled to meet seven times a year but meets more often when circumstances warrant this. In addition, the Board dedicates a full meeting, usually held over two days, to the discussion of the Group's strategy, addressing critical short, medium and long term issues. This augments the discussion of strategic topics at every Board meeting. Annually, each of the Group's business unit heads presents to the Board in some depth on the key aspects of their business. In 2022, the Board increased the number of scheduled meetings from six to seven.

In between meetings, the Board receives regular updates from the chief executive on operational and business performance; and engages with senior management on specific topic briefings.

Principal activities during the year

Topic and link to pillars of value	Activities	Outcomes/decisions
Safety and health Fatal incidents, Total Recordable Injury Frequency Rate, health and medical incidents — Further reading pages 57-60	Safety is the most critical area of focus for the Board and the first topic discussed at Board meetings. The causes of fatal incidents and those causing injury were examined in detail by the Sustainability Committee and the findings discussed by the Board. Management performance in reducing such incidents through the Group's Elimination of Fatalities programme was monitored. The Board continued to monitor the operational and technical innovation initiatives that have the potential to positively impact the Group's safety performance and make mining safer and more sustainable. The Sustainability Committee considered the Group's workplace health programmes, and the significant progress that has been made in relation to broader employee well-being, including mental health, bullying and harassment and gender-based violence.	Rigorous and continued focus on oversight of safety performance.
People Inclusion and diversity, talent and performance management, employee engagement — Further reading pages 60-63	People are a pillar of the Group's strategy and the Board is focused on creating an inclusive and diverse culture. The Board considered the strategic priorities for the Group's people and organisation model, and leadership development programmes, designed to deliver the Group's talent management ambition. The Board was updated on the Group's inclusion and diversity strategy, and progress made on initiatives and policies in the areas of gender and ethnic diversity, mental health, LGBT+, and Living with Dignity. Succession plans for the Group Management Committee (GMC) were reviewed by the Nomination Committee, on behalf of the Board. The Board received feedback on discussions and outcomes of two Global Workforce Advisory Panel meetings chaired by one of the independent non-executive directors. The Board also considered the findings and action plans from the 2021 global employee engagement survey and a 2022 global 'pulse' survey on safety, aligned to our Purpose and Values, and global colleague insights strategy, including inclusion and diversity.	Approved senior leadership changes during the year. Provided input into the topics of discussion for the Global Workforce Advisory Panel.

Topic and link to pillars of value	Activities	Outcomes/decisions
Environment Environmental incidents, energy and climate change, water availability and rehabilitation — Further reading pages 44-51	The Board reviewed the steps taken by management to reduce energy and natural resource consumption, and key projects and technologies contributing to energy transition. Climate-related activities, energy efficiency targets and decarbonisation strategies were considered during the year by the Board and the Sustainability Committee. The Board discussed the Group's roadmap to carbon neutrality, focusing on the underlying initiatives, workstreams and plans underpinning delivery of our target of carbon neutral operations by 2040. The Board considered initiatives towards achieving carbon neutral energy in the Group's operations. The Board considered the development and implementation of Anglo American's suite of technologies, integral to its FutureSmart Mining™ programme, that are driving step-change innovations and transforming the nature of mining. The Board was updated on tailings storage facility management at the Group's operations. The Board discussed the challenges and opportunities presented by the 'future of work', and how the Group is taking a leadership role in shaping the transition in the nature of work and in the workforce, aligned to our FutureSmart Mining™ strategy and Sustainable Mining Plan, unlocking our ability to deliver and embed innovation on the Group's journey towards being a materials solutions provider.	The Board approved: – A shareholder agreement and renewable energy partnership with EDF Renewables to develop a regional renewable energy ecosystem in South Africa – Agreements for the supply of 100% renewable electricity for the Group's Steelmaking Coal business in Australia – A business combination between Anglo American's nuGen™ Zero Emissions Haulage Solution with First Mode, to create a fully operational, independent entity intended to accelerate the development of a holistic, zero emissions solution – A supply agreement with First Mode to decarbonise our global fleet of ultra-class mine haul trucks.
Socio-political Social incidents and performance, government, media, investor and stakeholder relations — Further reading pages 51-55	The Board receives updates on key geopolitical developments in the Group's operating jurisdictions, significant social incidents, and a briefing from the Group head of investor relations, at each meeting. Feedback from meetings held between executive management and institutional investors is communicated to the Board. Board members engaged with local community representatives during their visit to Peru in September 2022. The chief executive and business unit leaders updated the Board on engagement with the governments of the Group's host countries and on local community dialogue. The Board was briefed by management on feedback following the Group's two Sustainability Performance updates held in 2022, and the findings of the external stakeholder consultation survey that had been undertaken in 2021. Management updated the Board on the Group's strategy in respect of its former corporate head office buildings in Johannesburg, South Africa.	Funded the endowment of a university chair and sustainable mining innovation programme at Camborne School of Mines in recognition of the outgoing chief executive's contributions to responsible mining practices.
Economic outlook and commodity price Macro-economic environment and commodity price outlook — Further reading pages 78-79	The Board received briefings from internal teams on trends in relevant areas and likely scenarios for global economic growth. The Board received regular updates on commodity markets, including market volatility and its underlying drivers, from Marketing leadership.	

Topic and link to pillars of value	Activities	Outcomes/decisions
Operations Operational performance by each business unit and progress of key projects — Further reading pages 84-111	The Board received detailed updates on the operational performance, strategy, safety and sustainability performance, people, technological innovation, and key risks of its business units. The Board was updated throughout the year on operational readiness, pre-commissioning processes and delivery of the Group's new world class Quellaveco copper mine in Peru. Progress of the De Beers Venetia Underground and Crop Nutrients Woodsmith projects was discussed. The Board considered a sustainable, long term solution to enhance water supply for communities in Chile, including the construction of a desalination plant, a water pipeline and the upgrade and construction of two waste water treatment plants at our Los Bronces copper mine in Chile. The Board was updated on the permitting implications for the Los Bronces Integrated Project, following the decision by the Chilean permitting body to reject the project's environmental permit application. Management updated the Board on the Group's intellectual property strategy, and pathways to commercialisation.	The Board approved: – An agreement to secure desalinated water for the Group's Los Bronces copper mine in Chile, as part of the first phase of an integrated water security project – Funding for a tailings filtration plant at Iron Ore Brazil's Minas-Rio operation to extend the useful life of the existing tailings storage facility – Additional funding facilities for completion of the Quellaveco copper operation in Peru.
Financial Key financial measures, liquidity and balance sheet strength, cost improvements, dividend — Further reading pages 80-83	The Board monitored and discussed progress against the annual budget and five-year plan. Liquidity strategy and balance sheet strength were reviewed. A revised Group treasury policy was considered by the Board and Audit Committee. The Board and Audit Committee considered a sustainability-linked financing framework for the purpose of a potential sustainability-linked bond issuance. Management updated the Board on the Group's finance function strategy and ongoing finance transformation programme. The Board and Audit Committee considered the Group's dividend policy.	Recommended the 2021 final dividend and a special dividend (approved at the 2022 AGM) and approved the 2022 interim dividend. The Board approved: – The establishment of the Group's first sustainability-linked financing framework and a 10-year $100 million sustainability-linked loan agreement with the International Finance Corporation, understood to be the first in the mining sector globally to focus exclusively on social development indicators – The issuance of its first sustainability-linked bond, a 10-year €745 million instrument which includes performance targets to reduce the Group's greenhouse gas emissions and fresh water abstraction, and to support job creation in host communities – The Group's 2023 budget – A revised Group treasury policy.

Topic and link to pillars of value	Activities	Outcomes/decisions
Strategy Portfolio outlook, progress on critical tasks and long term strategic pathways — Further reading pages 10-63	The Board considered strategic issues at every meeting in 2022 and, in addition, held a two-day dedicated strategy meeting. The Board discussed progress towards delivery of the Group's strategic goals in the context of Portfolio, Innovation and People, including: long term megatrends and disruptions; pathways to evolve the Group's business model from a metals and mining company to being a materials solutions provider; implications for the Group on future investment decisions as a result of geopolitical fracturing; climate change, energy transition and the circular economy; the Group's resilience to 1.5°C pathways; the hydrogen economy; decarbonisation strategies; technology and innovation capability; organisational capabilities and exploration activities. The Board considered options for moving its portfolio towards future-enabling products, while supporting a Just Transition that seeks to balance the needs and expectations of all stakeholders, including environmentally and socially sustainable jobs, consistent with addressing the overriding issue of climate change.	Approved the Group's critical strategic objectives. Key decisions made during the year in support of the Group's pathways to carbon neutrality.
Board governance Reports from committees, legislative and regulatory compliance, succession planning — Further reading pages 138-203	Each of the committee chairs reported on their respective meetings. Reports were received on the Group's compliance with relevant legislation and regulation and any actions needed to respond to recent developments. The Board received updates on material litigation across the Group. The Audit Committee chair provided an update on material whistleblowing reports. Executive and GMC succession planning was considered throughout the year by the Nomination Committee and the Board. The Board and Nomination Committee reviewed the Board's composition, diversity and succession plans for non-executive and executive directors.	The Board approved Board, Board committee and GMC appointments: – Ian Tyler as the Board's senior independent director – Duncan Wanblad as a member of the Sustainability Committee; and Hilary Maxson as a member of the Nomination Committee – The appointments of Helena Nonka, Tom McCulley, Matt Daley, Al Cook, and Alison Atkinson as members of the GMC, on the recommendation of the chief executive – Changes to the composition of the Board following Tony O'Neill's retirement as Group technical director. The Chairman and executive directors approved increases to the non-executive directors' fees from 1 January 2022. Endorsed a revised Code of Conduct. Approved Anglo American's 2022 Modern Slavery Act statement.

Board effectiveness in 2022

Each year, the Board undertakes a rigorous review of its own effectiveness and performance, and that of its committees and individual directors. At least every three years, the review is externally facilitated. In 2022, an internal evaluation was undertaken. The process for how the review was conducted and its findings are illustrated below.

The last externally facilitated effectiveness review of the Board was undertaken in 2021, the results of which were reported in the 2021 Integrated Annual Report. Taking account of the findings of the 2021 review, the Board had identified four priority areas for 2022, the details of which were reported in the 2021 Integrated Annual Report. Actions to address these areas were identified and progressed throughout the year. The Board made good progress on implementing the actions to address the findings, as illustrated in the table below.

Again in 2022, the directors completed online, questionnaire-based internal effectiveness reviews. To allow the Board and its committees to judge progress over a three-year period, the reviews explored similar areas to the 2021 review. The 2022 review reaffirmed that the Board believes that it continues to be effective, collegiate and well-functioning.

The review of the chairman's performance was led by the senior independent director. The chairman was not present during the discussions with both executive and non-executive directors as it related to him. The unanimous view of the directors was that the chairman continues to provide strong leadership to the Board, noting that he fosters a positive and supportive culture that facilitates the contribution of each director. In addition, the chairman received a report evaluating the individual directors' performance. To complement the internal review process, the chairman holds regular one-to-one meetings with each of the directors.

Actions taken in 2022 to address the areas identified by the Board as effectiveness priority areas following the 2021 externally facilitated review are summarised below:

Topic	Areas identified for action	Actions taken in 2022
Long term strategy	Continue to focus the Board's time on execution of the Group's long term strategy, and further shaping of strategic choices over the 10-30-year time horizon, particularly in light of the trends in climate change and the circular economy.	The Board considered strategic issues at every meeting in 2022, in addition to its two-day dedicated strategy meeting. The Board discussed progress towards delivery of the Group's strategic goals, including: long term megatrends and disruptions; pathways to evolve the Group's business model from a metals and mining company to being a materials solutions provider; climate change, energy transition and the circular economy; and decarbonisation strategies.
Technology deployment	The Board should direct its focus by allocating capital to this key source of competitive advantage by innovation and deployment of new ways of mining, aligned with the Group's Purpose.	The Board considered the implementation of Anglo American's suite of technologies, integral to its FutureSmart Mining™ programme, that are driving step-change innovations and transforming the nature of mining. The Board approved a business combination between Anglo American's nuGen™ Zero Emissions Haulage Solution with First Mode, to create a fully operational, independent entity intended to accelerate the development of a holistic, zero emissions solution.

Topic	Areas identified for action	Actions taken in 2022
People	Maintain focus on exposure of the Board to future leaders in the Group's talent pipeline. Facilitate increased contact between the Board and the business, and between the independent NEDs and senior management. Use of video technology and/or virtual technology to bring operations into the boardroom and facilitate (subject to the easing of travel restrictions) additional location visits in 2022.	Two location visits were facilitated for the Board in 2022, to South Africa in June, and Peru in September. Both visits afforded opportunities for the full Board to engage with management and employees. Deep dive briefings on topics scheduled for discussion at Board meetings were held between senior leadership and the NEDs. Use of video technology was used to enhance the Board's deliberations and understanding of topics discussed at meetings during the year.
Director development and induction	Strengthen the ongoing development of Board directors, aligned with the Group's strategic objectives, and enhance the new director onboarding programme to ensure a more individually tailored approach.	The deep dive briefings on topics scheduled for discussion facilitated directors' ongoing development. The new director onboarding programme was reviewed and further strengthened to ensure a more tailored approach appropriate to the director's experience and background. Directors appointed to the Board in 2022, or to new roles on the Board or committees, undertook onboarding meetings with management and, where relevant, external advisers, to ensure they were fully effective in their new roles.

Building on the priority areas identified and the actions taken during 2022, and taking account of the findings of the 2022 review, the Board has identified the following effectiveness priorities for 2023:

Topic	Areas identified for action
People	Maintain Board focus on the Group's talent management, including its processes to identify and develop talent. Maximise opportunities for the Board to have exposure to future leaders in the Group's talent pipeline.
Community and customer engagement	With the return of Board site visits, pursue opportunities for the Board to have direct engagement with community representatives. Seek opportunities for the Board to engage with the Group's customers.
External insights	Increase the Board's exposure to external insights in pertinent areas, particularly climate change and geopolitical trends.
Strategy	Redirect the Board's strategic focus towards the making of strategic choices and overseeing the execution of strategy.

Committee effectiveness

The committee evaluations looked at ways in which they could improve their overall effectiveness, their performance and effectiveness priority areas they needed to address in 2023. All Board committees were believed to be performing well and were appropriately constituted.

Board members and senior executives with Quellaveco leaders and members of the workforce in front of one of the operation's fleet of autonomous heavy haul trucks during the Board's visit to the mine in September 2022.

Board and non-executive directors' visits to Group operations in 2022

Undertaking regular site visits allows the directors to gain a better understanding of the Group's operations and culture, and affords Board members the opportunity to meet and engage with a diverse cross-section of employees and local stakeholders to appreciate, at first-hand, their interests and concerns.

The Board usually meets at least once a year at one of the Group's major operations. In 2022, following the easing of Covid-19 related global travel restrictions, the Board was able to resume in-person engagements and undertook two site visits, which are described in the next few pages.

(Left to right) Group director – South Africa Nolitha Fakude, non-executive director Hilary Maxson and mine captain for master drilling Eva Tebele at the underground portal at our PGMs' Mogalakwena mine during the Board's visit to South Africa in June 2022.

Board visit to South Africa

In June 2022, the Anglo American plc Board and Sustainability Committee met at the Group's new South African corporate offices in Johannesburg.

Board members were able to engage with employees at an event to mark the official opening of the new global shared services (GSS) facility, and received a presentation from management on the Group's strategy in respect of its former corporate head office buildings in Johannesburg.

The Board spent a day visiting our Platinum Group Metals' Mogalakwena mine, accompanied by members of the Platinum Management Committee, focusing on operations, community engagement and social performance, tailings stewardship and technology. They were able to see at first-hand the prototype of the world's largest hydrogen-powered ultra-class mine haul truck designed to operate in everyday mining conditions, that was unveiled in May 2022, as part of Anglo American's nuGen™ Zero Emission Haulage Solution. nuGen™ is part of FutureSmart Mining™, Anglo American's innovation-led approach to sustainable mining and supports the Group's commitment to carbon neutrality across its operations by 2040.

As part of the visit, the chairman hosted an evening event for Board members to engage with leaders from the Group's South African businesses.

Group director – South Africa Nolitha Fakude (second left) and chief executive Duncan Wanblad (fourth from left) with Global Shared Services (GSS) employees Nonhlanhla Makhubu (left), Pintu Lumbwe (third from left) and Johanna Rakgolela (right) at an event to mark the official opening of the new GSS centre in Johannesburg, South Africa.

At Mogalakwena in June, Board members and executives are briefed on the prototype nuGen™ hybrid hydrogen and battery powered heavy haul truck, which was officially launched at the mine the previous month.

Board visit to Peru

In September 2022, the Board held one of its meetings in Moquegua, Peru and visited the Group's new flagship Quellaveco copper mine, accompanied by senior leaders from across the Group. During the visit, the Board received detailed presentations from Copper and Base Metals management on their strategy and operations.

The group visited the Information Centre in Moquegua which is managed by Anglo American and provides information about Quellaveco and how it is run, local cultural heritage, and affords opportunities for community engagement. Board members also visited several of the social projects in the Moquegua region supported by Anglo American and got an on-the-ground feel for the positive impact they are making on local communities.

At the Quellaveco mine, Board members visited the Asana river barrier, the tailings dam at Cortadera, the processing plant at Papujune, and saw the autonomous trucks in action in the pit, where they engaged directly with the operators who remotely control the fleet. The Board also toured the Integrated Operations Centre, which is at the heart of what is Peru's first 100% digital and fully automated mine.

The visit provided Board members opportunities to engage directly with Quellaveco leadership.

"Nothing beats a site visit. They allow non-executive directors to get a real feel of what the operations are all about, an appreciation of the quality of the people running them and, most notably for me, the impact our organisation is making in host communities, particularly as an employer and in stimulating business activity more broadly."

Nonkululeko Nyembezi
Independent non-executive director

In addition, in February 2022, non-executive director Marcelo Bastos spent two days visiting the Crop Nutrients' Woodsmith project in north-east England, accompanied by our former Group technical director, Tony O'Neill, and Tom McCulley, CEO of Crop Nutrients. The directors visited the mine site and held discussions on the sinking methodologies being implemented and discussed the transition pathway to mine operations.

Non-executive director Ian Ashby (centre) speaking with Quellaveco process manager Justo Enriquez (right) at our new Quellaveco copper mine in September 2022. The distinctive dome of the Papujune processing plant is visible in the background.

Board members and executives with Augustin Romero (left), vice president of Haas avocado producers' association, a farming organisation in the Moquegua region and one of the social projects supported by Anglo American in Peru, in September 2022. On the right is social performance manager for Copper Peru Fernando Montero.

Stakeholder engagement

How the Board has engaged

The Board is committed to ensuring collaboration and partnering with a broad range of stakeholders, both directly and indirectly through reports from senior management. Stakeholder considerations form part of discussions at Board meetings and decision making takes into account potential impacts on our stakeholders, as described in the Section 172 statement on page 25 of the Strategic Report. How the Board interacts directly with certain of its key stakeholders is illustrated below. For further information on reflecting stakeholder views in the Board's decision making, please see pages 25-27.

Creating shared value

Investors	Employees and unions
Communities	Suppliers and contractors
Civil society (NGOs, faith groups and academia)	Customers
Governments and multilateral institutions	Industry associations

Global Workforce Advisory Panel

Anglo American's Global Workforce Advisory Panel (the Panel) was established in 2019. Its purpose is to give employees more of a 'voice' in the boardroom so their views can be better understood and considered when decisions are being made about the future of the business. The Panel affords valuable opportunities for the Board to understand how the Group's culture, Purpose and Values are embedded into the organisation.

The Panel operates alongside Anglo American's existing employee engagement mechanisms, such as regular employee engagement surveys and director interaction with employees.

Composition of the Panel

The Panel is made up of 11 employees, representing the countries where the Group has a significant presence, and is chaired by Marcelo Bastos, one of the Board's independent non-executive directors. Panel members are nominated using agreed criteria set out in its terms of reference and selected to ensure representatives, throughout the organisation, are appropriately balanced across the areas of gender, ethnicity, age and seniority. New Panel members undertake an induction to ensure a clear understanding of their role and to support them in being effective employee representatives. The Panel is supported by the Group's company secretarial and employee engagement teams. Panel members meet at least twice a year with the Panel chair.

Panel chair transition

In April 2022, non-executive director Marcelo Bastos succeeded Byron Grote as the Board's designated non-executive director to chair the Panel, following Byron's retirement from the Board. Marcelo joined the Board as a non-executive director in 2019, and his more than 30 years' global mining experience across the Americas, Africa, Asia and Australia, along with his CEO, COO and C-suite director roles, has given him substantial experience of facilitating engagement and business understanding with a wide range of employees globally.

Panel meetings and discussions in 2022

The Panel met on two occasions in 2022, in March and November. The first meeting of the year was held virtually over two sessions, to accommodate members in different global time zones. Marcelo Bastos attended the meeting, ahead of his appointment as Panel chair. The second meeting was held in person at the Group's corporate head office in London.

Topics for discussion in 2022 included feedback on the Group-level focus areas agreed following the 2021 global employee engagement survey and the 2022 global pulse on safety, the Group's Sustainable Mining Plan/De Beers' Building Forever commitments with reference to the sustainability leadership questions asked on the global employee engagement survey, and the Group's plans to define its draft Reward Philosophy and Principles. Panel feedback was also sought on the Group's approach to recognition.

Panel members are provided with briefings in advance on topics for discussion at Panel meetings and asked to engage with the workforce populations they represent, in order to provide feedback with their collective views at Panel meetings.

"The Panel is an excellent way for the voice of employees to be heard in the boardroom. I look forward to continuing to represent my colleagues in Brazil and being part of this extraordinary forum."

Isaac Ferreira Guimarães Neto
Issac is an HR Coordinator in Brazil, and has been a Panel Member since 2021

Members of the Global Workforce Advisory Panel with independent non-executive director Marcelo Bastos (front row), who chairs the Panel, meeting in London in November 2022.

The second Panel meeting of the year was held in person – the first in-person Panel engagement since the outbreak of the Covid-19 pandemic. In addition to the formal Panel meeting, members engaged in pre- and post-meeting activities, including an externally facilitated refresher training session on the effectiveness of employee engagement representatives, and presentations from De Beers and Crop Nutrients management. Panel members had the opportunity to engage at an informal event with the Panel chair, the Board chairman, chief executive, and Group general counsel and company secretary.

The Panel is scheduled to meet three times in 2023, and we anticipate one of these meetings taking place in person.

Board and Panel feedback
Following both Panel meetings, Marcelo Bastos discussed the key themes with the Board chairman and chief executive. At two Board meetings in 2022, Marcelo provided his reflections from Panel meetings and discussed the key themes with the full Board. The key messages from each meeting were shared and discussed with the Group Management Committee. Marcelo shares feedback from the Board meeting discussions with the Panel at its following meeting.

Topics for discussion at Panel meetings are proposed equally by Panel members, the Panel chair and members of the Board, and management.

"I was delighted to be appointed as the Panel chair in 2022. I can think of no better way for the Board to connect directly with the voice of our employees from around the world in such an open and consistent way."

Marcelo Bastos
Independent non-executive director and Panel chair

Global employee engagement surveys
The Board was updated during the year on the findings and resulting actions from a global employee engagement survey undertaken in 2021, and the 2022 global pulse survey focused on physical and psychological safety. The findings and resulting actions from the global employee engagement survey undertaken in the fourth quarter of 2022 were presented and discussed with the Board at its meeting in February 2023.

— For more information on our People and workforce culture:
See pages 56-63

Investor engagement

The Group always has an active engagement programme with its key financial audiences, including investors and sell-side analysts, as well as potential shareholders.

The Group's investor relations department manages the interactions with these audiences through roadshow meetings, presentations including at the time of the interim and final results and twice yearly sustainability updates, as well as regular attendance at industry conferences organised mainly by investment banks for their institutional investor base. Key topics covered include finance and operating performance, sustainability and governance matters. The focus of sustainability discussions continues to be on climate change, with particular emphasis in the earlier part of the year on the non-binding resolution on climate change at the 2022 AGM; while the Group's approach to workplace culture and eliminating bullying, harassment and victimisation across the organisation was a priority engagement area for many investors in the latter part of the year.

The investor relations and management team returned to international travel in 2022 for the first time since the Covid-19 pandemic. While key industry conferences and some investor roadshows were held in person, many events continued in virtual format, which we expect to be the new normal. The incoming chief executive also held a series of introductory one-on-one meetings with major shareholders to gather their views and perspectives on the business as part of his transition into the role. Any significant concerns raised by a shareholder in relation to the Company and its affairs are communicated to the Board.

The Board receives a briefing at each meeting from the Group head of investor relations and analysts' reports are circulated to the directors. Feedback from meetings held between executive management, or the investor relations department, and institutional shareholders, is also communicated to the Board

Annual General Meeting

Due to the ongoing challenges from the Covid-19 pandemic, 2022 was the first year that the Company decided to hold its AGM using a hybrid format which facilitated greater engagement from a wider section of shareholders where physical attendance was not possible for some of our members. The Board envisions that the Company's future AGMs will continue to be held in a hybrid format.

The Board values the AGM as an opportunity for all shareholders, but in particular its retail shareholders, to raise questions and comments to the Board. Shareholders were invited to submit their questions in advance of the AGM and also offered the opportunity to ask questions during the meeting both in person and electronically.

Voting levels at the 2022 AGM were approximately 70%, with generally less than 2% being votes withheld. All resolutions submitted to the meeting in 2022 were passed with at least 87% of votes in favour.

Investor engagement in 2022

January
- Closed period
- Q4 2021 Production Report

February
- 2021 full year results
- Investor roadshows: London (virtual)
- Conferences: Morgan Stanley Diamond Day (De Beers virtual fireside), BMO Global Metals & Mining

March
- Investor roadshows: London (virtual), Edinburgh (virtual), North America (virtual) and South Africa
- Conferences: Morgan Stanley Sustainable Metals and Mining Seminar fireside session (virtual), Exane Basic Materials (virtual)

April
- Q1 Production Report
- Sustainability Performance update
- Incoming Chief Executive introductory meetings with major shareholders
- Climate Action 100+ investor meeting
- AGM
- UBS London Mining Tour (virtual)

May
- Investor roadshows: London (virtual) and North America (virtual)
- Conferences: J.P. Morgan Cazenove European Materials Conference (virtual), Bank of America Metals & Mining
- Incoming Chief Executive introductory meetings with major shareholders

June
- Conferences: RBC Global Mining and BofA Smart Mine 3.0 (virtual)
- Morgan Stanley Materials Cannonball Run fireside session (virtual)

July
- Closed period
- Q2 Production Report
- 2022 interim results
- Investor roadshows: London (virtual) and North America (virtual)

August
- Investor Roadshows: South Africa

September
- Investor Roadshows: London (virtual), Edinburgh (virtual) and North America (virtual)
- Conferences: Credit Suisse Global Steel and Mining (virtual), Berenberg ESG in Mining Panel

October
- Q3 Production Report
- Sustainability Performance update
- Investor Roadshows: London (virtual), ESG investor meetings (virtual)
- Chairman investor meeting

November
- Investor roadshow: Frankfurt
- ESG investor meetings (virtual)
- Conferences: Goldman Sachs Global Natural Resources

December
- 2022 investor update event
- UBS Australian investors group meeting

Sustainability Committee report

"Through the Sustainability Committee, we are able to ensure that sustainability issues are discussed at the highest levels of the organisation. The Committee's work is more relevant than ever as the Group seeks to manage the risks that come with climate change and to navigate through an increasingly stringent regulatory environment."

Committee members

Ian Ashby – Chairman
Marcelo Bastos
Stuart Chambers
Nonkululeko Nyembezi
Duncan Wanblad (appointed 20 April 2022)
Elisabeth Brinton (resigned 23 September 2022)
Mark Cutifani (resigned 19 April 2022)
Tony O'Neill (resigned 31 December 2022)

— For further detail on biographies and Board experience:
See pages 124-126

Business unit heads, Group directors of corporate relations and sustainable impact, people and organisation, the Group general counsel and company secretary, and the Group heads of safety and sustainable development also participate in meetings of the Committee. Other members of senior management are invited to attend when necessary. Other non-executive directors regularly attend Committee meetings at the invitation of the chair.

Role and responsibilities

The Committee oversees, on behalf of the Board, material management policies, processes, and strategies designed to manage safety, health, environment, climate change-related and socio-political risks and opportunities, to achieve compliance with sustainable development responsibilities and commitments and strive to be a global leader in sustainable mining.

The Committee is responsible for reviewing the causes of any fatal or significant sustainability incidents and ensuring learnings are shared across the Group.

The Committee's terms of reference are available to view online.

— For more information, visit:
www.angloamerican.com/about-us/governance

Committee discussions in 2022

The Committee met four times in 2022. At each meeting, the Committee reviews detailed reports covering the Group's performance across a range of sustainability areas, including: safety; health and wellness; socio-political trends; human rights; climate change; and environmental and social performance. Significant social, safety, health and environmental incidents are reviewed at each meeting, as are the results from operational risk reviews and operational risk assurance.

The Committee seeks to address the fundamental root causes of all fatal incidents occurring across Anglo American.

In 2022, two members of the workforce lost their lives at the Group's managed operations. The preliminary observations from each of these fatal incidents were reported to the next Committee meeting following their occurrence, noting the factors surrounding the incidents, mitigation steps being taken and the process for formal investigation. Following completion of the independent investigations, findings were presented to the Committee and the learnings shared internally.

In addition to the Committee's standing agenda items, the following matters were discussed during 2022:

- Progress and evolution of the Group's Elimination of Fatalities programme, designed to achieve a zero fatality business
- Group principal risks relating to sustainability
- Updates on the decarbonisation programme for the Group's Scope 1 and 2 greenhouse gas emissions and monitoring achievement of carbon neutrality targets
- The management of physical climate change risks and resilience across the Group
- Delivery of the Group's Sustainable Mining Plan, including activities to better embed and integrate sustainability across the business
- Social performance, community land access, displacement and resettlement issues across the Group
- Cultural heritage management
- Collaborative Regional Development and socio-economic development
- Human rights trends and human rights litigation risks
- Anglo American's 2021 Sustainability Report
- Outcomes of the 2021 external audit of the Group's sustainability data for inclusion in the 2021 Sustainability Report
- Permitting: the current permitting environment across the Group
- 2021 Social Way 3.0 assessment results and update on implementation across the Group
- Geotechnical risk management – an update on the challenges and initiatives to sustainably eliminate rockfall fatalities at the Group's mining operations
- Tailings and water storage facilities stewardship
- Fire and explosives risk management
- Shaft risk management
- Aviation-related safety risks
- An update on the Group's global workplace health and wellness programmes
- The development and roll-out of Process Safety Management across the Group's operations
- Power supply reliability in South Africa – risk mitigation and opportunities
- Future safety metrics and key performance indicators for safety
- Review of annual bonus and incentive plan measures proposed to the Remuneration Committee in relation to sustainability
- Committee effectiveness.

(Left to right) At Mogalakwena's North Concentrator Plant, the mine's General Manager Willie Noordman, Sustainability Committee members Marcelo Bastos and Duncan Wanblad, and committee chair Ian Ashby are briefed by principal – process development Dane Gavin on coarse particle recovery (CPR) technology, in front of the CPR plant during the Board's visit in June 2022. The roll-out of new technologies, including CPR, our inaugural zero-emission nuGen™ heavy haul truck at Mogalakwena and remotely operated trucks at other Group mines, resulting from the implementation of our Future Smart™ programme Group-wide, is making mining cleaner and greener – and safer.

In 2022, the Committee held two of its four meetings outside the UK – in June in Johannesburg, South Africa, and in September in Moquegua, Peru. More information on Board and non-executive directors' visits to Group operations can be found on pages 140-142.

Nomination Committee report

"The Committee plays an essential role in ensuring the composition of the Board reflects an appropriate mix of skills, experience, diversity and perspectives to suit the evolving nature of the business and the expectations of society and all our stakeholders."

Committee members

Stuart Chambers – Chairman
Ian Ashby
Marcelo Bastos
Hilary Maxson (appointed 1 January 2023)
Hixonia Nyasulu
Ian Tyler (appointed 19 April 2022)
Byron Grote (resigned 19 April 2022)
Anne Stevens (resigned 19 April 2022)

— For further detail on biographies and Board experience:
See pages 124-126

The chief executive, the Group director of people and organisation, and the Group general counsel and company secretary also participate in meetings of the Committee, when relevant to do so. Other non-executive directors may attend committee meetings at the invitation of the chairman.

Role and responsibilities

The role of the Nomination Committee is to assist the Board in regularly reviewing its composition and those of its committees, to lead the process for Board appointments, and ensure effective succession planning for the Board and senior management.

The Committee's terms of reference are available to view online.

— For more information, visit:
www.angloamerican.com/about-us/governance

Committee discussions in 2022

The Committee met five times in 2022, with full attendance by the members, as described on page 132. Discussions at the meetings covered the responsibilities outlined above, with particular focus on executive and non-executive succession planning.

The following matters were considered during 2022:

- The composition, structure and size of the Board and its committees, and the leadership needs of the organisation
- Recommending to the Board the appointment of Ian Tyler as the senior independent director
- The time commitment expected from the non-executive directors to meet the expectations of their role
- Recommending that the Board support the election or re-election of each of the directors standing at the Annual General Meeting in 2022
- Succession planning for executive directors and Group Management Committee roles
- Non-executive director succession planning, approving the appointment of Spencer Stuart as external search consultant to facilitate recruitment, and formalising the search process for a non-executive appointment

- Board committee membership changes and making recommendations to the Board on the appointment of directors to serve on Board committees:
  - Hilary Maxson as a member of the Nomination Committee from January 2023
  - Duncan Wanblad as a member of the Sustainability Committee from April 2022.

Process used in relation to non-executive Board appointments

As part of the Board's ongoing cycle of refreshment, in the second half of 2022 the Nomination Committee commenced a search process to recruit a new non-executive director, as part of an orderly succession process to ensure that the capabilities and attributes lost as a result of retirements from the Board in 2022 were replaced, and to ensure the composition of the Board reflected an appropriate mix of skills, experience, diversity and perspectives.

Spencer Stuart was retained by the Committee in 2022 to assist with the search process. Spencer Stuart has previously worked for the Group in recruiting for non-executive and senior leadership appointments and accordingly has a good understanding of the Board's requirements. They are accredited under the UK Government's Voluntary Code of Conduct for Executive Search Firms.

Prior to the search commencing, the Nomination Committee agreed the skills and experience it considered necessary for the role and provided this to Spencer Stuart. A longlist of gender and ethnically diverse candidates was then identified by Spencer Stuart and discussed with the Committee members to agree a shortlist to be interviewed. Shortlisted candidates were interviewed by members of the Committee and other Board members, as relevant.

The findings of the internal 2022 Board and committee effectiveness review are set out on pages 138-139.

Information on the Group's policy on inclusion and diversity, and details of the gender balance of Anglo American's senior management and their direct reports (defined as our Group Management Committee and those reporting to the committee), can be found in the People section on pages 62-63.

Audit Committee report

"The Committee is responsible for ensuring the integrity of the Company's financial statements and to strengthen its internal controls, risk management framework and the annual reporting on their effectiveness."

Committee members

Hilary Maxson* – Chairman
Nonkululeko Nyembezi
Ian Tyler*
Byron Grote* (resigned 19 April 2022)
Anne Stevens (resigned 19 April 2022)

*Audit Committee members deemed to have recent and relevant financial experience in accordance with the UK Corporate Governance Code.

The Committee as a whole has competence relevant to the sector.

— For further detail on biographies and Board experience: **See pages 124-126**

The chairman, the chief executive, the finance director, the Group financial controller, Head of financial reporting, Group financial reporting manager, the Group head of risk management and business assurance, and the Group general counsel and company secretary also participate in meetings of the Committee.

Role and responsibilities

- Monitoring the integrity of the annual and interim financial statements.
- Making recommendations to the Board concerning the adoption of the annual and interim financial statements.
- Overseeing the Group's relations with the external auditor.
- Reviewing the independence, effectiveness and objectivity of the external auditor.
- Reviewing and monitoring the effectiveness of the Group's risk management and internal control mechanisms.
- Approving the terms of reference of the internal audit function and assessing its effectiveness.
- Approving the internal audit plan and reviewing regular reports from the Group head of risk management and business assurance on effectiveness of the internal control system.
- Receiving reports from management on the principal risks of the Group. Details of the principal risks are contained on pages 69-73.
- Overseeing completion of the viability statement.
- Reviewing the effectiveness of the Group's Code of Conduct and the arrangements to counter the risk of bribery and corruption.

The Committee's terms of reference are available to view online.

— For more information, visit: **www.angloamerican.com/about-us/governance**

Fair, balanced and understandable

A key requirement of our financial statements is for the report to be fair, balanced, understandable and provide the information necessary for shareholders to assess the Group's and parent Company's position and performance, business model and strategy. The Audit Committee and the Board are satisfied that the 2022 Integrated Annual Report meets this requirement, as appropriate weight has been given to both positive and negative developments in the year.

In justifying this statement, the Audit Committee has considered the robust processes which operate in creating the 2022 Integrated Annual Report, including:

- Review and approval of management's assessment of the risk of misstatement in financial reporting
- Clear guidance and instruction provided to all contributors
- Revisions to regulatory reporting requirements are provided to contributors and monitored on an ongoing basis
- Early-warning meetings focused on accounting matters are conducted between business unit management, Group functions, the Group finance team and the external auditor in advance of the year end reporting process
- A thorough process of review, evaluation and verification of the inputs from business units is undertaken to ensure the accuracy and consistency of information presented in the 2022 Integrated Annual Report
- External advisers provide advice to management and the Audit Committee on best practice with regard to the creation of the 2022 Integrated Annual Report
- A meeting of the Audit Committee was held in February 2023 to review and approve the draft 2022 Integrated Annual Report, in advance of the final approval by the Board. This review included the significant accounting matters explained in the notes to the consolidated financial statements
- The Audit Committee considered the conclusions of the external auditor over the key audit matters that contributed to their audit opinion, specifically impairment charges and impairment reversals and environmental restoration and decommissioning obligations.

Committee discussions in 2022

The Committee met five times in 2022, with full attendance (either virtually or in person) as described on page 132. Throughout the course of 2022, and consistent with prior years, the Audit Committee paid particular attention to the valuation of assets, one-off transactions, tax matters, financial controls and the Group's liquidity position. In addition, there were in-depth discussions on ad hoc topics as requested by the Audit Committee; for example, Quellaveco, marketing, ethical business conduct, mine closure liabilities, IT cyber risk, pensions funding and exposures, and sustainability reporting governance and assurance. The Committee was provided with an update by the Group General Counsel and Company Secretary on corruption related enforcement actions in our industry. The Committee reviewed the system of internal control and risk management.

An internal effectiveness review of the Committee was undertaken.

The key topics discussed by the Committee during 2022 are set out on the following pages.

Significant accounting issues considered by the Audit Committee in relation to the Group's financial statements

— Impairment and impairment reversals of assets

The value of mining operations is sensitive to a range of characteristics unique to each asset. Management is required to apply judgement in the estimation of Ore Reserves, and price and production forecasts which drive cash flow projections.

Response of the Audit Committee

The Committee exercises oversight over the impairment review process. The Committee assessed the identification of impairment and impairment reversal indicators, the impact of climate change on commodity prices and exchange rate assumptions, the review of changes in the valuation of cash generating units (CGUs) and associated sensitivity analysis, and the appropriateness of disclosures made within the 2022 Integrated Annual Report on key sources of estimation uncertainty.

The Committee paid particular attention to the impact of climate change on the Group's impairment analysis. In addition to the linkage to commodity prices, the impact of carbon pricing through carbon cost assumptions was considered for the operations where a valuation was prepared together with the consistency of climate related assumptions to the Group's wider climate strategy. The Committee reviewed and approved the associated climate related impairment disclosure.

During 2022, the most significant assets considered were the following:

De Beers
The annual impairment assessment for goodwill relating to De Beers shows that the valuation headroom has increased from $1.8 billion to $1.9 billion since 2021.

While sufficient headroom remains, the valuation continues to be sensitive to changes in foreign exchange rates and consumer demand, impacting prices. The Committee concluded that no impairment at 31 December 2022 should be recorded and carefully considered and approved the proposed disclosure.

Crop Nutrients
The design and scoping review for the Woodsmith project is ongoing and actively considering several different development options, 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. As a result an impairment assessment for the CGU was undertaken resulting in an impairment of $1.7 billion to bring the carrying value into line with the recoverable amount of $0.9 billion. The Committee considered the valuation scenarios presented by management and approved the conclusions of the assessment and the proposed disclosure.

Steelmaking Coal
An impairment reversal assessment was undertaken for the Moranbah-Grosvenor, Dawson and Capcoal CGUs (Steelmaking Coal) due to improvements in the economic and market environment for steelmaking coal. The Committee considered the outcome of the assessments, taking into account the medium and long term outlook for hard coking coal prices, exchange rates and the valuation scenarios presented by management. It was concluded impairment reversals of $0.2 billion and $0.2 billion (before tax) be recognised for Moranbah-Grosvenor and Dawson respectively. There was no adjustment necessary to the carrying value of Capcoal. The Committee considered forecast and valuation scenarios presented by management and approved the conclusions of the assessments and the proposed disclosure.

Kolomela, Kumba
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 (before tax and non-controlling interest) was recorded. The Committee considered the outcome of the assessment and approved its conclusion and the proposed disclosure.

Barro Alto, Nickel
At 30 June 2022, based on improvements in forecasted market conditions in the short and medium term, the valuation of Barro Alto was assessed. 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. On completion of the assessment there was no resultant change necessary to the carrying value of the CGU as the recoverable amount was materially consistent with the carrying value. The Committee considered market forecast and valuation scenarios presented by management and approved the conclusions of the assessment. The Committee was comfortable that there were no triggers for further impairment or reversal at 31 December 2022.

For each of the CGUs noted above the Committee considered disclosures and was satisfied they were appropriate. Particular attention was paid to instances where an impairment review had been undertaken during the year that disclosures made in the interim financial statements had been appropriately carried forward where necessary.

	Other In addition to the assets noted above, the Committee was updated on the valuation drivers of assets that had either previously been impaired and therefore are considered to have an inherent risk of either further impairment or impairment reversal or where other events had prompted a more detailed assessment. The valuation of the Los-Bronces-Chagres CGU was assessed in the year following the negative Environmental Qualification Ruling and proposed amendments to the Mining Royalty Bill together with the annual assessment due to the associated goodwill balance. The committee were satisfied all reasonably possible scenarios support the carrying value. The Committee gave careful consideration to the valuation drivers of Minas-Rio and other previously impaired assets, no impairments or impairment reversals were recorded for those assets.
— Taxation The Group's tax affairs are governed by complex domestic tax legislations, international tax treaties between countries and the interpretation of both by tax authorities and courts. Given the many uncertainties that could arise from these factors, judgement is often required in determining the tax that is due. Advice is received from independent experts where required.	**Response of the Audit Committee** The Group head of tax provided the Committee with updates throughout the year on various tax matters, including relevant international and domestic tax policy updates, the implementation and operational outcomes of the tax risk governance framework, the impact of international events and trends on the global tax environment and the future of resource taxation, the status of tax audits, tax reporting, and the status of uncertain tax positions. While all these matters are inherently judgemental, no significant issues arose during 2022.
— Provision for restoration, rehabilitation and environmental costs The estimation of environmental restoration and decommissioning liabilities is inherently uncertain, given the long time periods over which these expenditures will be incurred, and the potential for changes in regulatory frameworks and industry practices over time.	**Response of the Audit Committee** The Committee reviewed the update provided by management on estimates of environmental and decommissioning liabilities, which are based on the work of external consultants and internal experts. The Committee paid particular attention to the potential impact and associated disclosure necessary from the Group's public commitment of conformance with the Global Industry Standard on Tailings Management (GISTM) and were satisfied that, where appropriate, amounts had been provided or disclosed. The Committee considered the changes in liability assumptions, including discount rates, and other drivers of movements in the amounts provided on the balance sheet and concluded that the provisions recorded as at 31 December 2022 appropriately reflected these updates.
— Special items, remeasurements and one-off transactions The Group's criteria for recognising a special item or remeasurement involves the application of judgement in determining whether an item, owing to its size or nature, should be separately disclosed in the income statement.	**Response of the Audit Committee** The Committee reviewed each of the items classified as special items or remeasurements in the financial statements, and the related disclosures, to ensure that the separate disclosure of these items was appropriate.

Significant accounting issues considered by the Audit Committee in relation to the Group's financial statements continued

— Retirement benefits The estimation of retirement benefits requires judgement over the estimation of scheme assets and liabilities. Areas of judgement include assumptions for discount and inflation rates and life expectancy. Changes in the assumptions used would affect the amounts recognised in the financial statements.	**Response of the Audit Committee** The Committee reviewed the assumptions behind the calculations of the asset and liability positions of the Group's pension and medical plans and concluded that the amounts recorded as at 31 December 2022 appropriately reflected these updates. In addition, the Committee reviewed the funding levels of the plans, any additional funding being provided to the plans and the overall expense recognised for the year. The Committee assessed the appropriateness of the Group's overall risk management approach to retirement benefits.
— Legal matters A provision is recognised where, based on the Group's legal views and, in some cases, independent advice, it is considered probable that an outflow of resources will be required to settle a present obligation that can be measured reliably. This requires the exercise of judgement. The Committee was updated by the Group's general counsel and company secretary on the status of legal matters over the course of the year.	**Response of the Audit Committee** During the year the Committee considered developments with the Kabwe case including with respect to the class certification application which was heard in January 2023. The litigation is still subject to significant uncertainty, and it was concluded that it is not currently possible to make a reasonable estimate of the outcome, quantum or timing of any potential future determination. Various other legal matters were reviewed and the Committee considered management's assessment that there were no individually material provisions required with respect to ongoing legal matters and that the disclosures made in respect of contingent liabilities were appropriate. The Committee endorsed management's proposal.
— Accounting standards and best practice guidance The impact of new accounting standards, and any elections made in their application, involves judgement to ensure their adoption is managed appropriately.	**Response of the Audit Committee** The Committee considered and was satisfied appropriate disclosure had been made of the amendment to IAS16 *Property, Plant and Equipment: Proceeds before intended use* that had the most significant impact on the Group's Quellaveco project where all revenues in 2022 arose before commercial production would be reached. The judgement and associated accounting consequences of whether commercial production had been reached as at 31 December 2022 for Quellaveco were assessed and the Committee were satisfied that the status was not achieved at 31 December 2022. During the year the Financial Reporting Council's (FRC) Supervision Committee undertook a limited scope review of the Group's TCFD disclosures and disclosures of climate in the 2021 financial statements. The FRC asked some clarification questions and recommended some further enhancements in respect of certain impairment disclosures. The Committee reviewed the responses provided, noted the points were satisfactorily resolved and that where applicable disclosures were appropriately enhanced for the 2022 financial statements. The Committee received updates on government consultations regarding UK Corporate Reform which are anticipated to bring wide-ranging changes to the corporate regulatory landscape.
— Going concern basis of accounting in preparing the financial statements The ability of the Group to continue as a going concern requires judgement in the estimation of future cash flows and compliance with debt covenants in future years.	**Response of the Audit Committee** The Committee assessed the forecast levels of net debt, headroom on existing borrowing facilities and compliance with debt covenants. This analysis covered a period of least 12 months from the date of approval of the financial statements, and considered a range of downside sensitivities linked to the Group's principal risks, including a reduction in commodity prices and potential operational incidents. The Committee concluded it was appropriate to adopt the going concern basis.

Liquidity management

— Liquidity and debt Reviewing the application of the debt strategy, funding and capital structure and the Group's forecast cash position. Judgement is required in the estimation of future cash flows and their impact on financing plans and contingencies.	**Response of the Audit Committee** The Committee received regular updates on the profile of the Group's debt maturities and liquidity headroom, continued capital expenditure requirements, free cash flow generation and dividend payments. The Committee reviewed management's debt capital markets and banking plans for 2023, in the context of strategy-defined targets, to ensure the continued sufficiency of financing facilities.
— Payment of the dividend Reviewing management's recommendation to the Board regarding the level of dividend to be paid for 2022, based on the payout-ratio-driven dividend policy.	**Response of the Audit Committee** During 2022, the Committee reviewed the proposals for payments of dividends, in accordance with the payout-ratio-driven dividend policy based on 40% of underlying earnings. Taking into account the Group's liquidity position, the Committee endorsed the proposal by management, and recommended to the Board for approval, the payments of the 2021 final dividend, 2021 special dividend and the 2022 interim dividend.
— Viability statement The viability statement, and the underlying process to analyse various scenarios that support the development of the viability statement, are found on pages 67-68.	**Response of the Audit Committee** The Committee reviewed the time period over which the assessment is made, along with the scenarios that are analysed, the potential financial consequences and assumptions made in the preparation of the statement. The Committee concluded that the scenarios analysed were sufficiently severe but plausible and the time period of the viability statement was appropriate.

Risk assurance

— Risk management The Group's risk profile and the process by which risks are identified and assessed.	**Response of the Audit Committee** The Committee assessed the Group's risk profile, in particular the principal risks (see pages 69-73). The Committee discussed the key risks, the mitigation plans in place and the appropriate executive management responsibilities. The Committee also considered the process by which the risk profile is generated, the changes in risk definitions and how the risks aligned with the Group's risk appetite. Following discussion and challenge, the risk profile was approved.
— Various risk matters The Committee oversees the implementation of work to mitigate a variety of key risks.	**Response of the Audit Committee** During the course of 2022, the Committee reviewed work to mitigate data protection risk, risks associated with the Quellaveco project, marketing and trading risks and managing mine closure and concurrent rehabilitation liabilities. The Committee evaluated the work being performed, progress made and provided challenge to satisfy itself that these risks were being adequately managed.
— Ethical business conduct The Committee monitors the effectiveness of, and compliance with, the Group's Code of Conduct. The Committee also reviews the Group's whistleblowing arrangements and procedures.	**Response of the Audit Committee** The Committee reviewed the ongoing work to enhance ethical business conduct across the Group. The Committee received reports on bullying and harassment investigations, anti-corruption initiatives and the inaugural Action for Integrity campaign. The Committee considered the activities undertaken to strengthen Code of Conduct and Group policy governance such as undertaking risk management effectiveness reviews of 20 Group policies and implementation of a Compliance Management System.
— Mineral Resources and Ore Reserves statements The year-on-year changes to Mineral Resources and Ore Reserves for operations and projects across the Group.	**Response of the Audit Committee** The Committee reviewed the significant year-on-year changes, satisfying itself that appropriate explanations existed. The Committee also reviewed the ongoing improvements in the process to estimate and report Mineral Resources and Ore Reserves.
— Internal audit work Reviewing the results of internal audit work and the 2022 plan.	**Response of the Audit Committee** The Committee received reports on the results of internal audit work. The Committee discussed areas where control improvement opportunities were identified and reviewed the progress in completion of agreed management actions. The Committee reviewed the proposed 2023 internal audit plan, assessing whether the plan addressed the key areas of risk for the business units and Group. The Committee approved the plan, having discussed the scope of work and its relationship to the Group's risks.
— External audit Reviewing the results of the external audit work, evaluating the quality of the external audit and consideration of management letter recommendations.	**Response of the Audit Committee** The Committee reviewed the planning report from PwC in June 2022 and approved the final audit plan and fee, having given due consideration to the audit approach, materiality level and audit risks. The Committee received updates during the year on the audit process, including how the auditor had challenged the Group's assumptions on the accounting issues noted in this report. In February 2023, the Committee reviewed the output of the external audit work that contributed to the auditor's opinion.

Ensuring the independence and effectiveness of the external auditor

Anglo American's Group policy on External Auditor Independence incorporates the requirements of the FRC's revised Ethical Standard published in 2019.

A key factor that may impair an auditor's independence is a lack of control over non-audit services provided by the external auditor. The external auditor's independence is deemed to be impaired if the auditor provides a service that:

- Results in the auditor acting as a manager or employee of the Group
- Puts the auditor in the role of advocate for the Group
- Creates a mutuality of interest between the auditor and the Group.

Anglo American addresses this issue through the following measures:

- Services performed by PwC are permitted non-audit services. The permitted non-audit services mirrors the 'Whitelist' included in the FRC's revised Ethical Standard
- Prior approval by the Audit Committee of non-audit services where the cost of the proposed service exceeds or is expected to exceed $100,000
- Disclosure of the extent and nature of non-audit services.

Anglo American's approach to the provision of non-audit services is contained within its policy on External Auditor Independence.

Non-audit work is only undertaken where there is commercial sense in using the auditor without jeopardising auditor independence; for example, where the service is related to the assurance provided by the auditor or benefits from the knowledge the auditor has of the business.

Non-audit fees represented 13% of the 2022 audit fee of $16.2 million. A more detailed analysis is provided on page 284.

Other safeguards:

- The external auditor is required to adhere to a rotation policy based on best practice and professional standards in the UK. The standard period for rotation of the audit engagement partner and any key audit partners is five years. The audit engagement partner, Mark King, was appointed in 2020 and will rotate off at the end of the 2024 audit in accordance with this requirement
- Any PwC partner designated as a key audit partner of Anglo American will rotate off the audit at the end of 2024 and shall not be employed by Anglo American in a key management position unless a period of at least two years has elapsed since the conclusion of the last relevant audit
- The external auditor is required to assess periodically whether, in their professional judgement, they are independent of the Group
- The Audit Committee ensures that the scope of the auditor's work is sufficient and that the auditor is fairly remunerated. The Committee agreed an audit fee of $16.2 million (2021: $15.1 million) for statutory audit services in the year
- The Audit Committee has primary responsibility for making recommendations to the Board on the appointment, reappointment and removal of the external auditor
- The Audit Committee has the authority to engage independent counsel and other advisers as they determine necessary to resolve issues on the auditor's independence
- An annual assessment is undertaken of the auditor's effectiveness through a structured questionnaire and input from all business units and Group functions covering all aspects of the audit process. The Audit Committee members also participate in this assessment, which evaluates audit planning, execution, communications and reporting. The assessment identifies strengths and areas for improvement, which are discussed with the auditor and action plans agreed. The Committee reviewed the measures taken by PwC to support audit quality, including their significant focus on robust challenge and appropriate scepticism in respect of management's assumptions. The evaluation of the external audit concluded that the external auditor was independent, objective and effective in the delivery of the audit.

Anglo American confirms compliance during the year with the provisions of the Competition and Markets Authority Order on mandatory tendering and audit committee responsibilities.

Conclusions of the Audit Committee for 2022

The Audit Committee has satisfied itself that the external auditor's independence was not impaired.

The Audit Committee held meetings with the external auditor, without the presence of management, on two occasions, and the chairman of the Audit Committee held regular meetings with the lead audit engagement partner during the year.

Consideration given to the appointment of the external auditor

The Audit Committee's assessment of the external auditor's performance and independence underpins its recommendation to the Board to propose to shareholders the re-appointment of PwC as auditor until the conclusion of the AGM in 2024. Resolutions to authorise the Board to re-appoint and determine the remuneration of PwC will be proposed at the AGM on 26 April 2023.

Risk management

Risk management is the responsibility of the Board and is integral to the achievement of the Group's objectives. The Board establishes the system of risk management, setting risk appetite and maintaining the system of internal control to manage risk within the Group. The robust process of identifying and evaluating the principal and emerging risks was in place during 2022 and up to the date of this report. The Group's system of risk management and internal control is monitored by the Audit Committee under delegation from the Board. The Board confirms that it has completed a robust assessment of the Company's emerging and principal risks.

The system of risk management is designed to ensure awareness of risks that threaten the achievement of objectives. The controls that mitigate those risks are identified so that assurance can be provided on the effectiveness of those controls. A determination can then be made as to whether the risk is operating within the Group's risk appetite. We seek to embed a culture of risk awareness into the development of our strategic and operational objectives.

The process for identification and assessment of the principal risks combines a top-down and bottom-up approach. At the operations level, a process to identify all risks that prevent the achievement of objectives is undertaken. Detailed analysis of the material risks at each location is performed to ensure management understanding of the risk and controls that reduce likelihood of occurrence and impact should the risk materialise. These operational-risk profiles contribute to the assessment of risks at the business unit level. Executive management at each business unit assesses risks that threaten achievement of the business unit objectives and the status of controls, or actions, that mitigate those risks. At the Group level, risks are identified through assessment of global factors affecting the industry and the Group specifically, as well as the risks arising from the business unit assessments. Consideration is given to the views and interests of Anglo American stakeholders. Materiality of risk is determined through assessment of the various impacts that may arise and likelihood of occurrence. An exception relates to those risks deemed catastrophic in nature, where the focus of assessment is on impact and status of internal controls, given the very low likelihood of occurrence. When considering the impact of any risk, we assess safety, environmental, financial, legal or regulatory, social and reputational consequences.

Regular reports on the status of risks and controls are presented to executive management teams throughout the year. The Audit Committee reviews reports on the overall Anglo American risk profile on two occasions during the year and conducts in-depth reviews of specific risks during its meetings over the course of the year. Each principal risk is assigned to either the Board or the relevant Board committees to oversee executive management actions in response to that risk. The Audit Committee reviews that oversight process on an annual basis.

Details of the principal risks are provided on pages 69-73.

Risk appetite

We define risk appetite as 'the nature and extent of risk that Anglo American is willing to accept in relation to the pursuit of its objectives'. Each principal risk is assessed as to whether it is operating within the limit of appetite for the Group. This is based on review of the external factors influencing that risk, the status of management actions to mitigate or control the risk and the potential impact should the risk materialise. For risks operating beyond the limit of appetite, a change in strategy may be required. For risks operating within, but approaching the limit of appetite, specific management actions may be required to ensure the risk remains within the limit of appetite.

Risk management and the system of internal control

Controls either reduce the likelihood or impact of any risk, while the identification of material controls – i.e. those controls that have the most influence in mitigating a risk – is an important input for audit planning.

The system of internal control operates on a collaborative 'three lines' approach, with operating management owning and managing risks and controls on a day-to-day basis, and business unit or functional management fulfilling a second line role through frequent oversight of implementation of controls, and providing complementary expertise, support and challenge relating to the management of risk.

A centrally managed internal audit department provides the third line role by reviewing the design and operating effectiveness of the internal control framework, which includes the work performed by the first and second lines management teams. External assurance providers sit outside the three lines' roles but provide additional assurance to satisfy legislative and regulatory expectations, or requests from management or the Board to complement internal sources of assurance.

The above is reflected in the Anglo American Risk and Assurance Governance (RAG) Model, introduced in 2020, and work has continued in 2022 together with the respective functions and operations to embed this further.

Internal audit operated in all the Group's managed businesses in 2022, reporting its work to executive management and the Audit Committee on a regular basis. The internal audit department's mandate and annual audit coverage plans were approved by the Audit Committee.

The scope of internal audit work covers the broad spectrum of risk to which the Group is exposed. The audit of controls associated with major operating/technical risks was undertaken in conjunction with relevant internal and external technical experts from the Technical and Sustainability function, the results of which were shared with the Sustainability Committee and Audit Committee.

In determining its opinion that the internal financial controls and internal control and risk management environment was effective during 2022, the Audit Committee considered the following factors:

- The results of internal audit work, including the response of management to completion of actions arising from audit work
- The key risk areas of judgement and estimation uncertainty within financial reporting and mitigating actions taken by management
- The output of risk management work
- The output of external audit work and other assurance providers
- Issues identified by management or reported through whistleblowing arrangements, and the results of investigations into allegations of breaches of our values and business principles.

Reviewing the effectiveness of the system of risk management and internal control

The Board, through the Audit Committee, fulfils its responsibility in reviewing the effectiveness of the system of risk management and internal control through review of reports submitted over the course of the year covering the risk management process, adequacy of the internal control environment, consideration of risk appetite, in-depth reviews of specific risks and the results of external audit work. The Sustainability Committee also reviews safety and sustainable development risks in detail and reports its findings to the Board.

Reviewing the effectiveness of internal audit

The Committee assesses the work of internal audit on a regular basis through the receipt of reports on the progress of the internal audit plan and issues arising and through its annual effectiveness review. The resources of internal audit are also monitored to ensure appropriate expertise and experience. The Committee met with the Group head of risk management and business assurance, in the absence of management on two occasions during 2022. An external quality assessment was performed of the internal audit function, which concluded conformance with the Institute of Internal Auditors Standard and the UK Code of Practice for Internal Audit is high and that the function is overall effective. Furthermore, the chair of the Committee held regular one-to-one meetings with the Group head of risk management and business assurance.

Whistleblowing programme

The Group operates a multilingual whistleblowing facility which uses a reporting platform provided by a third party service provider. The whistleblowing programme is called YourVoice and continues to facilitate confidential and anonymous reporting of a wide range of concerns about potentially unethical, unlawful or unsafe conduct or practices that conflict with our Values and Code of Conduct.

YourVoice channel is available to our employees in our managed operations as well as to all external stakeholders, such as suppliers, community members, and members of the public affected by our operation.

During 2022, we received 1,089 reports through the YourVoice channel, a 37% increase from 2021.

900 allegations were closed during this reporting period, which include intakes from prior years. 29% of the 2022 allegations closed were substantiated or partially substantiated. All YourVoice reports are assessed and investigated as appropriate by a dedicated investigation team based across the Group using a standardised investigation framework. Appropriate actions were taken against substantiated allegations.

The continued rise in reports is attributed to the increased awareness of the channel, a growing culture of trust among our employees and other stakeholders to raise their concerns with confidence. The promotion of this channel through other relevant Group-wide initiatives, such as the Action for Integrity month, policies and programmes, also encouraged a healthier 'speak up' culture.

The current process facilitates the opportunity to take early remedial actions and enables management to address any systemic issues identified. For this purpose, protocols have been agreed with the Group's senior management for early involvement and support in sensitive investigation cases, such as fraud, bullying, harassment, safety and others with the potential for significant reputational damage.

The Audit Committee is responsible for monitoring and advancing the programme on a continuous basis.

Directors' remuneration report

"Against the backdrop of the uncertain economic climate, the Committee remains focused on ensuring the links between pay and performance remain robust. During this challenging time we must also be agile to protect the welfare of our workforce."

Committee members

Ian Tyler – Chairman (appointed to the Committee 1 January 2022 and as chair from 19 April 2022)

Ian Ashby

Hixonia Nyasulu

Byron Grote (resigned 19 April 2022)

Anne Stevens (chair – resigned 19 April 2022)

Ian Tyler had the requisite length of service as a member of a remuneration committee on his appointment as the chairman, in accordance with the UK Corporate Governance Code and the Committee's terms of reference.

— For further detail on biographies and Board experience: **See page 124–126**

The chairman, chief executive, Group director of people and organisation, the Group head of reward, and external advisers also attend meetings at the invitation of the Committee.

Role and responsibilities

- Establishing and developing the Group's general policy on executive and senior management remuneration.
- Determining specific remuneration packages for the chairman, executive directors, members of the GMC and other senior management for review and approval by the Board.
- Input and oversight on the reward policy for the broader workforce.
- Engaging with the wider workforce, shareholders and other stakeholders regarding executive remuneration.

The Committee's terms of reference are available to view online.

— For more information, visit **www.angloamerican.com/about-us/governance**

Changes to the Committee

Ian Tyler joined the Board and was appointed to the Committee effective 1 January 2022. Ian was appointed chairman of the Committee on 19 April 2022.

Byron Grote and Anne Stevens stepped down as non-executive directors and members of the Committee on 19 April 2022.

Committee discussions and focus areas in 2022

- Approval of incentive results for the 2021 annual bonus and vesting levels of the 2019 LTIP
- Setting of incentive targets for the 2022 annual bonus and LTIP
- Development of the 2023 directors' remuneration policy, including consultation with shareholders on proposals
- Approval of remuneration arrangements for outgoing technical director on cessation of employment
- Approval of remuneration arrangements for GMC members, including new appointments
- Approval of terms for inaugural grant of new global all employee share plan – 'MyShare'
- Updates on broader employee pay, including response to global cost-of-living crisis and feedback from Global Workforce Advisory Panel on remuneration matters.

Key areas of focus for 2023

- Assessment of 2022 incentive outcomes, including for the 2022 annual bonus and 2020 LTIP award
- Setting of incentive targets for 2023, including the 2023 annual bonus and 2023 LTIP award
- Finalise 2023 remuneration policy to be presented at the 2023 AGM
- Review of corporate governance in relation to remuneration issues, remuneration market trends and any implications for the Group.

Introductory letter

Dear Shareholders
I am delighted to present my first letter to introduce the Anglo American directors' remuneration report. I joined the Board and the Committee in January 2022 and assumed the role of chairman of the Committee following the AGM on 19 April. I would like to thank my predecessor Anne Stevens for her valuable years of service in the role.

2022 proved to be another year of high uncertainty, with the post-Covid economic recovery, inflationary pressures, and Russian invasion of Ukraine, contributing to the ongoing cost-of-living crisis. This was the scenario faced by our employees across the world, and the Group responded quickly to provide our people with reassurance and appropriate support.

It has been a challenging year for the Group in terms of operational performance, in part due to the external challenges, albeit recording its second highest level of underlying profits. We remained focused on our commitment to keep employees and communities safe, while continuing to grow our business in its supply of metals and minerals that enable a lower carbon economy and that meet the diverse needs of a growing global population.

We will be presenting to the 2023 AGM a new remuneration policy to shareholders for approval. This policy aims to build on the Committee's long term approach in ensuring strong alignment between remuneration and delivery of our strategic ambitions, guided by our Purpose. The current balanced framework will remain in place, continuing to incentivise strong delivery over the short term and the achievement of our long term strategy.

Fairness and wider workforce pay
We care deeply about our workforce and continue to prioritise their safety and well-being. Throughout the year we supported several initiatives in this respect, and the challenges faced by our people will continue to be front of mind as we go into 2023.

Our response to the cost-of-living crisis
The cost-of-living crisis in many countries, exacerbated by higher energy prices, was felt by both the Group and many of our stakeholders. This period of economic uncertainty was unprecedented in recent times and the related pressures were felt by our employees, especially those in lower-paid roles. It was critical that the Company acted to provide these employees with reassurance that they were supported at this time.

In September, we paid a one-off lump sum support payment to lower paid employees in 10 countries that were most affected by the crisis. The value of the payment for each country was determined on a country-by-country basis based on the inflation levels for that country. I am pleased the Group was able to act quickly and effectively in supporting our people through these challenging times.

Salary increase levels for our wider workforce for 2023 also take into account the continued high levels of inflation, with country-by-country increases being informed by CPI increases. This approach further signals the Company's commitment to ensuring that employee welfare is prioritised during this difficult time.

MyShare – our new global share plan
As outlined last year, work has been under way on the development and implementation of a new global all employee share plan – 'MyShare'. The plan was approved by shareholders at the 2022 AGM, with overwhelming support of 98.54%.

MyShare is a global initiative that supports our goal to give all employees the chance to own shares, create greater equity in wealth creation opportunities across the wider global workforce, and enhance employee engagement. The scheme will enable employees to share in the success of the Group and help further foster a sense of pride and ownership in coming to work on a daily basis. The first award was made in September 2022.

Further details on the launch of the MyShare scheme are outlined in the Fairness section on page 195 of this report.

Workforce engagement on remuneration
Anglo American's Global Workforce Advisory Panel (the Panel) currently comprises 11 employees drawn from across our business, and is chaired by non-executive director Marcelo Bastos. The Panel's purpose is to give the workforce more of a 'voice' in the Boardroom so their views can be better understood and considered when decisions are being made about the future of the business. This includes how the committee takes on board the views of the wider workforce in making decisions on executive remuneration. The Panel operates alongside Anglo American's existing employee engagement mechanisms, such as regular employee engagement surveys and director interaction with employees.

In 2022, the Panel was able to hold its first in-person meeting since the start of the Covid-19 pandemic. Panel members are provided with briefings in advance, on topics for discussion at the meetings and were asked to engage with the workforce populations they represent, in order to provide feedback with their collective views at Panel meetings. At this meeting, one of the topics discussed was remuneration and reward at Anglo American. Overall, Panel members reported strong support for our reward structures and there were no concerns reported on executive pay.

The Committee was pleased with the quality and richness of the feedback from these sessions and will continue to actively seek opinions on reward and executive remuneration through the Group's employee engagement mechanisms, including from the Panel.

Living wage
The Company continues to be a proud advocate of the living wage, having been an accredited Living Wage employer in the UK since 2014, via the Living Wage Foundation. In 2022, we embarked on accreditation with the Fair Wage Network and we are proud to have been awarded status as a committed global living wage employer in January 2023.

CEO pay ratio
The CEO pay ratio compares the chief executive's remuneration to the pay for an employee at the median, lower quartile and upper quartile of our UK employee population (including De Beers and Crop Nutrients employees).

The median CEO pay ratio for 2022 is 73:1, down from 141:1 for 2021. The sizeable decrease is mainly due to the restated 2021 ratio being high, impacted by the strong actual share price of the LTIP on vesting of £39.19. Additionally, this is also impacted by the appointment of the new CEO at a lower salary level than his predecessor. Further details on the CEO pay ratio can be found on page 200.

2023 remuneration policy
On assuming the role of chair of the Committee, an immediate priority was to oversee the development of the new remuneration policy for approval at the 2023 AGM. With the recent appointment of a new chief executive, alongside my own recent appointment, it was fortuitously timed. We have worked to ensure the new policy will continue to be fit for purpose in supporting the Company's strategic goals in the future.

The review process was comprehensive, collating internal views and opinions, as well as considering external market information and best practice. The review considered a number of alternatives, ranging from minor amendments to a more radical overhaul of current structures. The overarching goal for this review was to ensure that remuneration payouts continue to strike a fair balance between ensuring that pay not only reflects the Company's underlying performance, but that it is also aligned to the returns delivered to shareholders.

The result of the review was that the current remuneration policy is still appropriate in supporting the Company's future growth strategy and culture under the leadership of our new chief executive. However, we are proposing some amendments to the policy (summarised below) which the Committee believes will provide the Company with greater flexibility to adapt to the ever changing external environment and also align our practices to that of the market.

Summary of key changes
The main changes to the executive directors' remuneration policy for 2023 are set out below.

Increase LTIP maximum opportunity to 350% of salary
The maximum grant opportunity for the LTIP has been increased by 50% of salary, from 300% to 350%. This change is to ensure that the remuneration policy offers sufficient flexibility in both retaining and motivating current executive directors and in attracting exceptional future leaders in a competitive global market for talent. For the 2023 LTIP grant, it is proposed that this increase will only be implemented for the chief executive. The Committee considers that the increase in the chief executive's LTIP award is appropriate, taking into account the reduction in the chief executive's base salary (in comparison to his predecessor). The increased LTIP opportunity will:

1. rebalance his total package towards the longer term, which is more consistent with our overall organisational reward philosophy; and
2. bring his total package more in line with market practice for a company of our size and complexity. Ideally, we would have set the chief executive's LTIP opportunity at this higher level on appointment, but this was not possible under the current remuneration policy.

The finance director's LTIP opportunity will remain at 300% of base salary, as the Committee considers that the overall positioning of his package relative to their peers in the market remains appropriate.

Replacement of the formulaic LTIP grant reduction with a discretionary approach
The 2020 policy introduced a formulaic mechanism to reduce the value of LTIP grants in the event of a share price fall of 25% or more between successive grants. The purpose of this was to mitigate the risk of windfall gains for participants, in the event of a material fall in share price compared to prior years.

It is proposed that for the 2023 Policy, the formulaic element of this mechanism will be replaced with a discretionary approach, guided by the principles set out below.

The additional flexibility provided through this discretionary approach will ensure that future outcomes are equitable and reflective of the circumstances at each grant date, based on a holistic view. The discretionary approach is also more aligned with current market practice. During our consultation with shareholders, we committed to providing further information in this report as to how the discretionary mechanism will work in practice. As such, the Committee has developed the following principles:

Each year, the Committee will formally review any share price fall since the last LTIP grant date. In the event that there has been a fall in share price prior to grant (compared to the share price used to determine the number of shares granted under the previous award), the Committee will first consider whether that fall is material:

- If the reduction is 15% or less, the Committee will proceed with the grant in the normal way
- If the reduction is between 15% and 25%, the Committee will carry out a review of the possible reasons for the reduction. In the absence of a compelling reason to adjust the grant level, the Committee will proceed with the grant in the normal way
- If the reduction is greater than 25%, the Committee will carry out a review of the possible reasons for the reduction, and its starting point will be that a reduction in grant level is likely to be appropriate, unless there is a compelling reason otherwise.

In its review, the Committee will consider if the application of a reduction mechanism is appropriate, taking a holistic view in light of the prevailing conditions. In particular, the Committee will consider:

- The circumstances of the fall in share price, including any internal, micro-economic or macro-economic factors that may have influenced the fall beyond normal market forces
- Whether the share price used to determine the number of shares granted under the previous award represented an unusual high compared to performance more generally over a sustained period, and whether this is attributable to an external event or circumstance
- The number of shares granted to executive directors under recent LTIP grants.

Removal of quantitative cap on salary increases and maximum benefit levels

Under the current policy, there is a quantitative cap on the maximum salary increase and total benefit levels for any given year. Such quantitative caps are not common practice in the market and, therefore, to ensure appropriate flexibility, it is proposed that they should be removed. There are no plans to change the implementation of these policies and, under our new policy, any salary increase for the executive directors will normally, at most, be in line with the increase for the wider UK workforce. This change is a move purely to align our policy to that of the market.

Shareholder consultation

The above proposals were finalised following a consultation with a group of our largest shareholders and proxy advisers. Overall, the feedback received from this process was positive and the Committee found their views helpful in developing and framing the changes. Several shareholders asked constructive questions relating to the proposals and I am confident our response addressed the points raised. I would like to thank all stakeholders who provided valuable feedback during the process.

Director changes during the year

In November 2022, we announced the plans for the retirement of our Group technical director – Tony O'Neill. Tony stepped down from the Board at the end of 2022 and will remain with the Company to ensure a smooth transition of his responsibilities. Following Tony's decision to retire, the role was divided into two to facilitate the next phase of prioritisation for Anglo American's technical disciplines, to best support business performance. It has been announced that these roles will be filled by Matt Daley as Group director of technical and Alison Atkinson as Group director of projects and development. Tony will leave the Company at the end of his notice period on 30 June 2023.

The Committee approved the terms for Tony's departure in December 2022. Full details of Tony's remuneration arrangements for his departure are outlined in the implementation report on page 194. His remuneration arrangements on retirement are in line with the current directors' remuneration policy, and treatment of his incentives will be in line with his service agreement and the rules of our incentive arrangements.

Decision making

The Committee has taken into consideration: company performance, which includes financial performance; health and safety; personal achievements of each executive director in innovation, our People agenda and transforming our portfolio, when making decisions on pay. We also continue to consider shareholder opinion and experience, pay for the wider workforce, and wider societal expectations. As a Committee, we continue to strive to make decisions that strike a balance between incentivising the management team, paying for good performance and being equitable in the broader context. To avoid conflicts of interest, no executive director is present when their pay is discussed; likewise, the chairman is not present in the meeting when his remuneration is discussed.

As in 2020 and 2021, the Committee did not make adjustments to incentives as a result of the impact from the Covid-19 pandemic.

2022 outcomes

Safety, health and environment

While we continue to make progress on our safety record and strive to reach our target of zero harm, it is with regret and sadness that we experienced two fatalities at our managed operations during 2022, as well as a fatality related to an incident that took place during 2021. In line with our updated approach to the safety deductor, as outlined in the 2021 report, to ensure reductions to variable pay are more significant in terms of quantum than previously implemented, the Committee judged that it was appropriate to apply a 15% deduction to annual bonus payouts for the executive directors.

Any loss of life on our sites is unacceptable and we will continue to work until we hit our goal of zero fatalities on a consistent basis. As such, in 2022, we continued to implement our safety vision through targeted tactics, and by investing in systems, standards and people. The embedding of our Elimination of Fatalities work continued successfully across the business with all in scope workstreams across all business units completing the Elimination of Fatalities programme sustainability process; this is recognised in the bonus outcomes described below. We fully expect the embedding of this work to be reflected in improved safety outcomes as we look forward.

In 2022, our total recordable injury frequency rate (TRIFR) decreased by 2% to 2.19, reflecting the urgent safety reset and calls to action undertaken across the Group in the second half of the year. Although this reduction was not sufficient to deliver on our target, we saw a marked improvement towards the end of the year and remain absolutely committed to working towards a step-change in the reduction of injuries.

Financial performance

The combined effects of Russia's invasion of Ukraine and the lingering impact of the Covid-19 pandemic continue to pose a volatile economic environment. Additionally, extreme weather has further hampered several of our operations across the globe.

The challenging conditions have meant that underlying EBITDA for the year has fallen to $14.5 billion, down from the record performance in 2021, yet this was still our second highest ever achieved. The absolute decrease was due to a combination of inflationary headwinds, lower production volumes and higher energy prices raising the cost of production.

Despite the fall in EBITDA, we delivered a return on capital employed result of 30%, above our targeted 15% through-the-cycle return. We also saw strong relative share price performance, resulting in a TSR of 14.3% for the year, versus the median for the FTSE 100 of (15.4)%.

The Committee considers the operation of the policy in 2022 and the pay outcomes to be appropriate and reflective of overall performance.

Annual bonus outcomes

In the context of the financial performance described above, the financial measures within the annual bonus paid out at 22%. This outcome, although delivered in the context of strong financial performance and shareholder returns, reflects the fact that the Committee sets highly challenging targets at the start of each year, delivery of which has been impacted by the operational and other challenges highlighted elsewhere in the report. The Committee will continue to set robust targets which strike a balance between rewarding underlying improvements and reflecting the shareholder experience.

Despite the fact that our TRIFR did not reduce in line with the target, the Group continued to make good progress towards our safety, environmental and health goals, resulting in a 75% payment against SHE targets (this does not include the 15% safety deductor which is applied to the whole award).

Bonus outcomes for the executive directors after the safety deductor were at 42.6% of maximum for the CE, the former CE and the technical director, and 43.4% of maximum for the finance director.

2020 LTIP outcomes

The shareholder experience over the three-year performance period was a positive one; the total TSR outcome of 80.6%[(1)] is significantly higher than the FTSE 100 median TSR of (0.4)% and the Euromoney Global Mining Index TSR of 63.9%. This resulted in full vesting of the 17% of the LTIP based on the FTSE 100 measure and 73.2% vesting of the 33% of the award based on the Euromoney Global Mining Index measure. This resulted in a total of 41.2% vesting from the total 50% of the award linked to TSR performance conditions.

The 15% of the award dependent on ROCE vested at 100%, based on attributable ROCE of 30% for the year. Group Cumulative Sustainable Attributable Free Cash Flow was affected by below budget cost and volume performance across the three year performance period, impacted by headwinds including Covid-19 and one-off operational incidents. This resulted in 0% vesting for this measure.

Greenhouse gas (GHG) Intensity for 2022 reduced by 21% against the 2019 baseline, driven primarily by renewable energy programmes commencing in Chile, as well as lower GHG emissions from reduced production activity in Steelmaking Coal and lower emissions from Aquila compared to previous operations at Grasstree. This resulted in vesting of the full 6% for this measure.

Energy efficiency for 2022 did not meet the 4% threshold reduction, so resulted in 0% vesting for the 8% this measure represents. The primary drivers were lower overall production levels, specifically at Steelmaking Coal, where operations still required a baseload of energy use to keep ventilation and other equipment running.

The 6% of the LTIP for the tailings dam measure required 100% implementation of the Anglo American tailings standard. The standard set was a deliberately high bar and considerable progress has been made towards meeting it in full, despite the scarcity of independent experts available to verify progress. Overall, risks are being managed effectively. However, notwithstanding this strong progress, the 100% requirement was not met, resulting in 0% vesting. The related tailings metric in the 2021 LTIP will continue to be closely monitored during 2023 to ensure the measure is effectively driving the overall outcome required and fairly reflects the progress achieved.

The LTIP awards will therefore vest at 62.2% of maximum.

The Committee considers that the operation of the policy and the annual bonus and LTIP outcomes for 2022 are a fair reflection of the overall performance of the business and the role played by management in that performance, and the experience of shareholders and stakeholders. Therefore, no discretionary adjustments to the incentive outcomes were made.

Looking ahead

2023 remuneration policy

The 2023 remuneration policy will be presented to a shareholder vote at the AGM in April 2023. The Committee will continue to engage where necessary with shareholders and other stakeholders to ensure that the policy is well understood and that support for the policy will remain strong.

Salaries

The Committee approved a 4% increase to current executive directors' salaries in 2023. Although an 8% increase was awarded to the Group's UK-based employees in light of the exceptionally high inflation levels and the impact of the cost of living crisis, the Committee, supported by management, felt that an 8% increase would not be appropriate for the executive directors who are less impacted by the cost-of-living challenges.

Implementation of incentives in 2023

The maximum annual bonus will remain at 210% for the chief executive and the finance director. As outlined above, it is proposed to increase the LTIP award level for the chief executive to 350% of base salary as part of the new remuneration policy. The maximum LTIP opportunity for the finance director will remain at 300% of salary.

Performance measures attached to the awards are in line with the structure outlined in the remuneration policy. Details of performance conditions attached to the 2023 incentives can be found in the implementation report that begins on page 192.

Conclusion

2022 has represented a busy but fulfilling first year for me as a director of the Company. I would like to thank everyone at Anglo American for their warm welcome and support in this role.

The remuneration policy review has helped me to gain a good understanding of the structures and dynamics relating to our remuneration offerings, especially for our most senior management. I believe the amendments to our 2023 policy will provide us with the tools to properly support the Company strategy and new chief executive's plans in the future. I hope we can count on your support for the vote at the AGM in April.

Ian Tyler
Chairman, Remuneration Committee

(1) Based on three-month average prices, in line with the TSR calculation methodology for LTIP awards.

At a glance

This section provides a summary of the key information presented in the remuneration report. This includes an overview of the 2023 policy being presented for a shareholder vote and a summary of the key changes being proposed.

Summary of our remuneration structure (changes in bold)

Element	2020 Policy	2023 Policy
Base salary		
Maximum annual increase	5%, with discretion to exceed in limited circumstances	**Normally increase, at most, in line with the wider UK workforce. No maximum salary increase**
Benefits		
Maximum level	10% of salary, with discretion to exceed in specific circumstances	**No prescribed maximum cost of benefits**
Pension		
Maximum level	Newly appointed directors: contribution aligned with the Company contribution for the wider UK workforce Incumbent directors: reduction of pension levels to reach parity with UK workforce in 2023	In line with rate available to the wider UK workforce
Annual bonus		
Maximum opportunity	210% of salary	210% of salary
Operation	≥50% on financial performance ≥15% on SHE ≤20% on personal performance, with the balance on scorecard of measures based on the Group's strategic priorities	≥50% on financial performance ≥15% on SHE ≤20% on personal performance, with the balance on scorecard of measures based on the Group's strategic priorities
Deferral	50% of bonus earned is deferred 17% for 2 years, 33% for 3 years	50% of bonus earned is deferred 17% for 2 years, 33% for 3 years
LTIP		
Maximum award	300% of salary	**350% of salary**
Time period	3-year performance/vesting period 2-year holding period	3-year performance/vesting period 2-year holding period
Operation	Vesting based on performance measures linked to the Group's strategic priorities and may include relative TSR, ROCE, FCF and strategic objectives	Vesting based on performance measures linked to the Group's strategic priorities and may include relative TSR, ROCE, FCF, and strategic objectives
LTIP cap	Value at grant will be reduced in the event that the share price falls by 25% or more over the period between consecutive award dates	**Reduction mechanism for LTIP grants at discretion of Remuneration Committee**
Share ownership guidelines		
In-post	Chief executive: 4x salary Other executive directors: 3x salary	No change
Post-employment	Lower of actual shareholding on exit and 100% of in-post guideline, for 2 years (covers future share awards only)	No change
Non-executive director remuneration		
Fee levels	Maximum annual aggregate basic fee for all NEDs (excluding Chairman) of £1,250,000	No change

Incentive performance metrics – financial measures

Underlying EPS◊

$4.97/share

Three-year shareholder return

80.6%

Group attributable ROCE◊

30%

2023 Implementation table

Key remuneration element	Implementation		Performance metrics
Salary	Duncan Wanblad Stephen Pearce	£1,300,000 (4% increase) £903,018 (4% increase)	
Car allowance	Duncan Wanblad Stephen Pearce	£34,627 £33,719	
Pension	15% of base salary (aligned to wider UK workforce from January 2023)		
Annual bonus	Maximum of 210% of salary 50% paid out as cash 17% paid out as shares deferred for 2 years 33% paid out as shares deferred for 3 years		34% EPS 16% SAFCF 20% SHE 20% Strategic 10% Individual
LTIP	Duncan Wanblad – 350% of salary Stephen Pearce – 300% of salary 3-year performance period with 2-year post-vesting holding period		50% TSR 15% ROCE 15% SAFCF 20% ESG

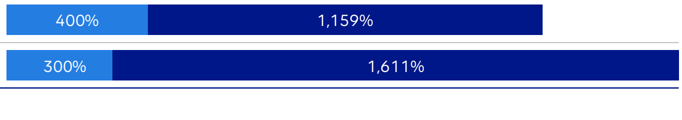
Key performance metrics for 2023

Metrics	Pillars of value	Rationale	Annual Bonus weighting	LTIP weighting
Safety and zero harm	Safety and health	– Employee safety is the Group's first and most important value	10%	
Underlying EPS◊	Financial	– Links reward to delivery of in-year underlying equity returns to shareholders	34%	
Sustaining attributable free cash flow◊	Financial	– Incentivises cash generation for use either as incremental capital investment, for capital returns to shareholders or debt reduction	16%	
Environmental Footprint	Environment	– Reduction in the Group's environmental footprint based on four pillars of ecological health (land, air, water and nature)	10%	
TSR	Financial	– Creates a direct link between executive pay and shareholder value – Measure is split between comparison against sector index (Euromoney Global Mining Index) and comparison against local peers (constituents of FTSE 100 index)		50%
Group attributable ROCE◊	Financial	– ROCE promotes disciplined capital allocation by linking reward to investment return over the performance period		15%
Sustaining attributable free cash flow	Financial	– Incentivises cash generation for use either as incremental capital investment, for capital returns to shareholders or debt reduction		15%
Renewable energy	Environment	– Commitment to address climate change by reducing GHG through the use of renewable energy		8%
Ethical Value Chains	Environment	– Ensuring our mines are assured against a recognised responsible mining standard		6%
Social responsibility	Socio-political	– Off-site jobs supported at our locations to reinforce our commitment to the communities in which we operate		6%
Total			**70%[1]**	**100%**

(1) 30% of annual bonus dependent on achievement of strategic and individual goals.

Executive directors' shareholdings

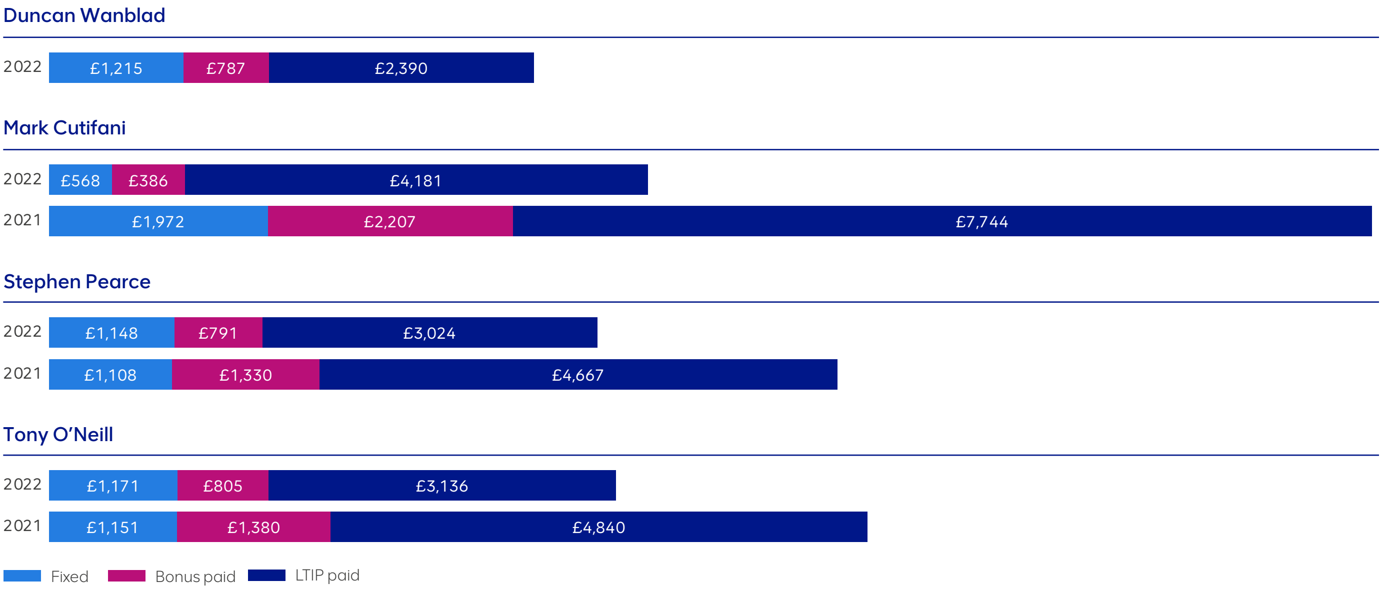
	Requirement	Shareholding as at 31 Dec 2022
Duncan Wanblad	400%	1,159%
Stephen Pearce	300%	1,611%



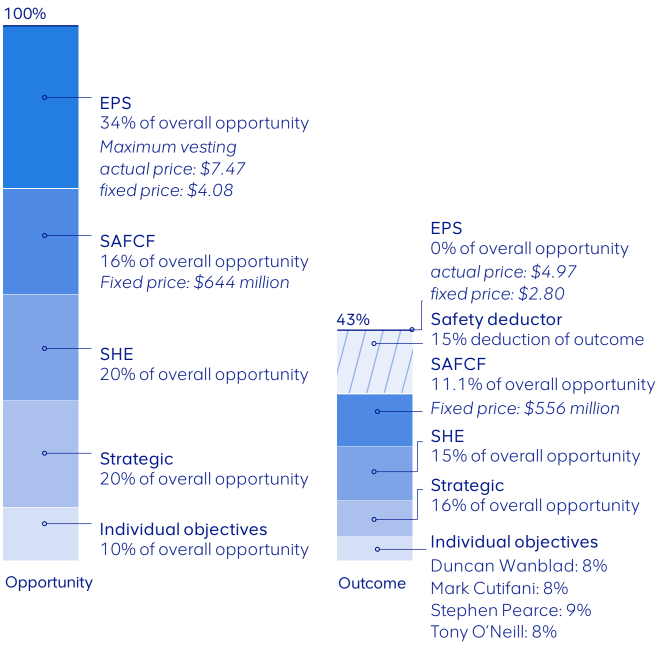
Executive directors are expected to build up and hold a percentage of their salary in shares (400% for the chief executive, 300% for other executive directors). As at 31 December 2022, all executive director shareholdings exceeded the required levels.

— For more information
See pages 190-191

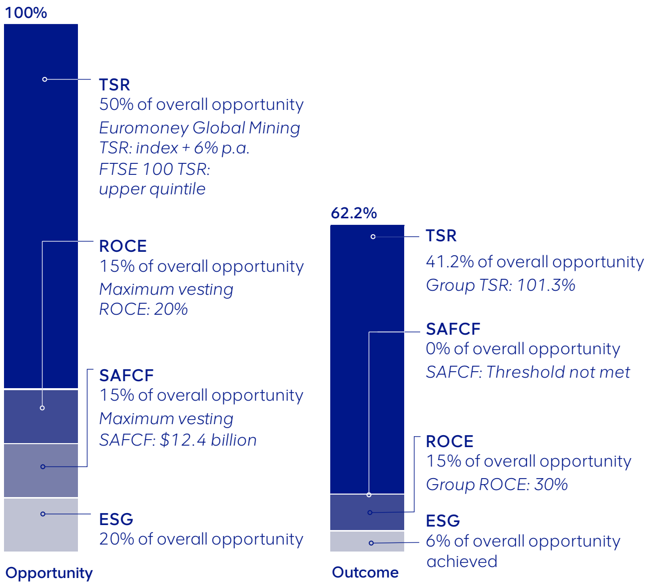
2022 Pay outcomes £'000



2022 annual bonus outcome



2020 LTIP vesting outcome



Directors' remuneration policy

2023 executive directors' remuneration policy

Changes to the directors' remuneration policy and summary of decision making process

Following a comprehensive review of the remuneration arrangements for our most senior levels of management, the Committee was satisfied that the policy and framework currently in place remain fit for purpose in supporting the Company's strategy for the next three years. We are proposing some amendments to the policy which the Committee believes will provide the Company with greater flexibility to adapt to the ever changing external environment and also align our practices to that of the market.

a. The maximum opportunity under the LTIP has been increased to 350% of salary.

b. The annual salary increase cap and annual benefits value cap has been removed to better align with market practice.

c. The formula driven LTIP reduction mechanism has been replaced with a discretionary approach to determine any adjustment, to ensure outcomes are appropriate in light of all prevailing circumstances and to better align with market practice. Principles as to the proposed review process each year can be found on page 192.

Further details are provided on these changes in the Chair's statement on pages 162-163 .

In addition to the above, other minor amendments have been made to the wording of the policy to aid operation and to increase clarity.

The Company will put the new remuneration policy, as set out on the following pages, to shareholders for a binding vote at the AGM on 26 April 2023. If approved, this policy will apply from the date of the AGM. The intention is that the revised policy will apply until the approval of the next policy at the Company's 2026 AGM.

In determining the policy, the Committee followed a robust process, which included discussions on the content of the policy at four Committee meetings. The Committee considered input from management and our independent advisers, and consulted with our major shareholders.

Market information relating to both the FTSE 100 and global mining sector peers was considered in the development of the new policy.

How our remuneration policy addresses UK Corporate Governance Code provision 40 principles

The 2023 remuneration policy was developed taking into consideration the principles of provision 40 of the UK Corporate Governance Code. The table below outlines how the policy addresses each of those principles:

Principle	How this is addressed in the 2023 remuneration policy
Clarity	Our remuneration structure is clearly defined, and performance-based elements, including metrics and vesting schedules are clearly disclosed.
Simplicity	Our remuneration elements are well-understood and in line with market standards.
Risk	Our policy limits the risk of unfair or excessive remuneration and supports long-term sustainable decision making through the following measures: – Clearly defined limits on the maximum opportunities of incentive awards – Operation of deferral on annual bonus awards – Operation of a post-vesting holding period for LTIP awards – The Committee has discretionary powers to adjust formulaic outcomes of incentive awards to ensure payouts are aligned to Group performance and the experience of key stakeholders – Robust malus and clawback provisions on all incentives – Discretion to reduce LTIP awards on grant to protect against potential 'windfall gains'.
Predictability	The policy has defined limits which can be used to determine potential values. Scenario charts are presented in the policy to illustrate potential payout scenarios.
Proportionality	Payouts under incentive awards are linked to the fulfilment of performance measures that support the Group's long-term strategy. Deferral and annual grants ensure long term alignment with shareholders. The Committee's powers of discretion ensure incentive outcomes are reflective of Company performance.
Alignment to culture	Focus on share ownership and long-term sustainable performance is reflected in the policy. LTIP performance measures support a long-term focus for executives, including in relation to our sustainability objectives. Payouts for a significant portion of both the annual bonus and LTIP are dependent on the achievement of ESG and SHE measures, which underlines the importance of safety and sustainability to the Group strategy.

2023 remuneration policy table

Key aspects of the remuneration policy for executive directors

	Operation	Opportunity	Performance measures
Basic salary To recruit and retain high calibre executives	Basic salary levels are reviewed annually by the Committee, taking account of factors including the Group's performance, individual performance, market practice at other companies of a similar size and complexity as well as at other companies in the mining sector, levels of increase for the wider workforce and inflation. The Committee considers the impact of any basic salary increase within the context of the total remuneration package.	Salary increases for executive directors will normally at most be in line with the increase awarded to the Company's wider UK workforce. There may be occasions when the Committee may award a higher annual increase, including (but not limited to): – Where there is a change in role or responsibility – An executive director's development or performance in role (e.g. to align a new appointment's salary with the market over time) – Where there is a significant change in the size and/or complexity of the Group.	Not applicable
Annual bonus To encourage and reward delivery of the Group's strategic priorities for the relevant year. To ensure, through the deferral of a portion into shares, that longer term focus is encouraged and in line with shareholder interests.	The annual bonus is awarded based on a combination of measures, determined by the Committee each year to ensure continued alignment with the Group's financial goals, strategic priorities and business needs. 50% of the annual bonus earned will be deferred into awards/shares under the Bonus Share Plan (BSP), vesting 17% after two years and 33% after three years. Vesting of BSP shares is subject to continued employment. Dividends or dividend equivalents are paid on Bonus Shares. Malus and clawback provisions apply as described below.	The maximum annual bonus opportunity is 210% of salary in respect of a financial year. The bonus earned at threshold performance is normally up to 25% of the maximum. Performance below threshold results in zero payout. The Committee has discretion to adjust the bonus outcome if it is not deemed to reflect the underlying performance of the Group or the experience of key stakeholders during the performance period.	Performance measures for the annual bonus for each year would normally meet the following criteria: – Minimum 50% financial measures – Minimum 15% SHE measures – Maximum 20% personal measures – Remainder of award to be linked to strategic measures. The Committee may reduce the bonus outcome in the event of one or more fatalities, taking into consideration all relevant facts and circumstances including the number of fatalities, the cause of such fatalities, any repeat failures in safety and the number of high potential incidents.

	Operation	Opportunity	Performance measures
Long Term Incentive Plan (LTIP) To encourage and reward the achievement of long term sustainable shareholder returns and the delivery of financial/strategic priorities. To align executive director interests to shareholder interests.	Conditional awards of shares or nil-cost options are granted annually, with a performance period of normally at least three years. Any awards that vest are subject to a holding period so that the overall LTIP time horizon normally is at least five years. Vested awards may not generally be sold during the holding period, other than to cover tax liabilities arising on vesting. Dividend equivalents accrue over the vesting period and are payable in respect of awards that vest. Malus and clawback provisions apply as described below.	The maximum annual LTIP opportunity is 350% of salary in respect of a financial year. The Committee reviews the executive directors' LTIP award sizes annually, prior to grant, to ensure they are appropriate. This includes consideration of the share price at the time of grant in comparison to prior years and the Committee may reduce award sizes where it judges that there has been a material decline in the share price and that a downward adjustment would be appropriate in the circumstances. For each performance element, threshold performance would normally not exceed 25% vesting of the element, rising on a broadly straight-line basis to 100% for achieving stretch targets. Performance below threshold results in zero vesting. The Committee has discretion to adjust the vesting outcome if it is not deemed to reflect the underlying performance of the Group or the experience of key stakeholders during the performance period.	Performance measures attached to each award should be linked to the Group's strategic priorities and may include, but are not limited to, TSR, ROCE, SAFCF and other strategic or ESG objectives.

	Operation	Opportunity	Performance measures
All-employee share plans To encourage eligible employees to build up a shareholding in the Company.	Executive directors are eligible to participate in applicable all-employee share plans on the same basis as other eligible employees in the relevant country they work in. In the UK, these currently comprise the Company's Save As You Earn (SAYE) scheme and Share Incentive Plan (SIP) on identical terms to other UK employees.	In line with the award limits applicable to the share plan, on the same basis that apply to other eligible employees.	Not applicable, in line with scheme terms as applicable to all employees.
Pension To provide a market competitive level of pension provision, taking account of the provisions for the wider workforce, to attract and retain high performing executive directors.	Executive directors participate in defined contribution pension arrangements. Executive directors may request a pension allowance to be paid in place of defined contribution arrangements. Current executive directors have the choice for contributions which may not be paid to a UK-registered pension scheme as a result of applicable limits (either annual allowance or lifetime allowance) to be treated as if paid to an unregistered unfunded retirement benefit scheme (UURBS). The UURBS is closed to new members and future executive directors will not be eligible to join this scheme. Instead any pension contributions outside of applicable limits may be paid as a cash equivalent.	Maximum pension contribution or cash allowance is aligned with the contribution levels available for all of the wider UK workforce (currently 15% of salary).	Not applicable
Other benefits To provide market competitive benefits.	Benefits include (but are not limited to): – 28 days' leave, with encashment of any accumulated leave in excess of 20 days – Car and/or travel related benefits – Medical insurance (family) – Death and disability insurance – Directors' liability insurance – Limited personal taxation and financial advice – Club membership – Other ancillary benefits, including attendance at relevant public events. The Committee may introduce other benefits if it is considered appropriate to do so. The Company reimburses all necessary and reasonable business expenses and may pay the tax costs on benefit provisions. The Committee reserves the discretion to award certain situation-specific benefits (such as relocation) either on a one-off or ongoing basis.	The value of benefits is set at a level which the Committee considers to be appropriate, taking into account the overall cost to the Company, individual circumstances, benefits provided to the wider workforce and market practice.	Not applicable

Note to the policy table

Malus and clawback

Awards under the annual bonus (including both cash and deferred bonus awards under the BSP) and LTIP are subject to malus and clawback provisions over the following time periods:

	Malus	Clawback
Annual bonus	To such time as payment is made	Up to two years following payment
Deferred bonus	To such time as the award vests	Up to two years following vesting
LTIP	To such time as the award vests	Up to two years following vesting

Clawback may be applied in the circumstances below. Malus may be applied in the circumstances below, as well as in other exceptional circumstances, at the Committee's discretion.

- Material misstatement in results
- Misconduct
- Material failing in risk management
- Error in calculation.

Shareholding guidelines

Executive directors are expected to build up and retain a holding in shares in the Company with a value of four times basic salary in respect of the chief executive and three times basic salary in respect of other executive directors. The Committee takes into consideration achievement against these in-post guidelines when making grants under the Company's various incentive plans.

Executive directors who step down from the Board will normally be required to continue to hold the lower of the in-post requirement or their actual shareholding at the point of stepping down. The requirement applies for a two-year period following stepping down as an executive director and applies to all share awards granted under the BSP or LTIP from 2020 onwards.

The Committee retains discretion to allow exceptions to these guidelines in exceptional circumstances. Full disclosure will be included in the relevant annual report should this discretion be utilised.

Choice of performance measures and target setting

The performance measures used for annual bonus and LTIP awards reflect the annual and long term financial, strategic and ESG priorities of the Group.

The Committee has a rigorous approach to determining performance measures, their weighting and target-setting. Targets are set taking into account a number of factors including internal and external forecasts, market practice, and past performance. The Committee carefully reviews targets prior to each award to ensure that they remain appropriately stretching.

Remuneration arrangements elsewhere in the Group

The remuneration arrangements for the executive directors outlined in the policy are broadly aligned with those for other executives serving on the Group Management Committee (GMC), although opportunity levels vary. The arrangements are also broadly aligned with the arrangements for the wider workforce, dependent on seniority within the business. For further details of the cascade of remuneration elements for the UK workforce, please see the section on cascade of pay elements through employee population in the Fairness section on page 195 of this report.

In determining remuneration policy and structures for executive directors, the Committee takes account of and ensures appropriate alignment with pay and related policy and outcomes for the wider employee workforce. The Committee maintains broad oversight of policies relating to pay and how these are implemented for the wider workforce and, through Board engagement, ensures that it has a good understanding of the views of employees and other stakeholders with regard to executive pay.

Payments from previously agreed remuneration arrangements

The Committee reserves the right to make any remuneration payments and payments for loss of office, notwithstanding that they are not in line with the policy set out above, where the terms of the payment were agreed (i) under a previous policy, in which case the provisions of that policy shall continue to apply until such payments have been made; (ii) before the policy or the relevant legislation came into effect; or (iii) at a time when the relevant individual was not a director of the Company and, in the opinion of the Committee, the payment was not in consideration for the individual becoming a director of the Company. For these purposes, 'payments' includes the satisfaction of awards of variable remuneration and, in relation to awards of shares, the terms of the payment which are agreed at the time the award is granted. Details of any such payments will be set out in the relevant year's Annual Report on Remuneration.

Discretion

The Committee, consistent with market practice, retains discretion over a number of areas relating to the operation and administration of the annual bonus and LTIP, including:

- To adjust the performance measures and/or targets if an event occurs which makes such variation necessary or desirable, to ensure the performance measures and/or targets continue to be appropriate and capable of being measured on a fair and consistent basis, in line with the Committee's intention when setting the original performance measures and/or targets
- Share awards may be adjusted in the event of a variation in share capital or other event that may affect the Company's share price
- Awards may be settled in cash in exceptional circumstances.

Approach to recruitment and promotion

The remuneration arrangements for a newly recruited or promoted executive director will normally reflect the remuneration policy in place for executive directors at the time of the appointment. The arrangements will normally therefore comprise basic salary, annual bonus, LTIP awards, benefits, pension and all-employee share plan participation on the bases set out above. The maximum level of variable remuneration which may be granted (excluding buy-out awards) is 560% of salary, which is in line with the maximum limit under the annual bonus and LTIP.

The initial basic salary level for a newly recruited or promoted executive director may be be set at lower than the typical market level to reflect the individual's experience and salary levels within the Company. Where basic salary is set below the typical market level, the Committee has the discretion to award salary increases above the wider workforce average in the year(s) after appointment for that executive, with the goal of bringing the individual to the appropriate salary level.

For external appointments, the Committee may determine that it is appropriate to offer remuneration (i.e. buy-out awards) to replace any remuneration opportunity or other contractual entitlement forfeited at a previous employer, when it considers this to be in the best interests of the Company and its shareholders. The terms of any buy-out awards will normally be determined taking into account the nature, time horizons and performance requirements of remuneration forfeited, and the likelihood of such requirements being met. Any such buy-out awards will typically be made under the existing annual bonus and LTIP schemes, although, in exceptional circumstances, the Committee may exercise the discretion available under the relevant Listing Rule 9.4.2 to make awards using a different structure. Shareholders will normally be notified of any buy-out awards at the time of appointment or in the following year's Directors' remuneration report.

For internal appointments, any commitments made before appointment and not relating to the appointment will be honoured according to their terms.

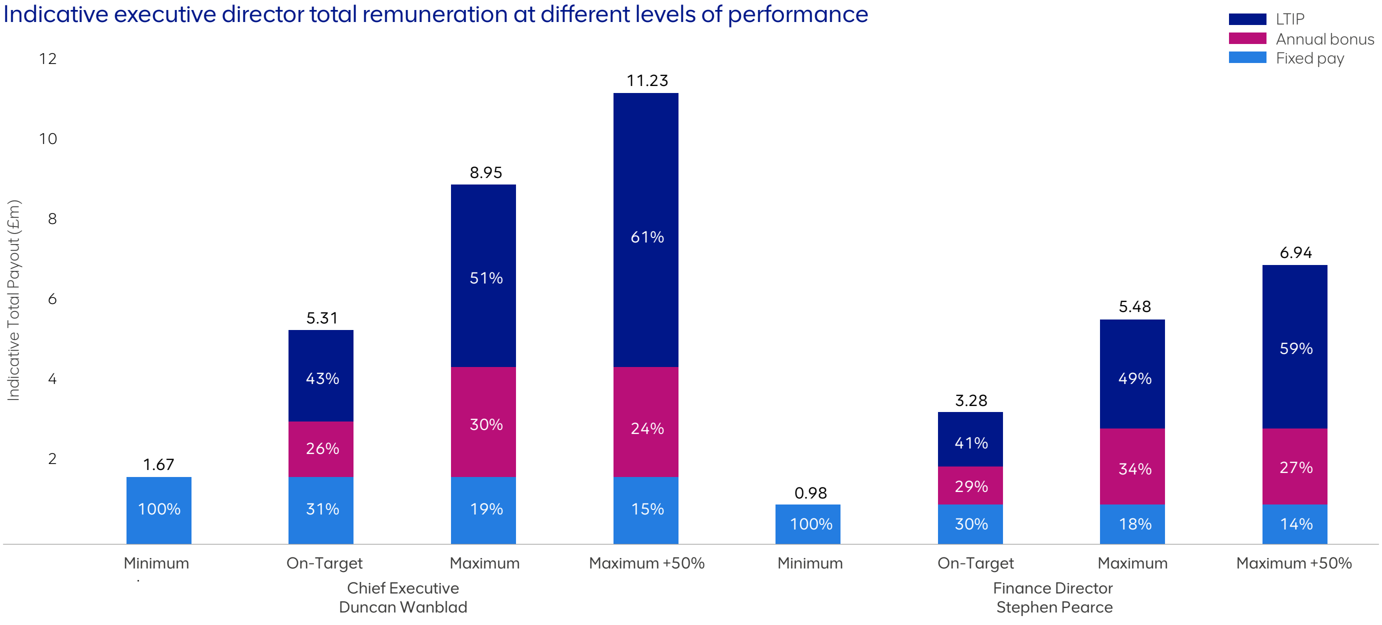
Other elements may be included in the following circumstances:

- An interim appointment being made to fill an executive director role on a short term basis
- If exceptional circumstances require that the chair or a non-executive director takes on an executive function for a short term basis
- If an executive director is appointed at a time in the year when it would be inappropriate to provide an annual bonus or LTIP award for that year. Subject to the limit on variable remuneration set out above, the quantum in respect of the period employed during the year may be transferred to the subsequent year
- If the executive director is required to relocate, reasonable relocation, travel and subsistence payments may be provided for the director and/or their family (either via a one-off or ongoing payments or benefits). Repatriation costs to the director's country of origin may also be paid where the director is retiring.

Indicative executive director total remuneration at different levels of performance

The charts below illustrate how the total pay out opportunities for the executive directors vary under four different performance scenarios: minimum, on-target (i.e. in line with the Company's expectations), maximum, and maximum plus 50% share price appreciation.

Indicative executive director total remuneration at different levels of performance



Key assumptions:

Pay element	Minimum	On-target	Maximum	Maximum +50%
Fixed	2023 basic salary, benefits and pension	2023 basic salary, benefits and pension	2023 basic salary, benefits and pension	2023 basic salary, benefits and pension
Annual bonus	None	50% of maximum bonus opportunity	100% of maximum bonus opportunity	100% of maximum bonus opportunity
LTIP	None	50% of maximum LTIP opportunity	100% of maximum LTIP opportunity	100% of maximum LTIP opportunity, plus 50% share price appreciation

- Potential incentive opportunities are based on the maximum set out in the policy table (being 210% of salary in annual bonus, and 350%/300% of salary in LTIP for chief executive/finance director respectively).
- Applied to basic salaries effective 1 January 2023, of £1,300,000 for the chief executive and £903,018 for the finance director.
- 2022 benefit levels; for the chief executive, the full-year equivalent benefit level is shown.
- Dividend accrual has been excluded in all four scenarios; share price movement has been excluded from the 'minimum', 'on-target' and 'maximum' scenarios, but has been applied to the LTIP award in the 'maximum plus 50% share price growth scenario'.
- Participation in the SAYE and SIP has been excluded, given the relative size of the opportunity levels.

Non-executive directors fee policy

Details of the policy on fees paid to non-executive directors (NEDs) are set out in the table below.

Element	Purpose and link to strategy	Operation	Opportunity
Chairman fees	To attract and retain a high-calibre chairman by offering a market-competitive fee level.	The chairman is paid a single fee for all of their responsibilities. The level of this fee is reviewed periodically by the Committee and chief executive, with reference to appropriate market reference points, and a recommendation is then made to the Board (in the absence of the chairman). Fees are normally paid in cash, with the flexibility to forgo all or part of the net fees to acquire shares in the Company.	The current maximum annual aggregate basic fee for all NEDs, excluding the chairman, is £1,250,000. Any proposed revision to this limit would be subject to shareholder approval, as required under the Company's Articles of Association.
Chairman benefits	To provide market competitive benefits.	The chairman is entitled to the reasonable use of a car and driver. Reasonable and necessary expenses are reimbursed. The Company will cover any taxation due on benefits. Additional benefits may be introduced and/or provided on an ad-hoc basis if considered appropriate.	
Non-executive director fees	To attract and retain high calibre NEDs by offering market competitive fees.	The NEDs are paid a basic fee. Additional fees are paid to reflect additional Board or committee responsibilities or time commitment as appropriate. This includes, but is not limited to, chairing or being a member of one of the main Board committees, acting as the Board's designated non-executive director to chair the Global Workforce Advisory Panel or acting as the senior independent director. Fee levels are reviewed periodically by the chairman and executive directors, with reference to appropriate market benchmarks, and a recommendation is then made to the Board. Fees are paid in cash, with the flexibility to forgo all or part of the net fees to acquire shares in the Company. Reasonable and necessary expenses are reimbursed. Additional benefits may be introduced and/or provided if considered appropriate.	

Policy on termination and change in control

Service agreements

Executive directors

The terms of employment are set out in the executive directors' service agreements which are rolling contracts with no fixed term. Notice periods for both executive directors is 12 months.

The dates of the executive directors' service agreements are set out below.

	Date of appointment
Duncan Wanblad	19 April 2022
Stephen Pearce	24 April 2017

The chairman and NEDs are appointed by the Company under letters of appointment and do not have service agreements. The dates of appointment for each NED are set out below.

	Date of appointment
Stuart Chambers	1 September 2017
Ian Ashby	25 July 2017
Marcelo Bastos	1 April 2019
Hilary Maxson	1 June 2021
Hixonia Nyasulu	1 November 2019
Nonkululeko Nyembezi	1 January 2020
Ian Tyler	1 January 2022

Key terms of the policy on termination and change in control are set out on the following pages. The Company's policy on termination is consistent with provisions relating to termination of employment in the executive directors' service agreements and with provisions in the incentive plan rules. Also set out are the key terms relating to change in control, where there is no termination. There are no provisions for enhanced payments in the event of a change in control of the Company.

Non-executive directors

All NEDs have letters of appointment with the Company for an initial period of three years, subject to annual re-appointment at the AGM. The Company Chair's appointment may be terminated by the Company with six months' notice. All other NEDs have a notice period of one month. The appointment letters for the Chair and NEDs provide that no compensation is payable on termination, other than any accrued fees and expenses.

Policy on payments to executive directors leaving the Group

In the table opposite, a 'good leaver' is defined as an individual who leaves the business for reasons including retirement, redundancy, death, ill health, injury, disability, or any other reason as defined by the Committee. Where departure is on mutually agreed terms, the Committee may treat the departing individual as a good leaver in respect of one or more elements of remuneration. The Committee uses this discretion judiciously and shareholders will be notified of any exercise of this discretion as soon as reasonable. A 'bad leaver' is typically an individual whose service has been terminated for cause.

Principles of determining payments for loss of office

<table>
<tr><th></th><th>'Good leaver'</th><th>Voluntary resignation</th><th>'Bad leaver'</th></tr>
<tr><td>Salary, benefits and pension for notice period</td><td colspan="2">Salary, benefits and pension continue to be paid to the date of termination of employment, including, where relevant, any notice period and/or gardening leave period.

The Company may terminate employment with immediate effect and, in lieu of the unexpired portion of any notice period, make a series of monthly payments based on salary and benefits (or make a lump sum payment based on salary only). Any monthly payments will normally be reduced to take account of any salary received from alternative employment.</td><td>Immediate termination with no notice period.</td></tr>
<tr><td>Bonus accrued prior to termination</td><td>A time-pro-rated bonus award may be made by the Company, with the Committee's approval and taking into account performance, and will be paid wholly in cash.</td><td>No accrued bonus is payable.</td><td>No accrued bonus is payable.</td></tr>
<tr><td>Unvested Bonus Shares</td><td>Normal circumstances
Bonus Shares vest in full on the normal vesting date (i.e. awards will not vest early).

Exceptional circumstances
(e.g. death or other compassionate grounds at the discretion of the Committee)

Bonus Shares vest in full and are eligible for immediate vesting.</td><td>Awards forfeited.</td><td>Awards forfeited.</td></tr>
<tr><td>Unvested LTIP awards</td><td>Normal circumstances
LTIP awards will typically vest on the normal vesting date, subject to the achievement of relevant performance conditions at the end of the normal performance period and, unless the Committee determines otherwise, released at the end of the holding period.

Exceptional circumstances
(e.g. death or other compassionate grounds at the discretion of the Committee)

LTIP awards may vest and be released on departure, subject to an assessment of the achievement of relevant performance conditions at that time.

Unless the Committee determines otherwise, awards are pro-rated for time to reflect the proportion of the performance period elapsed at the time of cessation.</td><td>Awards forfeited.</td><td>Awards forfeited.</td></tr>
<tr><td>Vested LTIP awards subject to holding period</td><td>Normal circumstances
Vested LTIP awards that are subject only to a holding period will normally be released in full at the end of the holding period.

Exceptional circumstances
(e.g. death or other compassionate grounds)

Vested LTIP awards subject to a holding period may be released on departure.</td><td>If an employee resigns to join a competitor (as defined by the Committee), vested LTIP awards that remain subject only to the holding period will be forfeited unless the Committee determines otherwise.

Outside of these circumstances, such awards are released to the employee at the end of the holding period.</td><td>Awards forfeited.</td></tr>
<tr><td>SAYE and SIP</td><td colspan="3">Outstanding shares and/or options under the Company's SAYE and SIP are treated in accordance with the relevant HMRC rules.</td></tr>
<tr><td>Other</td><td>Limited disbursements (for example, legal costs, relocation costs, untaken holiday).</td><td colspan="2">Limited disbursements may be paid at the discretion of the Committee.</td></tr>
<tr><td>Malus and clawback</td><td colspan="3">Malus and clawback provisions in the relevant incentive plan rules apply.</td></tr>
</table>

Policy on change in control (without termination)

In respect of the annual bonus, the Committee will determine the most appropriate treatment for the outstanding bonus period according to the circumstances.

Any unvested Bonus Shares will normally vest in full at the time of the change in control.

Any unvested LTIP awards will normally vest at the time of the change in control, with vesting determined based on the Committee's assessment of the performance conditions and, unless the Committee determines otherwise, be subject to a time-based reduction.

Any vested LTIP awards subject to a post-vesting holding period will normally be released in full at the time of the change in control.

Consideration of the views of the wider workforce and shareholders

In reviewing and developing the remuneration policy, the Committee has taken into account:

- The internal context for remuneration policy design at Anglo American, including the remuneration arrangements that apply for other employee groups
- Recent developments in the governance landscape for executive remuneration in UK-listed companies
- The views of our shareholders.

During 2022, the Committee consulted with major shareholders and proxy advisers on the proposed revisions to the policy (and its implementation for 2023). Conversations were useful in terms of understanding the perspectives of shareholders and the Committee was pleased with the level of support received in respect of the changes. Shareholders asked that rationale for the changes be clearly articulated in the annual report on directors' remuneration which we have sought to provide. From the consultation conversations, we have also included some guidance on how the operation of the updated LTIP reduction mechanism will work going forward. The Committee also listens to, and takes into consideration, investor views and comments throughout the year.

As a standing item in the annual agenda, the Committee reviews in detail how the remuneration arrangements for the executive directors compare to those for other members of the GMC, to ensure an appropriate balance between internal alignment and line of sight to an executive's own areas of responsibility. A further standing item presents the Committee with information on wider employee pay. The Committee welcomes employee feedback on the remuneration policy and facilitates this through the wider engagement of employees on corporate matters as described elsewhere in this Annual Report (see pages 143-144). In addition, many of the Company's employees are shareholders, through the global employee share ownership arrangements, and many of them, like other shareholders, are able to express their views on directors' remuneration at each general meeting.

Annual report on directors' remuneration

Audited Information

Under schedule 8 of the Large and Medium-sized Companies and Groups (accounting and reports) Regulations 2008 (as amended), elements of this section of the report have been audited. The areas of the report subject to audit are indicated in the headings.

Executive director remuneration in 2022 (audited)

The table below sets out the remuneration paid to the executive directors for 2022.

Single total figure of remuneration for executive directors

	Total basic salary[1] £'000	Benefits in kind[2] £'000	Annual bonus – cash and Bonus Shares[3] £'000	LTIP[4][5][6] award vesting £'000	Pension[7] £'000	Other[8] £'000	Total £'000	Total fixed remuneration £'000	Total variable remuneration £'000
Executive directors									
Duncan Wanblad	**880**	**126**	**787**	**2,390**	**209**	**5**	**4,397**	**1,215**	**3,182**
Duncan Wanblad (2021)	—	—	—	—	—	—	—	—	—
Mark Cutifani	**426**	**49**	**386**	**4,181**	**93**	**4**	**5,139**	**568**	**4,571**
Mark Cutifani (2021)	1,399	191	2,207	7,744	382	5	11,928	1,972	9,956
Stephen Pearce	**868**	**92**	**791**	**3,024**	**188**	**5**	**4,968**	**1,148**	**3,820**
Stephen Pearce (2021)	843	63	1,330	4,667	202	5	7,110	1,108	6,002
Tony O'Neill	**900**	**49**	**805**	**3,136**	**222**	**5**	**5,117**	**1,171**	**3,946**
Tony O'Neill (2021)	874	42	1,380	4,840	235	5	7,376	1,151	6,225

(1) 2022 salaries for Duncan Wanblad and Mark Cutifani pro-rated for period in year served as a director. For Mark Cutifani, this is the period between 1 January 2022 and 19 April 2022. For Duncan Wanblad, this is between 19 April 2022 and 31 December 2022.
(2) Benefits in kind figures for 2022 include benefits not previously disclosed due to a reporting error primarily related to additional car-related benefits. Full details of the additional benefits disclosed are outlined in the benefits in kind section on page 180. Benefits in kind figures for 2021 have been restated on the same basis.
(3) Bonus values for Duncan Wanblad and Mark Cutifani are pro-rated values for the period in year as a director. For Mark Cutifani, this is the period between 1 January 2022 and 19 April 2022. For Duncan Wanblad, this is between 19 April 2022 and 31 December 2022.
(4) The 2020 LTIP vesting level was confirmed by the Remuneration Committee at its meeting on 20 February 2023. As the awards are due to vest after publication of this report, an average share price between 1 October 2022 and 31 December 2022, of £30.14, was used to calculate the value and will be trued up in the 2023 report. The LTIP values shown include dividend equivalent amounts of £356,629 for Duncan Wanblad, £623,944 for Mark Cutifani, £451,244 for Stephen Pearce and £467,960 for Tony O'Neill. This includes an equivalent payment for the special dividend paid in September 2021. The values of LTIP awards that vested in 2022 have been restated using the share price at vesting of £39.19, see page 186 for further details.
(5) The value for Duncan Wanblad represents vesting of shares he received prior to joining the Board.
(6) For the 2020 LTIP vesting in 2023, between grant and valuation of the award for single figure purposes, the share price increased from £18.13 to £30.14 for original grant shares and decreased from £31.37 to £30.14 for additional shares granted on the demerger of Thungela resources. For the 2020 LTIP, the total proportion of the value disclosed in the single figure attributable to share price growth is 39.7%. The Remuneration Committee did not exercise discretion in respect of the share price appreciation. For the 2019 LTIP vesting in 2022, the share price increased from £20.25 to £39.19. at vesting, equating to an increase in value of each vesting share of £18.94. The proportion of the value disclosed in the single figure attributable to share price growth is 48.3%.
(7) Pension figures includes value of notional return on UURBS balances and do not include employer NIC values where pension is received as a cash allowance.
(8) 'Other' comprises the value of free and matching shares awarded under the SIP based on the value of shares at grant., Awards are not subject to performance in line with the scheme terms as applicable for all employees.

Basic salaries for 2022

The basic salaries for 2022 were as follows (in £'000s):

Duncan Wanblad

£880

Paid in 2022
(£1,250 – full year equivalent salary)

Stephen Pearce

£868

(2021: £843)

Mark Cutifani

£426

Paid in 2022
(£1,441 – full year equivalent salary)
(2021: £1,399)

Tony O'Neill

£900

(2021: £874)

Benefits in kind (audited)

Benefits for executive directors with a value over £5,000 are set out below. During the year, executive directors may receive benefits including car-related benefits, accommodation, tax advice, club membership, death and disability insurance, directors' liability insurance, medical insurance and other ancillary benefits.

2022 Benefits	Car related Benefits (£'000)	Other Benefits (£'000)
Duncan Wanblad	108	14(1)
Mark Cutifani	43	–
Stephen Pearce	65	18(1)
Tony O'Neill	35	9(2)

(1) Benefit relating to provision of accommodation for attending business events
(2) Benefit relating to tax advice

Due to a reporting error, certain car-related benefits available to executive directors have not previously been disclosed. These relate to the availability of a company-provided car and driver for the chief executive and the use of taxis that are not considered as business trips for tax purposes but which are necessary for the executive directors to perform their roles effectively. These arrangements have been longstanding benefits available to the executive directors and there has been no change in approach in 2022. The benefits value for 2021 in the single-figure table has been restated to include these. Although these expenses are incurred in line with the Company expenses policy, they must be reported as personal benefits for the purposes of tax reporting regulations; hence, the inclusion in this disclosure. The values shown above include the payment of any taxes due.

The values of the restated values for 2021 are as follows:

	2021 disclosed (£'000)	2021 restated value (£'000)
Mark Cutifani	57	191
Stephen Pearce	40	63
Tony O'Neill	39	42

Tony O'Neill received additional tax advice during the year relating to his impending retirement in June 2023.

The value of benefits for 2022 exceeds 10% of base salary for both the current and former chief executives. The Committee considered and is satisfied that the level of aggregate benefit provision, taking into account the situation and circumstances, in particular in relation to the provision of car benefit, was appropriate.

Annual bonus outcomes for 2022 (audited)

50% of the total 2022 annual bonus is payable in cash, with 50% deferred into shares. One-third of the deferred shares will vest after two years; the remaining two-thirds will vest after three years. The bonus deferred as shares is not subject to further performance but is subject to continued employment.

50% of each executive director's bonus outcome was assessed against financial targets. 20% each was assessed against strategic measures and a further 20% was assessed on Safety, Health and Environment (SHE) measures, with the remaining 10% being assessed against the achievement of individual objectives.

Strategic and SHE objectives are shared by the executive directors, with individual objectives being tailored for their specific roles. The key individual performance measures are assessed against the overall operational and financial performance of the business.

In 2022, tragically, two colleagues lost their lives in work-related incidents at our Group managed operations, and a further colleague passed away following a site-based accident in 2021 at our PGMs business. The accidents in 2022 occurred at our sites in Canada and Australia and are a reminder that we must not lose focus in our efforts to reduce the number of fatalities to zero.

Last year, the Committee outlined the implementation of more punitive deductions for fatalities for the 2022 bonus onwards. As a result of the three fatalities that have occurred during the year, the Committee judged that there will be a 15% reduction to 2022 executive director bonus outcomes. This reduction was determined following consideration by the Committee, taking into account full details of the incidents. The reduction of 15% for 3 fatalities compares to the 3.5% reduction in 2021 for 1 fatality and 3.5% for 2 fatalities in 2020, emphasising the Committee's commitment to safety.

Discretion

Incentives are designed to ensure they drive appropriate short and long term behaviours, and it is the Committee's general preference to avoid making any adjustments. Aside from the utilisation of discretion to apply the safety deductor, the Committee did not make any discretionary adjustments to the 2022 bonus outcomes and did not apply any discretion in response to share price movements.

Summary of 2022 annual bonus outcome

	Financial metrics (50%)	SHE metrics (20%)	Strategic metrics (20%)	Personal metrics (10%)	Total payout pre- safety deductor (%)	Payout after 15% safety deductor (%)[1]	Annual bonus value (£')[2][3]
Duncan Wanblad	11.1%	15.0%	16.0%	8.0%	50.1%	42.6%	£786,552
Mark Cutifani	11.1%	15.0%	16.0%	8.0%	50.1%	42.6%	£386,259
Stephen Pearce	11.1%	15.0%	16.0%	9.0%	51.1%	43.4%	£791,462
Tony O'Neill	11.1%	15.0%	16.0%	8.0%	50.1%	42.6%	£804,708

(1) Safety deductor applied on a multiplicative basis against overall annual bonus outcomes.
(2) Bonus for Mark Cutifani represents pro-rated bonus for period served as a director from 1 January 2022 up to 19 April 2022. His total bonus for the year includes an additional amount of £257,506 for the period between him stepping down as a director until his cessation of employment with the Company.
(3) Bonus for Duncan Wanblad represents bonus for period of year served as a director only from 19 April 2022 to 31 December 2022.

Annual bonus performance assessment for 2022 (audited)

The financial element of the 2022 annual bonus is measured against underlying EPS and sustaining attributable free cash flow (SAFCF) measures.

The EPS elements of the award accounted for 34% of the total annual bonus, split equally between EPS measured at fixed prices and FX rates and EPS measured at actual prices and FX rates. The fixed price and FX rate EPS portion is designed to reflect Group operational performance, excluding the impact of variations in price and currency. Both target ranges are illustrated in the financial performance table, with 25% vesting for performance at threshold. SAFCF, measured at fixed prices and FX rates, accounted for 16% of the total annual bonus.

Despite improvement in operating performance in the second half of the year, challenging conditions in the first half, including extreme rainfall, alongside safety incidents and unplanned maintenance issues, meant we were unable to produce the planned full-year volumes. This, along with continued inflation-related cost pressures, negatively impacted our financial results. Sustaining attributable free cash flow received support from non-earnings related cash flows.

The shared strategic objectives accounted for 20% of the total award. These objectives reflect the Group's strategic priorities for the year, incorporating a combination of quantitative and qualitative metrics. Following the end of the year, the Committee made a detailed assessment of performance, leading to the evaluations shown in the tables below.

The executive directors have 10% of the annual bonus weighted to individual performance measures, focusing on the critical deliverables for each executive director. The following tables detail the achievement against these objectives.

Financial performance

Metric	Threshold (25%)	Maximum (100%)	Achievement	Weighting	Outcome
EPS at actual prices and FX rates	$5.47/share	$7.47/share	$4.97/share	17.0%	—%
EPS at fixed prices and FX rates	$3.07/share	$4.08/share	$2.80/share	17.0%	—%
SAFCF at fixed prices and FX rates	$430m	$644m	$556m	16.0%	11.1%
Total				**50.0%**	**11.1%**

SHE performance

Metric	Metric type	Achievement	Weighting	Outcome
Total recordable injury frequency rate (TRIFR) – improvement of 15% on prior three-year Group average	Safety	Through the year we saw a slight improvement of 2% in overall safety performance and a TRIFR for 2022 of 2.19, compared to 2.24 in 2021. This was the result of a marked improvement in safety performance in the second half of the year, and in particular the final quarter. Despite the progress in the second half of this year the target was not met.	5%	—%
Increase Group-wide water efficiency to 78% along a path to achieve 85% efficiency by 2030.	Environment	An overall efficiency of 79.3% was achieved which meets the stretch target.	5%	5%
62.5% of all employees to have a personal confidential health assessment and receive feedback in the form of a wellness score	Health	87% of employees have been issued with their cardiovascular reports and outcome of lifestyle questionnaires and this target has been delivered consistently across the Group.	5%	5%
Elimination of fatalities – completion of sustainability process in accordance with the project plan	Safety	In scope workstreams across all business units completed the Elimination of Fatalities programme sustainability process, delivering the stretch goal. Action plans for gaps identified through the process are in place and we expect to see improved safety outcomes across the Group in coming years as a result of this programme.	5%	5%
Total			**20%**	**15%**

Shared strategic performance

Metric	Metric type	Achievement	Weighting	Outcome
Quellaveco – delivery of project milestones	Portfolio	Quellaveco obtained key permits for water and operating Line 1, and first concentrate was produced in July. Sales commenced in September with the first vessel departing port in early October. Operational licence for the second line obtained in December.	7%	5%
Crop Nutrients – align project execution strategy and delivery of project milestones	Portfolio	Activities relating to safety and culture reset and enhanced project delivery (including appointment of specialist shaft sinking and EPCM contractors) largely complete. Work in the shafts, intermediate shafts and tunnels progressed safely to plan through to the end of 2022.		
nuGen™ – complete PFS for a commercial hyrdogen truck with hydrogen supply, storage and refuelling	Innovation	Prototype truck launch took place in April. Pre-feasibility completed for hydrogen production and completed baseline design reviews for the vehicle and refueling systems. Combination with First Mode completed to accelerate development and commercialisation of nuGen™.	7%	7%
SA Power Network – finalise JV partnership with partner of choice and define structure for joint venture	Innovation	Partnership agreement with EDF Renewables signed in H2. Shareholders agreement signed in H2 and Envusa Energy established.		
Diversity – 31% women in CE manager-once-removed roles by end-2022	People	GMC: Following Helena Nonka's appointment, at 31 December four female executives (29%) are members of the GMC. CE-MOR population (GMC and their direct reports) 29% at end-2022 vs target of 31 % by end-2022, reflecting the impact of two retirements.	6%	4%
Operational Leadership Excellence Programme – expand scope to include GM+1 cohort	People	A GM Forum took place in H2 in Peru, which focused on implications of the themes from the global Technical Conference, and progression of plans for 2022/23 operational excellence. The GM+1 Module design was completed and will be deployed in 2023.		
Total			**20%**	**16%**

Personal performance

Duncan Wanblad

	Percentage weighting	2022 outcome
Financial	50%	11.1%
SHE	20%	15.0%
Strategic	20%	16.0%
Personal	10%	8.0%
Total	**100%**	**50.1%**
Safety deductor	A percentage reduction from overall bonus outcome on a multiplicative basis	15.0%
Overall result	**–**	**42.6%**

Details of personal objectives	Achievement		Outcome
Portfolio (5%) – Crop Nutrients	Board update & alignment in December on project execution, strategy and market development.		4%
People (5%) – Succession planning and managing key stakeholders through CE transition	– Helena Nonka (Group Director of S&BD) joined the Company on 1 October 2022. – Tom McCulley (CEO Crop Nutrients) was appointed to the GMC on 1 October 2022. – Matt Daley (Group Director – Technical) was appointed to the GMC on 1 January 2023. – Al Cook joined as CEO of De Beers on 20 February 2023. – Alison Atkinson was announced to be joining the Company as Group Director – Projects and Development in Q2 2023. – Other succession work ongoing and on track. – Multiple engagements with internal and external stakeholders during the course of 2022 across key geographies.		4%
Overall individual performance		**10% total weighting**	**8%**

Mark Cutifani

	Percentage weighting	2022 outcome
Financial	50%	11.1%
SHE	20%	15.0%
Strategic	20%	16.0%
Personal	10%	8.0%
Total	**100%**	**50.1%**
Safety deductor	A percentage reduction from overall bonus outcome on a multiplicative basis	15.0%
Overall result	**–**	**42.6%**

Details of personal objectives	Achievement		Outcome
Portfolio (5%) – Crop Nutrients	Work completed on optimisation of long term value.		4%
Innovation (3%) – Align key stakeholders on nuGen™ and Renewables	Extensive engagements in Q1, resulting in positive and committed endorsement.		2%
People (2%) – Execute successful handover of CE role	Execution smoothly managed with new CE embedded successfully in role.		2%
Overall individual performance		**10% total weighting**	**8%**

Stephen Pearce

	Percentage weighting	2022 outcome
Financial	50%	11.1%
SHE	20%	15.0%
Strategic	20%	16.0%
Personal	10%	9.0%
Total	**100%**	**51.1%**
Safety deductor	A percentage reduction from overall bonus outcome on a multiplicative basis	15.0%
Overall result	**—**	**43.4%**

Details of personal objectives	Achievement		Outcome
Portfolio (4%) – Complete Cerrejón exit and Quellaveco go live	Cerrejón exit fully completed during 2022, along with Quellaveco go live.		3%
Innovation (3%) – Capital Planning	Capital planning deep dive completed.		3%
People (3%) – UK regulatory requirements	Significant ongoing development in the design and testing of internal control activities in response to anticipated UK legislation.		3%
Overall individual performance		**10% total weighting**	**9%**

Tony O'Neill

	Percentage weighting	2022 outcome
Financial	50%	11.1%
SHE	20%	15.0%
Strategic	20%	16.0%
Personal	10%	8.0%
Total	**100%**	**50.1%**
Safety deductor	A percentage reduction from overall bonus outcome on a multiplicative basis	15.0%
Overall result	**—**	**42.6%**

Details of personal objectives	Achievement		Outcome
Portfolio (4%) – Coarse particle recovery	Approved project completed and handed over for commissioning.		3%
Innovation (3%) – Next evolution of FutureSmart Mining™	Next evolution of FutureSmart Mining™ designed and embedded in plans for 2023–2025.		2%
People (3%) – Organisation design	Revised organisational structure confirmed in Q4 2022 and implemented on 1 January 2023.		3%
Overall individual performance		**10% total weighting**	**8%**

2020 LTIP award vesting (audited)

In 2020, Mark Cutifani, Stephen Pearce and Tony O'Neill received LTIP grants of 226,879, 136,734, and 141,799 conditional shares respectively; in addition to this, they received 806, 583 and 605 additional conditional shares respectively as a result of the demerger of our South African thermal coal operations into Thungela Resources Ltd in June 2021. Duncan Wanblad held a total of 108,525 shares under the 2020 LTIP from both the original grant and the additional shares from the Thungela Resources demerger; vesting of his shares is on the the same basis as for the other executive directors. More details on the Thungela Resources additional shares can be found in the 2021 remuneration report.

Mark Cutifani left the Company on 30 June 2022, his in-flight LTIP awards were pro-rated up to this date. These shares will continue and vest on their original vesting schedules subject to a performance assessment.

Vesting of 2020 LTIP conditional share awards was subject to:

- The Group's TSR performance relative to:
  (i) Euromoney Global Mining Index
  (ii) FTSE 100 constituents over the three-year period to 31 December 2022
- Group attributable ROCE in year to 31 December 2022
- Group cumulative sustaining attributable FCF at fixed price and FX rates over the three-year period to 31 December 2022
- Implementation of improvement in energy efficiency
- Implementation of improvement in GHG intensity
- Implementation of the Anglo American standard across tailings facilities.

TSR performance over the three-year period was strong, with shareholders seeing a TSR of 80.6%, well above the FTSE 100 median TSR of -0.4% and the Euromoney Global Mining Index TSR of 63.9%.

ROCE performance for the period was strong at 30%, resulting in full vesting of this portion of the award. There was no vesting under the cumulative cash flow measure, this was due to below-budget cost and volume performance in the face of headwinds, Covid-19 and one-off operational incidents.

Energy efficiency did not meet the 4% threshold reduction, resulting in 0% vesting for this element. This was impacted by the incident at Grosvenor in 2020, which resulted in lower overall production levels, whilst the operation still required a baseload of energy use to keep ventilation and other equipment running.

GHG Intensity for 2022 reduced by 21% against the 2019 baseline, driven primarily by renewable energy programmes commencing in Chile, as well as lower GHG emissions from reduced production activity in Steelmaking Coal and lower emissions from Aquila compared to previous operations at Grasstree. This resulted in vesting of the full 6% for this measure.

The 6% of the LTIP for the tailings dam measure required 100% implementation of the Anglo American tailings standard. The standard set was a deliberately high bar and considerable progress has been made towards meeting it in full, despite the scarcity of independent experts available to verify progress. Overall, risks are being managed effectively. Given that the 100% requirement was not met, the result is 0% vesting. The related tailings metric in the 2021 LTIP will be closely tracked and interrogated during 2023 to ensure the measure is effectively driving the outcome required.

The LTIP awards will therefore vest at 62.2% of maximum.

Discretion

No discretionary adjustments were made to the LTIP targets or outcome.

Performance assessment for 2020 LTIP awards

Measure	Weighting	Threshold performance (25% vesting)	Stretch performance (100% vesting)	Actual performance	Vesting outcome
Euromoney Global Mining Index TSR	33%	Index performance (63.9%)	Index +6% p.a. (90.3%)	80.6%	73%
FTSE 100 constituents TSR	17%	Median TSR performance (-0.4%)	80th percentile TSR performance (27.5%)	80.6%	100%
Group attributable ROCE	15%	12 %	20 %	30.0%	100%
Group sustaining attributable free cash flow (cumulative)	15%	$8.3 bn	$12.4 bn	< 8.3 bn	0%
Implementation of improvement in energy efficiency	8%	4% improvement	10% improvement	Target not met	0%
Implementation of improvement in greenhouse gas intensity[1]	6%	5% improvement	15% improvement	21%	100%
Implementation of AA standard across tailings facilities	6%	100% vesting for implementation of standard across all tailings facilities. 0% vesting if not met		Target not met	0%

[1] Intensity calculation for LTIP purposes based on 2022 CUeq production vs. a baseline of 2019 CUeq production.

Total outcome of the 2020 LTIP

	Numbers shares granted[(1)(2)]	Numbers shares vesting at 62.2%	Dividend equivalents on vested value	Value based on vesting at 62.2%[(3)]	Total value[(4)]
Duncan Wanblad (award granted prior to appointment to the Board)	108,525	67,455	£356,629	£2,033,286	£2,389,914
Mark Cutifani (maximum opportunity 300% of salary)	189,871	118,016	£623,944	£3,557,355	£4,181,299
Stephen Pearce (maximum opportunity 300% of salary)	137,317	85,351	£451,244	£2,572,722	£3,023,966
Tony O'Neill (maximum opportunity 300% of salary)	142,404	88,513	£467,960	£2,668,031	£3,135,990

(1) Number of shares includes additional Anglo American shares resulting from adjustment following the demerger of Thungela Resources Ltd. Dividend equivalents for additional adjusted shares accrue from the date of demerger.
(2) Number of shares for Mark Cutifani is the pro-rated number of shares up to his date of cessation of employment with the Company of 30 June 2022.
(3) The value attributable to share price growth growth is £806,335 for Duncan Wanblad, £1,410,736 for Mark Cutifani, £1,020,260 for Stephen Pearce and £1,058,053 for Tony O'Neill. The proportion of the total value attributable to share price growth is 39.7%.
(4) As the awards are due to vest after publication of this report, an average share price between 1 October 2022 and 31 December 2022, of £30.14, was used to calculate the value and will be trued up in the 2023 report.

Restatement of value of 2019 LTIP

	Number of shares vesting	Dividend equivalents value	2021 estimated value[(1)] (ex dividends)	2021 estimated total value	Actual value of award at vesting[(2)]	Restated 2019 LTIP value
Mark Cutifani	180,040	£688,500	£5,088,168	£5,776,668	£7,055,767	£7,744,267
Stephen Pearce	108,505	£414,101	£3,066,509	£3,481,449	£4,252,310	£4,667,250
Tony O'Neill	112,524	£429,440	£3,180,102	£3,610,413	£4,409,815	£4,840,126

(1) 2021 estimated value uses three-month average share price up to 31 December 2021 of £28.26 as stated in the 2021 Annual Report.
(2) The share price on vesting was £39.19.

Pension (audited)

The pension contribution amounts in the table below should be read in conjunction with the following information:

- The total amounts of pension contributions treated as having been paid into the UURBS for the executive directors are:
  - Duncan Wanblad – £128,264 (from 19 April 2022)
  - Mark Cutifani – £78,749 (up to 19 April 2022)
  - Stephen Pearce – £159,156
  - Tony O'Neill – £161,052
- Contributions treated as being paid into the UURBS earn a fixed return of 5.125%. The total return earned in 2022 was £78,194 for Duncan Wanblad, £13,353 for Mark Cutifani, £29,230 for Stephen Pearce, and £56,897 for Tony O'Neill. The interest levels outlined only relate to the period that they served as an executive director during the year.
- As at 31 December 2022, the total balance due to executive directors in relation to the UURBS was £3,978,794. Retirement benefits can only be drawn from the UURBS if a member has attained age 55 and has left Group service.

Total pension for 2022

	DC contribution (£'000)	UURBS contribution (£'000)	UURBS Notional Increase (£'000)	Total (£'000)
Duncan Wanblad	£2.8	£128.2	£78.2	£209.2
Mark Cutifani	£1.2	£78.7	£13.4	£93.3
Stephen Pearce	—	£159.2	£29.3	£188.5
Tony O'Neill	£4.0	£161.0	£56.9	£221.9

External directorships

Executive directors are not permitted to hold external directorships or offices without the prior approval of the Board. If approved, they may each retain the fees payable from only one such appointment.

In the year, Mark Cutifani retained fees for one external non-executive directorship, at TotalEnergies SE, amounting to €38,754. This value is pro-rated from his total fees for the year for the period he served as chief executive from 1 January 2022 to 19 April 2022.

Stephen Pearce retained fees for one external non-executive directorship, at BAE Systems plc, amounting to £120,014 for 2022.

Payments for past directors (audited)

In addition to retirement benefits, the Company continues to provide five former executive directors with private medical insurance arrangements. The total annual cost to the Company is £62,677. The Committee continues to meet these longstanding commitments, but no new commitments have been made during the year or will be made in future.

Payments for loss of office (audited)

Mark Cutifani stepped down from the Board on 19 April 2022. He remained an employee of the Company to facilitate a smooth transition for the chief executive until 30 June 2022. His remuneration for the proportion of 2022 where he wasn't a director is as follows:

For the period between 19 April 2022 and 30 June 2022, Mark Cutifani continued to be paid his salary, pension and benefits. The value of these during this period was £374,265.

Mark Cutifani also received a pro-rated bonus for the year up to his date of cessation of employment of 30 June 2022. For the period between 19 April 2022 and 30 June 2022, the value of the bonus was £257,506. The total bonus for 2022 is fully paid out in cash.

Mark Cutifani did not receive an LTIP award for 2023.

On cessation of employment (for the period between 1 July 2022 and 31 October 2022), Mark Cutifani received total payments in lieu of notice of £592,646 consisting of base salary, pension and car allowance.

Mark Cutifani also received a payment of £155,155 for unused holiday days as at his date of cessation of employment.

Treatment of outstanding share awards

Good leaver treatment was applied in respect of outstanding share awards. Subject to the terms of the awards, awards will vest at their original vesting dates and any LTIP awards which vest will be subject to a two-year holding period.

LTIP awards were pro-rated for service up to 30 June 2022 and vesting remains subject to performance. No LTIP was granted for 2022.

Mark Cutifani's outstanding shares as at 31 December 2022 are:

Award	Number of shares	Vesting date
2018 BSP 5-year	23,345	March 2023
2019 BSP 5-year	17,324	March 2024
2020 BSP 3-year	36,097	March 2023
2020 BSP 5-year	18,049	March 2025
2021 BSP 2-year	9,135	March 2023
2021 BSP 3-year	17,734	March 2024
2022 BSP 2-year	9,620	March 2024
2022 BSP 3-year	18,675	March 2025
2020 LTIP	189,871	March 2023
2021 LTIP	71,957	March 2024

The LTIP shares numbers are pro-rated from the start of the performance period of each award to Mark Cutifani's date of cessation of employment of 30 June 2022. These numbers include additional Anglo American shares awarded as a result of the demerger of Thungela Resources in 2021.

The payments as outlined above are in line with the disclosed arrangements in the 2021 remuneration report.

Other director remuneration in 2022 (audited)

Non-executive director remuneration

The table below sets out the remuneration paid to the NEDs in 2022. Fees shown include any additional fees paid in respect of chairing or being a member of one of the Board's committees or acting as the senior independent director.

Fee levels for the chairman and NEDs (including committee fees) were increased in 2022. Prior to this, increases to the NEDs' annual base fees were last approved in 2017 and phased in over a two-year period. Board committee membership and chair fees had not increased since 2019 and 2014 respectively. The additional fee for the senior independent director had also not seen an increase since 2014.

As outlined in the 2021 remuneration report, the chairman and NED fees will be reviewed annually from 2023 onwards.

Role	Fee (£'000)
Chairman fee	773[1]
NED base fee	97.5
Senior independent director	32.5 (additional to base fee)
Chair of Audit, Remuneration or Sustainability committees	40 (additional to base fee)
Audit, Remuneration or Sustainability committee membership	20 (each committee membership)
Nomination committee membership	12.5

[1] Includes service on any Board committees.

Single-total figure of remuneration for non-executive directors

	Total Fees 2022 £'000	Benefits in Kind 2022 £'000[4]	Total 2022 £'000[5]	Total Fees 2021 £'000	Benefits in Kind 2021 £'000[4]	Total 2021 £'000[5]
Non-executive directors						
Stuart Chambers	773	8	781	714	9	723
Ian Ashby	170		170	145		145
Marcelo Bastos	130		130	113		113
Elisabeth Brinton[1]	88		88	80		80
Byron Grote	61		61	175		175
Hilary Maxson[2]	132		132	61		61
Hixonia Nyasulu	130		130	113		113
Nonkululeko Nyembezi	137		137	120		120
Anne Stevens	51		51	145		145
Ian Tyler[3]	183		183	–	–	–

(1) Elisabeth Brinton joined the Board on 1 March 2021 and stepped down from the Board on 23 September 2022; her fees for 2021 and 2022 are both part-year figures.
(2) Hilary Maxson joined the Board on 1 June 2021; her 2021 fees are a part-year figure.
(3) Ian Tyler joined the Board on 1 January 2022.
(4) Stuart Chambers' benefits in kind figure relates to the reimbursement of travel expenses during the year and the settlement of tax in relation to the reimbursement.
(5) Total is comprised only of fixed remuneration.

Scheme interests granted during 2022 (audited)

The table below summarises the BSP and LTIP share awards granted to executive directors during 2022.

The BSP award granted in 2022 was granted in the form of forfeitable shares and is included in the applicable total annual bonus values as set out in the applicable single-figure table.

The LTIP is granted in the form of conditional shares and vesting is dependent on the Group's performance over 2022–2024 based on the performance metrics detailed.

Summary of conditional share awards and options granted in 2022

Type of award	Performance measure	Vesting schedule	Performance period end	Director	Basis of award	Number of shares awarded	Face value at grant[1]
Bonus Share Plan	—	—	—	Mark Cutifani	50% of bonus	28,295	£1,103,729
				Stephen Pearce	50% of bonus	17,053	£665,190
				Tony O'Neill	50% of bonus	17,684	£689,831
LTIP share awards	TSR vs. Euromoney Global Mining Index (33%)	25% for TSR equal to the Index; 100% for the Index +6% p.a. or above	31/12/2024	Duncan Wanblad	300% of salary	90,978	£3,750,000
				Stephen Pearce	300% of salary	66,779	£2,604,861
				Tony O'Neill	300% of salary	69,253	£2,701,356
	TSR vs. FTSE 100 constituents (17%)	25% for TSR equal to median; 100% for 80th percentile or above					
	Balanced Scorecard 50%	ROCE (15%) 25% for 12%; 100% for 20%					
		SAFCF at actual prices and FX rates (15%)					
		Freshwater Withdrawals (8%) 25% for 8.5% reduction in abstraction of fresh water in water-stressed areas over 3-year rolling average 100% for 11.5% reduction					
		Renewable Energy (6%) 25% for 150MW production 100% for 250MW production					
		Social responsibility (6%) 25% for 2 jobs supported off-site for each job on-site 100% for 2.5 off-site jobs supported for each job on-site					

(1) With the exception of the LTIP award for Duncan Wanblad, the face values of the BSP and LTIP awards have been calculated using a grant share price of £39.01. This share price has been calculated based on the average closing share prices between 28 February 2022 and 4 March 2022. As receipt of the LTIP awards is conditional on performance, the actual value of these awards may be nil. Vesting outcomes will be disclosed in the remuneration report for 2024. The number of shares for Duncan Wanblad's LTIP was calculated using the average closing share prices for the period between 11 April 2022 and 14 April 2022 of £41.22. The difference in grant share price for Duncan Wanblad is due to his LTIP for 2022 being delayed until his appointment as chief executive in April 2022.

Total interests in shares (audited)

The table below summarises the total interests of the directors (including any share interests held by connected persons) in shares of Anglo American plc as at 31 December 2022. These include beneficial and conditional interests.

Executive director shareholding requirements

As per the 2020 remuneration policy, the executive director shareholding guidelines were strengthened, with the chief executive being expected to hold interests in shares to a value of four times basic salary, and other executive directors being expected to hold shares to a value of three times salary. For the purposes of calculating progress against the shareholding requirement, the following shares are included:

- Beneficially owned shares
- Vested incentive shares in a holding period
- In-flight BSP shares on a net of tax basis
- SIP shares.

LTIP share awards with performance conditions are not included.

At the date of preparation of this report, all current executive directors have met their shareholding requirements, Duncan Wanblad has net shareholdings (including Bonus Shares) equal to 1,159% of basic salary and Stephen Pearce has net shareholdings equal to 1,611% of basic salary. These holdings are calculated using the average share price between 1 October and 31 December 2022 of £30.14.

During 2022, Mark Cutifani and Tony O'Neill stepped down from the Board. They are required to retain holdings in Anglo American to satisfy the post-cessation shareholding requirement. The post-cessation shareholding requirement states that executive directors must for two years from the date they step down from the Board retain shares equal to the lower of their in-post shareholding requirement or their actual holdings as at the date of cessation. Mark and Tony had built substantial holdings of Anglo American shares and as such their shareholding requirements will be their in-post requirement of 400% and 300% of their final salary respectively. At the year end, both Mark Cutifani and Tony O'Neill retained holdings well above the required levels.

Mark Cutifani must retain shares up until 19 April 2024 and Tony O'Neill must retain shares up until 31 December 2024.

Differences from 31 December 2022 to 22 February 2023

Duncan Wanblad's and Stephen Pearce's interests increased by 14 and 18 shares respectively during the period between 31 December 2022 to 22 February 2023, as a result of the acquisition of shares under the SIP. Their total holdings therefore increased to 788,136 and 798,611 respectively. There have been no other changes in the interests of the directors in shares between 31 December 2022 and 22 February 2023.

SAYE transactions

During 2022 Duncan Wanblad, Stephen Pearce each had SAYE options over shares of 2,895 maturing. Tony O'Neill held an SAYE option over 1,459 shares that matured in 2021. Each of these options over shares were exercised during the year. Details of the exercise of the options are as follows:

	Number of shares under option	Exercise date	Exercise Price	Market Price
Duncan Wanblad	2,895	15 December 2022	£10.36	£31.15
Stephen Pearce	2,895	15 December 2022	£10.36	£31.15
Tony O'Neill	1,459	4 April 2022	£12.33	£40.06

Shares in Anglo American plc at 31 December 2022

Directors	Beneficial	Within a holding period	Conditional (no performance conditions): BSP Bonus Shares	Conditional (no performance conditions): SIP	Conditional (no performance conditions): SAYE (options over shares)	Conditional (with performance conditions): LTIP	Total
Duncan Wanblad	337,680	92,466	84,056	5,869	—	268,051	788,122
Stephen Pearce	296,791	116,999	91,244	1,922	807	290,830	798,593
Tony O'Neill	647,214	121,333	95,488	2,911	—	301,605	1,168,551
Stuart Chambers	16,518	—	—	—	—	—	16,518
Ian Ashby[1]	2,557	—	—	—	—	—	2,557
Marcelo Bastos	1,727	—	—	—	—	—	1,727
Hilary Maxson	500	—	—	—	—	—	500
Hixonia Nyasulu	2,021	—	—	—	—	—	2,021
Nonkululeko Nyembezi	2,799	—	—	—	—	—	2,799
Ian Tyler	—	—	—	—	—	—	—
Former directors[2]							
Mark Cutifani (to 19 Apr 2022)	1,087,476	194,135	149,979	4,481	1,212	371,763	1,809,046
Byron Grote[1] (to 19 Apr 2022)	40,896	—	—	—	—	—	40,896
Anne Stevens (to 19 Apr 2022)	2,122	—	—	—	—	—	2,122
Elisabeth Brinton (to 23 Sept 2022)	—	—	—	—	—	—	—

(1) Included in the beneficial interests of Ian Ashby and Byron Grote are shares held via unsponsored ADRs.
(2) Mark Cutifani, Byron Grote and Anne Stevens stepped down from the Board with effect from 19 April 2022. Elisabeth Brinton stepped down from the Board with effect from 23 September 2022. Their interests are shown as at these dates.

Implementation of policy for 2023

The following pages provide a summary of how our directors' remuneration policy will be implemented for 2023.

The information in this section is on the basis that the 2023 remuneration policy is approved by shareholders at the Company AGM in April 2023.

Aside from the proposal to increase the chief executive's LTIP grant to 350% of salary, there are no major implementation changes planned for 2023.

Salary levels

Executive directors will receive a 4% increase in salary for 2023. This increase is significantly below the increase awarded for the majority of the Company's UK employees of 8%.

With effect from 1 January 2023, the salaries for the executive directors are:

- Duncan Wanblad – £1,300,000
- Stephen Pearce – £903,018.

Pensions and benefits

Pension contribution

The pension contribution for both the chief executive and finance director for 2023 is 15% of base salary, reducing from 18.3% for 2022. This is the final step of the phased reduction of executive pension levels, bringing it in line with the contribution level for the Company's UK workforce from 1 January 2023.

Benefits

There will be no changes to the benefits provided to executive directors for 2023.

Incentives

Annual bonus

The maximum annual bonus opportunity for each of the executive directors remains at 210% of salary.

As in previous years, the annual bonus targets are considered by the Board to be commercially sensitive; they will be disclosed in full per the 2023 annual report on remuneration. Specific details of individual and strategic performance targets for 2023 will also be included in the 2023 report.

The structure of the performance measures for the 2023 award will be as follows:

- EPS (34% weighting) – Half on performance at actual prices and FX, and half on performance at fixed prices and FX
- SAFCF (16%) – Sustaining attributable free cash flow at fixed prices and FX
- SHE measures (20%) – Safety objectives focused on elimination of fatalities, environment, health and injuries
- Strategic measures (20%) – Strategic objectives supporting the Group's delivery on portfolio, innovation and people
- Personal strategic measures (10%) – Individually tailored objectives to motivate the execution of the Group strategy.

Annual bonus safety deductor

A comprehensive review in relation to the operation of the safety deductor took place in 2021. For the 2022 performance year onwards, the Committee approved the implementation of deductions to the annual bonus at a more punitive level in the event of any fatalities that occur.

The final reduction applied is subject to Committee discretion and will be determined taking into consideration all relevant facts and circumstances, including the number of fatalities, the cause of such fatalities, any repeat failures in safety and the number of high potential incidents.

LTIP reduction mechanism – updated

As outlined in the updated remuneration policy, the previous formulaic reduction mechanism as outlined in the 2020 policy will be replaced with a new approach that places greater emphasis on the Remuneration Committee to utilise their power of discretion considering the full circumstances of the situation.

During the shareholder consultation on the new policy, it was committed that the Committee would provide some principles on the operation of the updated mechanism in the remuneration report. The LTIP reduction mechanism will operated on the following basis:

In the event there has been a fall in share price prior to grant (compared to the share price at grant for the previous award), the Remuneration Committee will first consider whether that fall is material:

- If the reduction is 15% or less, the Committee will proceed with the grant as normal
- If the reduction is between 15% and 25%, the Committee will carry out a review of the possible reasons for the reduction. In the absence of a compelling reason to adjust the grant level, the Committee will proceed with the grant in the normal way
- If the reduction is greater than 25%, the Committee will carry out a review of the possible reasons for the reduction; its starting point will be that a reduction in grant level is likely to be appropriate, unless there is a compelling reason otherwise.

As part of the review, the Committee will consider if the application of a reduction mechanism is appropriate, taking a holistic view in light of the prevailing conditions. In particular, the Committee will consider the following information in order to support its determination of whether a reduction should be made to award levels at grant:

- The circumstances of the fall in share price, including any internal, micro-economic or macro-economic factors that may have influenced the fall beyond normal market forces
- Whether the share price used to determine the number of shares granted under the previous award represented an unusual high compared to performance more generally over a sustained period, and whether this is attributable to an external event or circumstance
- The number of shares granted to executive directors under recent LTIP grants.

LTIP performance measures

The maximum LTIP opportunity for the chief executive and finance director will be 350% and 300% of salary respectively.

The performance measures for the 2023 LTIP will be as follows:

Performance measure (% weighting)	Targets
TSR vs Euromoney Global Mining Index (33%)	Threshold – TSR equal to index Stretch – TSR equal to index + 6% p.a.
TSR vs FTSE 100 (17%)	Threshold – equal to median constituent performance Stretch – equal to at least 80th percentile constituent performance
Return on Capital Employed (15%)	Threshold – 12% Stretch – 20%
Sustaining Attributable Free Cash Flow (15%)	Commercially sensitive, disclosed retrospectively
Renewable Energy (8%)	Threshold – 350MW Stretch – 500MW
Ethical Value Chains (6%)	Threshold – all mines assured against a recognised responsible mining standard by end of 2025 Stretch – 80% of our top 10 managed metals mining operations to achieve IRMA 50 or equivalent
Social Responsibility (6%)	Threshold –2.5 off-site jobs Stretch – 3 off-site jobs Jobs exclude induced employment

For all measures, 25% vesting for threshold performance, 100% vesting for stretch performance.

In 2023, the structure of the LTIP will continue to include a 50% weighting on relative TSR. Financial measures based on ROCE and SAFCF are also again included and continue to account for 15% each, with the remainder of the measures focused on strategic ESG objectives. SAFCF for the LTIP will be measured at actual prices and FX as for the 2021 and 2022 awards.

The Renewable Energy measure proposed for the 2023 LTIP is a continuation of the 2022 LTIP measure and is to deliver renewable energy projects in southern Africa focused on renewable energy generation supply capacity. In addition, our operations outside of Africa shall have diesel transition plans detailed and budgeted within their business plans, which align to 2030 SMP objectives.

For 2023, the water reduction measure is replaced by a mine Certification measure which builds on the Sustainable Mining Plan Ethical Value Chains stretch goal. The target focuses on bringing all our mines up to IRMA 50 certification status. Water reduction remains a focus, captured in the in-flight LTIP 2022 and also part of the SHE bonus measures.

The social responsibility measure is a continuation of the existing LTIP measure of off-site jobs created and maintained relative to on-site jobs. To maintain the required element of stretch in the target going forwards, the LTIP 2023 target of 2.75 excludes induced jobs. This measure continues to support the external livelihoods commitment outlined in our Sustainable Mining Plan and our ambition for a Just Transition, including the creation of environmentally friendly and socially sustainable jobs.

The three-year SAFCF measure in the LTIP will be at actual prices and FX, and is considered by the Board to be commercially sensitive; disclosing it would enable competitors to derive information as to our detailed business plan. The actual targets, along with the outcomes, will be disclosed in the 2024 remuneration report. The definition of SAFCF can be found on page 312.

Remuneration arrangements for the retirement of Tony O'Neill

It was announced in November 2022 that Tony O'Neill would be retiring and stepping down from the Board on 31 December 2022 and he will remain an Anglo American employee until 30 June 2023. Between stepping down as technical director and leaving the Group, he is continuing to provide services to the Group in support of a smooth transition of his responsibilities. The remuneration arrangements for Tony's retirement will consist of:

- Salary, pension and benefits up until his date of cessation of employment with the Company on 30 June 2023
- Pension level will be 15% of salary for this period, in line with the level received for the wider UK workforce
- A 2022 bonus to be fully paid out in cash at the normal time (following year end) to the extent a bonus is earned. Further details including the value of the bonus, are shown on page 181
- No bonus will be paid in respect of 2023
- Good leaver treatment will be applied in respect of outstanding share awards. Subject to the terms of the awards, awards will vest at their original vesting dates, and any LTIP awards which vest will be subject to a further two-year holding period
- No LTIP for 2023 will be granted
- 2021 and 2022 LTIP awards to be pro-rated for service up to 30 June 2023 and vesting will be at their original vesting dates subject to performance
- Outstanding BSP awards remain outstanding and will vest at their original vesting dates.

Following his retirement, Tony will be expected to maintain a holding of Anglo American shares of three times his salary on cessation, for a period of two years.

Non-executive director remuneration

As outlined in the 2021 remuneration report, the chairman and NED fees will be reviewed annually from 2023 onwards. For 2023, the chairman's fee and NED base fees will be increased by 4%, in line with the increase for executive directors and below the increase for the wider UK workforce. Board committee chair and membership fees are unchanged.

For 2023, the Board has approved the introduction of an annual fee for acting as the designated NED to chair Anglo American's Global Workforce Advisory Panel, to reflect the additional time commitment associated with the role. The additional fee will be paid from 1 May 2023, subject to shareholder approval of the 2023 Remuneration Policy.

Determining the fees paid to NEDs is a matter for the Board, with the NEDs abstaining; therefore, increases were approved by the chairman and the executive directors. The chairman's increase was approved by the Remuneration Committee, in consultation with the chief executive. No directors were involved in any decision as to their own fees.

Role	2022 Fee (£'000)	2023 Fee (£'000)
Chairman fee	773[1]	804[1]
NED base fee	97.5	101.4
Senior independent director	32.5 (additional to base fee)	32.5 (additional to base fee)
Chair of Audit, Remuneration or Sustainability committees	40 (additional to base fee)	40 (additional to base fee)
Audit, Remuneration or Sustainability committee membership	20 (each committee membership)	20 (each committee membership)
Nomination	12.5	12.5
Designated NED to chair Global Workforce Advisory Panel	n/a	20 (from May 2023)

[1] Includes service on any Board committees.

Fairness

Introduction
In 2020, we introduced this dedicated fairness section to the remuneration report, incorporating disclosures that demonstrate the Committee's belief that our remuneration structures are fair and appropriate.

Our response to the cost-of-living crisis
In 2022, the heightened cost of living affected a number of the countries in which we operate. This has meant that our employees, as with the rest of society, are experiencing significant increases to their cost of living, particularly in relation to essential goods such as food, energy and fuel. While our reward packages are competitive, with salaries kept under review, the situation in some countries this year was deemed so exceptional that a one-off intervention was made mid-year to support lower paid colleagues in those countries most affected. The value of this payment varied by country and was calculated by reference to relevant salary and inflation level.

Workforce engagement on remuneration
Anglo American's Global Workforce Advisory Panel (the Panel) met twice during the year, with one of the topics for discussion being remuneration. The Panel's purpose is to give the workforce more of a 'voice' in the Boardroom so their views can be better understood and considered when decisions are being made about the future of the business, including how the committee takes aboard the views of the wider workforce in making decisions on executive remuneration. The Panel operates alongside Anglo American's existing employee engagement mechanisms, such as regular employee engagement surveys and director interaction with employees.

Two meetings took place in 2022, providing employees with the opportunity to raise and discuss their views on a range of topics. The second of these meetings in November was the first in-person meeting since the start of the Covid-19 pandemic. One of the topics discussed was remuneration and reward at Anglo American. Panel members were briefed on a wide breadth of pay issues, including on executive remuneration. They were then asked to engage with the populations they represented and provide feedback with their collective views. Overall, Panel members reported strong support for our reward structures and there were no concerns reported on executive pay.

— For more information on our People and workforce culture:
See pages 56-63

— For more information on the operation of the Panel and the ways in which we currently engage with our workforce culture:
See pages 143-144

MyShare
During the year, we launched MyShare – our new global all employee share scheme. The scheme was approved by shareholders at the 2022 AGM with overwhelming support of 98.54%.

MyShare is a global employee share plan designed to facilitate employee share ownership, create greater equity in wealth creation opportunities across the wider global workforce and enhance employee engagement. The plan will enable employees to share in the success of the Company and encourage employees to act as owners.

The MyShare offering consists of two elements:

- An annual award of free shares of £1,000 to all eligible employees
- The opportunity to participate in a purchase and match scheme through the deduction of a portion of their salary. Individuals can purchase up to £150 worth of shares per month. The Company matches all share purchases on a 1 to 1 basis.

Free shares and matched shares carry a two-year vesting period before they are released to individuals.

In September 2022, the first grant of free shares was made to all eligible employees. In total, awards were made to 12,258 employees in15 countries.

The related purchase and match scheme was launched in January 2023. Uptake of the scheme has been encouraging to date, with 36% of eligible employees signing up, significantly exceeding our target of 10% uptake. It was anticipated that uptake of the purchase and match scheme in the year would be hampered by the challenging economic climate so it is pleasing to see strong uptake of this element in countries such as Peru, Chile and Botswana.

Living wage

Anglo American has been an accredited Living Wage employer in the UK since 2014 via the Living Wage Foundation. In January 2023, we strengthened our commitment by receiving global Living Wage certification with the Fair Wage Network, formalising our status as a committed global employer. The Fair Wage Network is a trusted organisation that has developed an online database that covers Living Wage reference values for every country in the world and is considered an expert in this field.

A Living Wage analysis now forms part of our annual pay review process so that we continue to pay workers above living wage thresholds for the localities in which they operate. Our Global Reward team has also worked collaboratively with our Supply Chain colleagues to explore the introduction of a Living Wage provision into the Responsible Sourcing Standard, consisting of a series of relevant laws, industry regulations, internal policies and site requirements that suppliers must comply with as a condition of working with our business.

Additionally, we are an active member of the Business Fights Poverty 'Living Wage Peer Circle', which is a forum to collaborate, engage and share Living Wage insights with peers from across multiple industries.

Cascade of pay elements through employee population

The following table represents the cascade of our remuneration elements across our UK employee population.

Population	Remuneration element	Details
All UK employees	Salary	Salaries are determined based on the role and market rates; regular benchmarking exercises are taken to ensure salaries remain competitive against the market. We are an accredited Living Wage employer and all employees are paid at least the Real Living Wage.
	Pension	All employees are able to participate in the Company's Defined Contribution scheme.
	Benefits	All employees are eligible to participate in our range of benefits ranging from private medical coverage, occupational health services (including Covid-19 testing), and life assurance to a range of well-being and shopping benefits.
	SAYE	All employees are eligible to participate in the Company's SAYE scheme, which encourages employee share ownership and the opportunity to share in the value created in the Company.
	SIP	All employees who have been in employment for three months or more are eligible to participate in the Company's SIP scheme of partnership and matching shares. The Company matches the number of partnership shares bought on a 1:1 basis. All employees are also eligible to receive discretionary annual awards of free shares.
	Annual Bonus	Our UK permanent employees are eligible to participate in our annual bonus scheme. Performance for the bonus is determined on a team basis, ensuring that everyone is working towards the company's collective goals.
Management and senior management	LTIP	LTIP performance measures for the management population are the same as those for the executive directors, providing appropriate alignment. The LTIP ensures the focus of the decision-making population is on long term value creation.
Executive directors and GMC members	Shareholding requirements	The executive director shareholding requirements were further strengthened in our 2020 remuneration policy, ensuring greater alignment with interests of shareholders. GMC members are also subject to a shareholding requirement.

Our key SHE and ESG commitments flow through to the incentives for all eligible employees. The annual bonus scheme outcomes for all eligible employees are determined by team-based goals that include SHE measures, financial metrics and critical strategic measures. All eligible employees are incentivised to work collectively on key priorities in these areas, and are subject to a safety deductor. The LTIP awards granted to management and senior management include the performance measures applicable to our executive directors, which for 2023 include ESG measures relating to renewable energy production, ethical value chains and supporting off-site jobs in the regions that we operate.

Gender pay gap

Introduction

We continue to build on the firm foundations created to not only close our gender pay gap but to ensure the workplace environment created is one where women can thrive.

As at April 2022, women made up 55% of our UK HQ employees compared with 56% a year earlier, and female representation continues to increase across our total management population. Our focus remains on talent acquisition, development, succession planning and mentoring, as well as intersectionality, so individuals not only get in but get on. Our actions are supporting our goal of having 33% female representation across our Executive Committee and those that report to it; this remained at 29% by the end of 2022, up from 18% in 2017, when the UK gender pay gap legislation took effect.

We make a positive difference in key areas, such as supporting those employees with family and carer responsibilities, and standing up to domestic violence.

We will continue to embed and focus our initiatives in those areas which will help us realise our vision of a truly inclusive workplace where everyone can thrive.

Summary

Anglo American Services (UK) Limited is the UK company that has historically been the largest employer of Anglo American's UK workforce and is predominantly engaged in the provision of head office corporate services to Anglo American's global operations. The following sets out the information required by the UK regulation for Anglo American Services (UK) Limited, as at 5 April 2022.

Our mean UK hourly pay gap of 39% is primarily a function of the representation of men in the most senior management roles in our UK head office, as shown most clearly in the quartile analysis. On a global basis, our gender pay gap[1] of c.16.4% reflects the far greater balance across the full breadth of our business activities.

(1) Weighted average gender pay gap of the guaranteed pay of those employees in Australia, Brazil, Chile, Singapore, South Africa and the UK who are subject to the Anglo American Group-wide reward structures.

Hourly pay

Anglo American is a global mining business, headquartered in the UK, and the majority of the senior leadership team is UK-based. The gaps shown below are largely attributable to the fact that more men than women are working in more highly paid, senior roles.

At the snapshot date of 5 April 2022, Anglo American Services (UK) Ltd comprised of:

- A UK workforce of 458 employees of which 45% were men and 55% were women
- Although there has been a significant improvement over previous years, the proportion of women in the senior management population has remained the same year on year, consisting of a substantially higher proportion of men (71%) than women (29%)
- Leading to a 39% mean and 29% median UK hourly pay gap (2021: 44% mean and 33% median).

Hourly pay gap ratios

The table below ranks Anglo American's 458 UK employees' hourly pay from lowest to highest and then splits the number of employees into equally sized groups.

Reflecting the hourly pay gap described above, this chart shows that there has been an increase in the upper quartile, where the percentage of women increased to 34%, and, the percentage of women in the upper middle quartile also continued to increase year on year from 55 to 57%. Proportionally, there remain more male employees than female employees in the higher pay quartiles.

Hourly pay quartiles

Hourly pay quartiles	2022 Percentage males in Quartile	2022 Percentage females in Quartile	2021 Percentage males in Quartile	2021 Percentage females in Quartile
Lower	23	77	20	80
Lower Middle	47	53	42	58
Upper Middle	43	57	45	55
Upper	66	34	69	31

Proportion of employees awarded a bonus for 2022

Anglo American's UK performance pay schemes operate irrespective of gender, with the majority of UK employees eligible to receive variable bonus pay during the year. 2022 saw 81% of male and 82% of female employees receive a bonus.

% awarded a bonus	2022	2021
Male	81%	84%
Female	82%	80%

The population for which bonus pay relates to was 460, reflecting the different rules for the statutory reporting of hourly rate and bonus figures.

Bonus pay gap

The factors driving the bonus pay gap are the same as for the hourly pay gap shown in metrics 1 and 2, being the imbalanced gender composition across the more senior roles in our UK headquarters. Variable performance pay structures for the most senior employees differ from those of the wider workforce, thereby further widening the gap. The decrease in the mean and median bonus pay gap for 2022 reflects the increasing proportion of female employees in more senior roles recognising there will be a lag given the vesting period for bonuses.

Bonus pay gap	2022	2021
Male	75%	79%
Female	63%	75%

The UK Gender Pay Gap Requirement

The UK Gender Pay Gap reporting requirement is a regulation under The Equality Act 2010 (Gender Pay Gap Information) Regulations 2017 that is designed to provide public transparency in relation to the difference between men's and women's earnings within a company.

This regulation came into effect on 6 April 2017 and all UK registered companies that employ, in the UK, 250 or more people are required to disclose the specifically defined information by 4 April 2023. The source data for the required information must be at the 'snapshot date' of 5 April 2022. Anglo American is confident that it complies with the UK's Equal Pay legislation, which governs the right to equal pay between men and women for equal work. I confirm the data reported is accurate.

Remuneration disclosures

10-year remuneration and returns

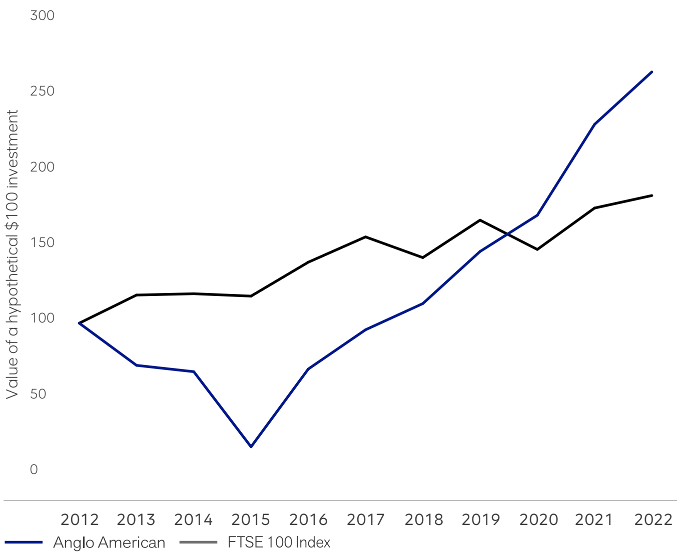
The TSR chart shows the Group's TSR performance against the performance of the FTSE 100 index from 1 January 2013 to 31 December 2022. The FTSE 100 index was chosen as this is a widely recognised broad index of which Anglo American has been a long term constituent. In comparison to the FTSE 100, the Company's TSR performance over this period is positive.

TSR is calculated in US dollars, and assumes all dividends are reinvested. The TSR level shown as at 31 December each year is the average of the closing daily TSR levels for the five-day period up to and including that date.

The table above shows the total remuneration earned by the incumbent chief executive over the same 10-year period, along with the proportion of maximum opportunity earned in relation to each type of incentive.

The total amounts are based on the same methodology as for the single figure table for executive directors on page 179 of this report.

10-year TSR performance



Source: Datastream

10-year CEO remuneration

Financial year ending	31 December, 2013	31 December, 2014	31 December, 2015	31 December, 2016	31 December, 2017	31 December, 2018	31 December, 2019	31 December, 2020	31 December, 2021	**31 December, 2022**
Cynthia Carroll										
Total remuneration (single figure, £'000)	1,462	—	—	—	—	—	—	—	—	—
Annual bonus (% of maximum)	67%	—	—	—	—	—	—	—	—	—
LTIP (% of maximum)	28%	—	—	—	—	—	—	—	—	—
Mark Cutifani										
Total remuneration (single figure, £'000)	5,305	3,725	3,462	3,996	6,693	15,636	10,745	9,331	11,928 [1]	**5,139**
Annual bonus (% of maximum)	65%	60%	36.5%	87.5%	76.9%	63.4%	58%	54.6%	75.2%	**42.6%**
LTIP (% of maximum)	—	—	50.0%	—%	50.0%	100%	92.5%	83.8%	90.0%	**62.2%**
Duncan Wanblad										
Total remuneration (single figure, £'000)										**4,397**
Annual bonus (% of maximum)										**42.6%**
LTIP (% of maximum)										**62.2%**

[1] Mark Cutifani's 2021 total remuneration figure has been restated with updated LTIP value based on actual share price at vesting and restated benefits value as outlined on page 179.

CEO pay ratio

The table shows our CEO pay ratio for 2022 based on our total UK population, and the methodology used for the calculation. At 73:1, the CEO pay ratio at the median has decreased from the median ratio of 141:1 (restated) in 2021. This is as a result of the following:

- The appointment of a new chief executive during the year at a lower base salary than his predecessor. The lower base salary also impacts pension and bonus levels
- For the chief executive's package in 2022, the remuneration for each individual in respect of the part of the year they were chief executive has been used. The exception to this is the value of the vesting of LTIP shares. For this, the previous chief executive's LTIP vesting has been taken as a prudent approach
- The restatement of the 2019 LTIP value for the 2021 ratio has increased the ratio. The higher actual share price at vesting raises the value of packages for more senior employees including the chief executive
- The total remuneration of the median employee has increased from £84,452 to £98,541. This is due to the median employee this year being on a higher salary, as well a higher pension level and receipt of the additional payment to address the cost of living crisis.

As for previous years and in line with our executive director remuneration strategy, our chief executive pay comprises a higher proportion of incentive pay compared to the wider employee population. While the main impact on the CEO pay ratio is from the change in chief executive this year, this will likely remain the key driver of fluctuations in the ratio from year to year.

Option A has been used to calculate the ratio, being the most comprehensive methodology of the three prescribed methods. This methodology uses the full-time equivalent pay and benefits data for all UK employees during the year and compares the single-figure number for employees at the 25th, 50th and 75th percentiles against the chief executive at the snapshot date of 31 December 2022, the last day of the financial year.

The salary, benefits and share plan data has been taken on a full-time equivalent basis, however, the annual bonus and LTIP values have been taken on an estimated basis. All other elements were calculated in line with the methodology used for the chief executive.

The employee at the 50th percentile does not participate in a long term incentive plan and does not receive all benefits applicable to the chief executive. Therefore, the ratio is not a direct comparison with the total remuneration of the chief executive. Having reviewed the reasons for the change in the median pay ratio, the Company is satisfied that the ratio is appropriate.

Financial year ending	Method used	25th percentile	Median percentile	75th percentile
2022	**Option A**	**122:1**	**73:1**	**41:1**
2021[(1)]	Option A	225:1	141:1	79:1
2020	Option A	188:1	126:1	74:1
2019	Option A	205:1	133:1	60:1

(1) 2021 numbers have been restated in line with the changes made to the single figure number as outlined in note 2 for the single figure table on page 179. This includes restatement of the value of the 2019 LTIP that vested in 2022 and the restated benefits figure for the executive directors.

	Salary				Total remuneration			
CEO pay ratio	2022	2021	2020	2019	2022	2021	2020	2019
25th percentile employee	**£41,738**	£44,761	£45,039	£53,027	**£58,523**	£53,027	£49,805	£49,805
Median percentile employee	**£70,637**	£60,029	£64,080	£84,452	**£98,541**	£84,452	£74,193	£74,193
75th percentile employee	**£110,452**	£99,176	£91,350	£108,200	**£173,168**	£150,876	£126,812	£126,812

Change in directors' remuneration compared to UK employees

The following table sets out the directors' basic salary, benefits and annual bonus amounts for 2022, 2021 and the year-on-year changes. We show the average change in each element for UK-based Anglo American Services (UK) Ltd and Anglo American Technical & Sustainability Services Ltd employees below GMC level (this excludes the De Beers and Crop Nutrients businesses' employees). This population is being used, as Anglo American plc does not have any direct employees. The chosen population is considered to be the most relevant employee comparator group, given the Group-wide nature of roles performed at the corporate head office.

The results show that the although the average UK employee salary has increased, the comparable salaries for employees who have been employed for both years shows a 6% rise from 2022. This is due to a combination of promotions and a 3% salary increase having being applied for all employees. Benefits have increased by 18% on a like-for-like basis, largely due to an increase in pension level. Bonus levels for employees on a like-for-like basis have fallen by 16%.

		2022[1] Salaries/ fees	2022[2] Benefits	2022 Bonus	2021[1] Salaries/ fees	2021[2][3] Benefits	2021 Bonus	2020[1] Salaries/ fees	2020[2] Benefits	2020 Bonus
Executive directors										
Duncan Wanblad[4]	£'000	1,250	179	1,117	0	0	0	0	0	0
	% change	–%	–%	–%	–%	–%	–%	–%	–%	–%
Stephen Pearce	£'000	868	92	791	843	63	1,330	826	37	965
	% change	3%	46%	(41%)	2%	71%	38%	2%	(5%)	(4%)
Non-executive directors										
Stuart Chambers[5]	£'000	773	8	0	714	9	0	700	7	0
	% change	8%	(12%)	–%	2%	18%	–%	–%	46%	–%
Ian Ashby	£'000	170	0	0	145	0	0	145	0	0
	% change	17%	–%	–%	–%	–%	–%	10%	–%	–%
Marcelo Bastos	£'000	130	0	0	113	0	0	105	0	0
	% change	15%	–%	–%	8%	–%	–%	2%	–%	–%
Hilary Maxson[6]	£'000	132		0	105	0	0	0	0	0
	% change	25%	–%	–%	–%	–%	–%	–%	–%	–%
Hixonia Nyasulu	£'000	130		0	113	0	0	100	0	0
	% change	15%	–%	–%	13%	–%	–%	11%	–%	–%
Nonkululeko Nyembezi	£'000	137		0	120	0	0	115	0	0
	% change	15%	–%	–%	–%	–%	–%	–%	–%	–%
Ian Tyler	£'000	183		0	0	0	0	145	0	0
	% change	–%	–%	–%	–%	–%	–%	4%	–%	–%
Former directors										
Mark Cutifani[7]	£'000	1,441	164	1,288	1,399	191	2,207	1,371	41	1,574
	% change	3%	(14%)	(42%)	2%	363%	40%	2%	7%	(4%)
Tony O'Neill	£'000	900	49	805	874	42	1,380	857	38	1,001
	% change	3%	17%	(42%)	2%	9%	38%	2%	12%	(4%)
Elisabeth Brinton[8]	£'000	118	0	0	96	0	0			
	% change	0	0	0	0					
Byron Grote[9]	£'000	206	0	0	175	0	0	175	0	0
	% change	18%	–%	–%	–%	–%	–%	4%	–%	–%
Anne Stevens[9]	£'000	173	0	0	145	0	0	145	0	0
	% change	19%	–%	–%	–%	–%	–%	4%	–%	–%
UK employees	**£'000**	111	24	77	**105**	**21**	**98**	**106**	**19**	**92**
	% change[10]	6%	18%	(16%)	**6%**	**28%**	**42%**	**5%**	**11%**	**7%**

(1) The Chairman and NED base fees increased in 2022 by 8.3%. Fees for chairing or membership of a sub-committee were also increased by 33.3%.
(2) Benefits for UK employees comprise pension and car allowances (where applicable), these being the most material.
(3) 2021 Benefits have been restated for executive directors as outlined in the benefits section on page 179. 2020 values have not been restated; hence, the large percentage increases for 2022.
(4) Duncan Wanblad joined the Board part way through 2022; values shown represent his full-year equivalent remuneration for future comparability.
(5) Stuart Chambers' benefits in kind figure relates to the reimbursement of travel expenses during the year and the settlement of tax in relation to the reimbursement.
(6) Hilary Maxson joined the Board on 1 June 2021; her full-year equivalent fees have been included for comparability in future years.
(7) Mark Cutifani stepped down from the Board on 19 April 2022; values shown for him represent his full year equivalent for comparability.
(8) Elisabeth Brinton joined the Board on 1 March 2021 and stepped down from the Board on 23 September 2022; her fees for 2021 and 2022 are full-year equivalents for comparability.
(9) Byron Grote and Anne Stevens both stepped down from the Board on 19 April 2022. Their 2022 fees are full-year equivalents for comparability.
(10) Annual salary increase was 2% in 2020 and 2021, and 3% for UK employees in 2022; increases shown include pay uplifts from promotions.

Distribution statement for 2022

The table below sets out the total expenditure on employee reward over 2022, compared to profit generated by the Company and the dividends received by investors. Underlying earnings are shown, as this is one of the Group's key measures of performance, while employee numbers help put the payroll costs of employees into context.

Distribution statement		2022	2021
Underlying earnings[1]	$m	6,036	8,925
	% change	(32)	184
Dividends payable for year to company shareholders[2]	$m	3,549	4,047
	% change	(12)	348
Dividends payable for year to non-controlling interests[2]	$m	1,566	2,837
	% change	(45)	250
Payroll costs for all employees	$m	3,849	3,796
	% change	1	13
Share buybacks	$m	–	1,000
	% change	(100)	348
Employee numbers	'000	62	62
	% change	–	(3)

(1) See page 219 for details on how underlying earnings are calculated.
(2) Includes value of special dividend paid in September 2021.

Results of AGM shareholder votes on remuneration aspects

	Number of votes		
Vote	For	Against	Abstain
2021 Annual Report on Remuneration (at 2022 AGM)	875,130,139 (94.81%)	47,890,763 (5.19%)	6,441,536
2020 Remuneration Policy (at 2020 AGM)	911,402,369 (95.61%)	41,886,673 (4.39%)	8,482,628

External advisers and fees

Advisers		Fees for committee assistance
Deloitte LLP	Appointed by the Committee as external advisers from November 2020 following a competitive tender process. Support during 2022 includes attendance and advice at Remuneration Committee meetings, advice on the development of the new remuneration policy and advice on the remuneration elements. Other services provided to the Company Corporate tax advisory services; risk advisory services including cyber security; financial advisory services in relation to transformation, mergers and acquisitions and capital restructuring; legal managed services; and consulting services including, human capital, enterprise and legal technology, operational and strategy and management consulting.	£169,800

Directors' service agreements

The executive directors are employed under service agreements which are rolling contracts with no fixed term. The chief executive and finance director have service agreements that may be terminated by either side by giving not less than 12 months' notice. The dates of the executive directors' service agreements are set out below.

	Date of appointment
Duncan Wanblad	19 April 2022
Stephen Pearce	24 April 2017

The chairman and NEDs are appointed by the Company under letters of appointment and do not have service contracts or contracts for service. All NEDs are expected to serve for an initial period of three years, subject to annual re-election by shareholders at the AGM. NEDs are typically expected to service two three-year terms, although the Board may invite them to serve for an additional period. The appointment of the chairman may be terminated by either side by giving not less than six months' notice. All other NEDs have a notice period of not less than one month from either side. The dates of each NED's original appointment are set out below.

	Date of appointment
Stuart Chambers	1 September 2017
Ian Ashby	25 July 2017
Marcelo Bastos	1 April 2019
Hilary Maxson	1 June 2021
Hixonia Nyasulu	1 November 2019
Nonkululeko Nyembezi	1 January 2020
Ian Tyler	1 January 2022

Remuneration Committee in 2022

Membership

The Committee comprised the independent NEDs listed on page 160 as at 31 December 2022.

External advisers to the Committee

The table opposite details the external advisers to the Committee and the fees paid for services provided during 2022. The fees for external advisers are charged on a time and expenses basis and are in accordance with the terms and conditions set out in each relevant engagement letter. Deloitte is one of the founding members of the Remuneration Consulting Group.

The Committee is satisfied that the Deloitte engagement team, which provides remuneration advice to the Committee, does not have connections with Anglo American plc or its directors that may impair its independence. The Committee reviewed the potential for conflicts of interest and judged that there were appropriate safeguards against such conflicts.

Approval

This directors' remuneration report has been approved by the Board of directors of Anglo American plc.

Signed on behalf of the Board of directors.

Ian Tyler
Chairman, Remuneration Committee

22 February 2023

Statement of directors' responsibilities

The directors are responsible for preparing the Integrated Annual Report and the financial statements in accordance with applicable law and regulation.

Company law requires the directors to prepare financial statements for each financial year. Under that law the directors have prepared the Group financial statements in accordance with UK-adopted International Accounting Standards and the Parent Company financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", and applicable law).

Under company law, directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Parent Company and of the profit or loss of the Group for that period. In preparing the financial statements, the directors are required to:

- Select suitable accounting policies and then apply them consistently
- State whether applicable UK-adopted International Accounting Standards have been followed for the Group financial statements and United Kingdom Accounting Standards, comprising FRS 101 have been followed for the Parent Company financial statements, subject to any material departures disclosed and explained in the financial statements
- Make judgements and accounting estimates that are reasonable and prudent
- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group and Parent Company will continue in business.

The directors are responsible for safeguarding the assets of the Group and Parent Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The directors are also responsible for keeping adequate accounting records that are sufficient to show and explain the Group's and Parent Company's transactions and disclose with reasonable accuracy at any time the financial position of the Group and Parent Company and enable them to ensure that the financial statements and the Directors' Remuneration Report comply with the Companies Act 2006.

The directors are responsible for the maintenance and integrity of the Parent Company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Directors' confirmations

for the year ended 31 December 2022

The directors consider that the Integrated Annual Report and accounts, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's and Parent Company's position and performance, business model and strategy.

We confirm that, to the best of our knowledge:

- the Group financial statements, which have been prepared in accordance with UK-adopted international accounting standards, give a true and fair view of the assets, liabilities, financial position and profit of the Group
- the Parent Company financial statements, which have been prepared in accordance with United Kingdom Accounting Standards, comprising FRS 101, give a true and fair view of the assets, liabilities and financial position of the Parent Company and
- the Strategic Report includes a fair review of the development and performance of the business and the position of the Group and Parent Company, together with a description of the principal risks and uncertainties that it faces.

By order of the Board

Duncan Wanblad
Chief Executive

Stephen Pearce
Finance Director

22 February 2023

Financial statements and other financial information

Contents

Independent auditors' report to the members of Anglo American plc

Report on the audit of the financial statements

Opinion

In our opinion:

- Anglo American plc's Group financial statements and Parent Company financial statements (the "financial statements") give a true and fair view of the state of the Group's and of the Parent Company's affairs as at 31 December 2022 and of the Group's profit and the Group's cash flows for the year then ended;
- the Group financial statements have been properly prepared in accordance with UK-adopted international accounting standards as applied in accordance with the provisions of the Companies Act 2006;
- the Parent Company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, including FRS 101 "Reduced Disclosure Framework", and applicable law); and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements, included within the Integrated Annual Report 2022 (the "Annual Report"), which comprise: the Consolidated and Parent Company balance sheets as at 31 December 2022; the Consolidated income statement, the Consolidated statement of comprehensive income, the Consolidated cash flow statement and the Consolidated and Parent Company statements of changes in equity for the year then ended; and the notes to the financial statements, which include a description of the significant accounting policies.

Our opinion is consistent with our reporting to the Audit Committee.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remained independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, as applicable to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

To the best of our knowledge and belief, we declare that non-audit services prohibited by the FRC's Ethical Standard were not provided.

Other than those disclosed in note 37, we have provided no non-audit services to the Parent Company or its controlled undertakings in the period under audit.

Our audit approach

Overview

Audit scope

- Our audit included full scope audits, audit of specific account balances or specified procedures at each of the Group's twelve in-scope businesses, joint ventures and associates ("components").
- Taken together, the components at which audit work was performed accounted for 97% of consolidated revenue, 95% of consolidated profit before tax and 95% of consolidated profit before tax, special items and remeasurements.

Key audit matters

- Assessment of impairment and impairment reversals for intangible assets, property, plant and equipment and investments in subsidiaries (Group and Parent)
- Provisions for environmental restoration and decommissioning (Group)

Materiality

- Overall Group materiality: $400 million (2021: $300 million) based on approximately 3.5% of the Group's three year-average consolidated profit before tax, special items and remeasurements.
- Overall Parent Company materiality: $300 million (2021: $300 million) based on approximately 1% of the Parent Company's total assets.
- Performance materiality: $300 million (2021: $225 million) (Group) and $225 million (2021: $225 million) (Parent Company).

The scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements.

Key audit matters

Key audit matters are those matters that, in the auditors' professional judgement, were of most significance in the audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by the auditors, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. These matters, and any comments we make on the results of our procedures thereon, were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

This is not a complete list of all risks identified by our audit.

The demerger of the Group's South African thermal coal operations (Group and Parent Company) and changes in the presentation of certain revenue streams from a gross to a net basis (Group), which were key audit matters last year, are no longer included because they were one-off issues impacting the prior year audit. Otherwise, the key audit matters below are consistent with last year.

Key audit matter	How our audit addressed the key audit matter
Assessment of impairment and impairment reversals for intangible assets, property, plant and equipment and investments in subsidiaries (Group and parent)	

As at 31 December 2022, the Group has intangible assets of $2,828 million (2021: $3,002 million) and property, plant and equipment of $41,125 million (2021: $39,501 million). All of these asset categories require review for indicators of impairment, and where relevant, impairment reversal.

The determination of whether an impairment or impairment reversal trigger exists can be judgemental. Management must determine the recoverable amount when impairment indicators or indicators of impairment reversal are identified.

The Group has goodwill of $1,671 million as at 31 December 2022 (2021: $1,877 million), predominantly associated with the De Beers business. Goodwill is required to be tested for impairment at least annually.

The determination of recoverable amount, being the higher of value-in-use ("VIU") and fair value less costs of disposal ("FVLCD"), requires judgement and estimation on the part of management in identifying and then determining the recoverable amounts for the relevant cash-generating units ("CGUs"). Recoverable amounts are based on management's view of key value driver inputs and external market conditions such as future commodity prices, budgeted operating expenditure, the timing and approval of future capital expenditure, and the most appropriate discount rate. As these assumptions were derived from observable data available to a market participant as required under IFRS, they are not necessarily aligned with a 1.5°C Paris Agreement scenario. Estimation uncertainty is considered to be significant due to the long lives of the majority of assets and uncertainty in the quantum and timing of cash flows, including the uncertain impact of climate change on the Group's operations, as described in note 7 to the financial statements.

The CGUs where impairment or impairment reversal triggers were identified in the year were Moranbah-Grosvenor, Dawson and Capcoal (all Steelmaking Coal), Barro Alto (Nickel), Los Bronces and Chagres (Copper), Kolomela (Kumba Iron Ore) and Woodsmith (Crop Nutrients). As triggers for impairment/impairment reversal were identified in respect of these CGUs, management prepared a detailed cash flow model on a FVLCD basis to estimate the recoverable amount. Management's analysis determined that impairment losses had occurred at Kolomela and Woodsmith, and that impairment reversals should be recognised at Moranbah-Grosvenor and Dawson. No impairments were recognised against the Group's goodwill.

Refer to notes 7 and 8 for management conclusions and the Audit Committee's views on page 152.

At 31 December 2022, the Parent Company holds investments in subsidiaries amounting to $32,971 million (2021: $31,796 million). Investments in subsidiaries are accounted for at historical cost less accumulated impairment. Judgement is required to assess if impairment triggers exist and where triggers are identified, if the investment carrying value is supported by the recoverable amount. In assessing for impairment triggers, management considers if the underlying net assets of the investment support the carrying amount and whether other facts and circumstances, including impairments recorded in the Group financial statements, would be indicative of a trigger.

Based on management's assessment, no impairment triggers in respect of the carrying value of investments in subsidiaries were identified at the balance sheet date.

Refer to note 1 of the Parent Company's financial statements.

For all material finite-lived intangible assets and property, plant and equipment, we undertook the following to test management's assessment for indicators of impairment/impairment reversal:

- we understood and evaluated management's processes and controls in respect of the impairment trigger assessment process;
- we assessed the appropriateness of management's identification of the Group's CGUs; and
- we evaluated and challenged management's assessment and judgements in respect of impairment/impairment reversal indicators, including ensuring that the impact of climate change, and recent commodity price and foreign exchange volatility, were appropriately considered in management's impairment trigger assessment and conclusions.

For each CGU where triggers for impairment or impairment reversals were identified, and in respect of the De Beers and other CGUs where an annual goodwill impairment test was required, management prepared a detailed cash flow model on a FVLCD basis to estimate the recoverable amount, or compared the carrying value to the fair value indicated by the share price of listed subsidiaries, where relevant. Our procedures in respect of each model included:

- verifying the integrity of formulae and the mathematical accuracy of management's valuation models;
- consideration of the impact of the latest life of asset plan assumptions and ensuring that the valuation model reflected the latest plans. This included assessing the competence and objectivity of management's internal technical experts in preparing the plan as well as reviewing the supporting information underpinning the internal expert's report, where appropriate;
- assessing the reliability of management's forecast capital and operating expenses with reference to comparing budgeted results with actual performance in prior periods;
- with the support of our valuations experts, assessing the discount rate used in each model and whether it fell within a reasonable range taking account external market data. Our assessment of discount rates also included consideration of country and asset specific risks and challenging management to ensure that these had been appropriately captured in either the discount rate or underlying cash flow forecasts;
- benchmarking management's forecast commodity price and foreign exchange assumptions against our own collated consensus data to assess whether they fell within an external analyst range. Specifically in respect of De Beers, we engaged our economics experts to challenge and assess the appropriateness of the methodology and assumptions used in deriving forecast diamond prices;
- challenging and verifying that the cash flow forecasts appropriately captured and considered the impact of carbon emissions on price, mine plan costs and cost of capital, where material;
- verifying that costs and benefits of achieving the Group's emissions reduction ambitions and targets and the implementation of projects to mitigate physical climate risk were appropriately included in cash flow forecasts, where such costs and benefits have been incorporated into the approved life of asset plan; and
- assessing whether the assumptions had been determined and applied on a consistent basis, where relevant, across the Group.
- assessing the disclosure made over the impairment charges and sensitivities within note 7 of the financial statements and challenging management where any inconsistencies were noted.

Key audit matter	How our audit addressed the key audit matter
	In addition to the procedures above we also performed the following specific procedures in respect of the Woodsmith impairment: – we reviewed the Board papers and minutes in relation to the Woodsmith investment plan to ensure that the ongoing investment plan, including changes to the profile and timing of the capital expenditure and expected production, was consistent with the outcome of the impairment test; – given the relative lack of observable market data on POLY4, we tested the inputs into management's pricing assumption and assessed the probability weighting applied to each pricing scenario in comparison to the ongoing investment plan. As a result of our work, we determined that the impairment charges recorded are appropriate and that adequate disclosures have been made in the financial statements. In respect of investments in subsidiaries in the Parent Company, we undertook the following to test management's assessment for indicators of impairment: – evaluated and challenged management's assessment and judgements, including ensuring that consideration had been given to the results of the Group's impairment assessment in respect of intangible assets and property, plant and equipment; – verified the mathematical accuracy of management's assessment and that the net assets of the subsidiaries being assessed agreed to the respective subsidiary balance sheet at 31 December 2022; and – independently performed an assessment of other internal and external impairment triggers, including considering the market capitalisation of the Group with reference to the carrying value of investments in subsidiaries in the Parent Company to identify other possible impairment indicators. As a result of our work, we are satisfied that management's impairment assessment of intangible assets and property, plant and equipment is appropriate and that there are no indicators of impairment in respect of the carrying value of the Parent Company's investments in subsidiaries as at 31 December 2022.

Key audit matter	How our audit addressed the key audit matter
Provisions for environmental restoration and decommissioning (Group)	
The Group has provisions for environmental restoration and decommissioning of $2,667 million as at 31 December 2022 (2021: $2,556 million). The calculation of these provisions requires management to estimate the quantum and timing of future costs, taking into account the unique nature of each site, the long timescales involved and the potential associated obligations. These calculations also require management to determine an appropriate rate to discount future costs to their net present value. Management reviews the environmental restoration and decommissioning obligations at each reporting period, using experts to provide support in its assessment where appropriate. This review incorporates the effects of any changes in local regulations, rehabilitation activities that have taken place during the year and management's anticipated approach to restoration and rehabilitation. During the 2022 financial year, management has considered the extent to which it expects the Group to incur additional expenditure in relation to conformance with the Global Industry Standard on Tailings Management ('GISTM'). Refer to note 15 for management's conclusions and the Audit Committee's views on page 153.	We assessed management's process for the review of environmental restoration and decommissioning provisions and performed detailed testing in respect of the cost estimates. As part of our detailed testing, we validated the existence of legal and/or constructive obligations with respect to the provision and considered whether the intended method of restoration and rehabilitation was appropriate. We evaluated the competence and objectivity of management's experts who produced the cost estimates. We read correspondence between management and management's experts, as well as with mining regulatory bodies where applicable, and also held meetings with the experts to understand their methodology and inputs. We considered whether any identified risks associated with climate change impacted either the timing or extent of remediation activities. For certain of the Group's environmental restoration and decommissioning provisions, particularly those where there had been a significant change in the provision compared to the prior year, we engaged our own internal experts to assess the work performed by management's expert, including review of any contingent liabilities, which are not provided for, and detection of any other excluded costs requiring recognition or disclosure that could be material. In assessing the appropriateness of cost estimates, we focused on validating that costs underpinning the accounting provision represent management's and the experts' best estimate of expenditure, based on the current extent of mine disturbance as well as any risk adjustments included in the estimate. In respect of claims that have been made by regulatory authorities or government bodies regarding closure estimates, we met with legal counsel, where relevant, to assess the probable outcomes in relation to ongoing claims and exposure and areas where legal requirements are open to interpretation. We assessed the timing of the cash flows and discount rates applied to calculate the present value of estimated costs by comparing the rates applied by management to the yields on government bonds with maturities approximating the timing of cash flows for each territory and currency. Specifically in relation to the Group's conformance with GISTM, we obtained the assessments performed by management to ensure cost estimates had been included for any additional expenditure required with respect to the tailings facilities. For those sites for which the impact of conformance to the standard has not been concluded, we considered whether there was any contrary evidence to suggest the cost of conformance could be material. We validated the formulae and mathematical accuracy of management's calculations. Based on the procedures performed, we consider that the provisions related to environmental restoration and decommissioning obligations are consistent with the obligations associated with the operations and the related remediation plans to satisfy those obligations. Further, we consider the related disclosures in the financial statements to be appropriate.

How we tailored the audit scope
We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the structure of the Group and the Parent Company, the accounting processes and controls, and the industry in which they operate.

The Group is organised into eight reportable segments – De Beers, Copper, Platinum Group Metals, Iron Ore, Steelmaking Coal, Nickel, Manganese and Crop Nutrients, as well as a Corporate function. Each segment is further divided into Businesses which align to discrete country or joint venture operations. We have identified each Business as a component, with each component representing a consolidation of a number of discrete country operations or underlying businesses.

The Group's accounting processes for managed operations are structured around a local finance function at each component, which are supported by the Group's central functions including: i) one of the Group's three shared service centres in either South Africa, Brazil or Australia dependent on the geographical location of the component; and ii) with the exception of De Beers and Steelmaking Coal, the Group's Marketing business in Singapore where the majority of the Group's commodity sales are transacted and processed. Each component reports to the Group through an integrated consolidation system.

Based on our risk and materiality assessments, we determined which components required an audit of their complete financial information having consideration to the relative significance of each component to the Group, locations with significant inherent risks and the overall coverage obtained over each material line item in the consolidated financial statements.

We scoped in ten components requiring an audit of their complete financial information, of which six were considered to be financially significant components. The additional four components subject to a complete audit were selected due to specific risk characteristics and in order to achieve the required coverage in respect of each material line item in the financial statements, including the Group's Corporate function. In addition one component was scoped in for audit of specific account balances and one component was scoped in for specified procedures over significant balances and transactions to obtain appropriate coverage of all material balances.

Recognising that not every operation or business in a component is included in our Group audit scope, we considered as part of our Group audit oversight responsibility what audit coverage had been obtained in aggregate by our component teams by reference to operations or businesses at which audit work had been undertaken.

Where the work was performed by component audit teams or at a central function, we determined the level of involvement we needed to have in the audit work at those components to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the Group financial statements as a whole.

The Group audit team visited component teams and local operations in Chile, Peru, South Africa, Australia and Singapore during the 2022 audit. In addition, our oversight procedures included the issuance of formal, written instructions to component auditors setting out the work to be performed at each location and regular communication throughout the audit cycle including regular component calls through video conferencing, review of component auditor workpapers and participation in audit clearance meetings.

Taken together, the components where we performed our audit work accounted for 97% of consolidated revenue, 95% of consolidated profit before tax and 95% of consolidated profit before tax, special items and remeasurements. This was before considering the contribution to our audit evidence from performing audit work at the Group level, including disaggregated analytical review procedures and our evaluation of entity level controls, which covers a significant portion of the Group's smaller and lower risk components that were not directly included in our Group audit scope.

The financial statements of the Parent Company are prepared using the same accounting processes as the Group's central functions and were audited by the Group audit team.

The impact of climate risk on our audit
As part of our audit, we made enquiries of management to understand its process to assess the extent of the potential impact of climate change risks on the Group and its financial statements. Management has explained how it has considered the impact of climate change on the financial statements, including specifically in respect of cash flow projections for impairment testing, in note 7 to the financial statements. This includes its consideration of risks and opportunities that could impact the financial statements together with assumptions in respect of carbon pricing.

We used our knowledge of the Group to consider the risk assessment performed by management, including its assessment of the strategic and financial resilience of the Group's portfolio under various scenarios. Management remains committed to achieving the climate ambitions announced in the previous year, which included halving scope 3 greenhouse gas emissions by 2040. During 2022, management engaged the Carbon Trust to conduct an independent assessment to provide external verification regarding the alignment of the Group's Scope 1 and 2 ambitions with a well-below 2° scenario. As a result of this assessment, and recognising that with forecasts of any type there is a margin of error, management has confidence that capital deployment in accordance with the Group's operational carbon neutrality ambitions is capital aligned with a contribution to achieving the goals of the Paris Agreement. For financial statement reporting purposes, as detailed in note 7, no specific climate scenario is used when determining asset valuations 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.

We considered management's financial statement reporting risk assessment in respect of climate change, focusing on those areas considered to be most heavily impacted such as management's impairment assessment over non-current assets. Whilst the impact is uncertain, we particularly considered the impact of both physical and transition risks arising due to climate change, as well as related opportunities and climate targets made by the Group, including any incremental capital expenditure and/or operating costs, on the recoverable value of the Group's assets.

The Group has climate ambitions for which a plan for delivery has not yet been developed. Accordingly, it is not possible to include the, as yet, unidentified related costs and benefits of those ambitions in forward looking estimates. Where the Group has defined climate change targets and has a high degree of confidence that a project is technically feasible, the related costs and benefits are included in the relevant Life of Asset Plan and asset valuations.

The useful lives of the Group's mines are reassessed annually and changes could impact depreciation charges and timing of mine restoration activities. Based on the current life of asset plans there were no indications that useful lives had been materially impacted by climate change. Our work on impairment is further described in the relevant Key Audit Matter. We have also read the disclosures made in relation to climate change, in the other information within the Annual Report, and considered their consistency with the financial statements and our knowledge from our audit.

Materiality

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

	Financial statements – Group	Financial statements – Parent Company
Overall materiality	$400 million (2021: $300 million).	$300 million (2021: $300 million).
How we determined it	Approximately 3.5% of the Group's three year-average consolidated profit before tax, special items and remeasurements	Approximately 1% of the Parent Company's total assets
Rationale for benchmark applied	Profit before tax, special items and remeasurements is used as the materiality benchmark. The directors use this measure as they believe that it reflects the underlying performance of the Group. We consider that it is most appropriate to calculate materiality based on a three-year average of profit before tax, special items and remeasurements to respond to longer-term trends in commodity markets and to dampen the impact of short-term price volatility. We used judgement to cap our materiality at $400 million.	We considered total assets to be an appropriate benchmark for the Parent Company, given that it is the ultimate holding company and holds material investments in subsidiary undertakings. We used judgement to cap our materiality at $300 million.

For each component in the scope of our Group audit, we allocated a materiality that is less than our overall Group materiality. The range of materiality allocated across components was $60 million to $110 million.

We use performance materiality to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds overall materiality. Specifically, we use performance materiality in determining the scope of our audit and the nature and extent of our testing of account balances, classes of transactions and disclosures, for example in determining sample sizes. Our performance materiality was 75% (2021: 75%) of overall materiality, amounting to $300 million (2021: $225 million) for the Group financial statements and $225 million (2021: $225 million) for the Parent Company financial statements.

In determining the performance materiality, we considered a number of factors - the history of misstatements, risk assessment and aggregation risk and the effectiveness of controls - and concluded that an amount at the upper end of our normal range was appropriate.

We agreed with the Audit Committee that we would report to them misstatements identified during our audit above $20 million (Group audit) (2021: $15 million) and $15 million (Parent Company audit) (2021: $15 million) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

Conclusions relating to going concern

Our evaluation of the directors' assessment of the Group's and the Parent Company's ability to continue to adopt the going concern basis of accounting included:

- Obtaining and examining management's base case forecast and downside scenarios, including those that incorporate the impact of operational disruption and the macroeconomic environment, checking that the forecasts have been subject to board review and approval;
- Considering the historical reliability of management forecasting for cash flow and net debt by comparing budgeted results to actual performance;
- Reviewing the key inputs into the models, such as commodity prices and production forecasts, to ensure that these were consistent with our understanding and the inputs used in other key accounting judgements in the financial statements;
- Performing our own independent sensitivity analysis to understand the impact of changes in cash flow and net debt on the resources available to the Group;
- Reviewing the covenants applicable to the Group's borrowings and reviewing whether management's assessment supports ongoing compliance with those covenants; and
- Reading management's paper to the Audit Committee in respect of going concern, and agreeing the forecasts set out in this paper to the underlying base case cash flow model.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group's and the Parent Company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

In auditing the financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

However, because not all future events or conditions can be predicted, this conclusion is not a guarantee as to the Group's and the Parent Company's ability to continue as a going concern.

In relation to the directors' reporting on how they have applied the UK Corporate Governance Code, we have nothing material to add or draw attention to in relation to the directors' statement in the financial statements about whether the directors considered it appropriate to adopt the going concern basis of accounting.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report.

Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The directors are responsible for the other information, which includes reporting based on the Task Force on Climate-related Financial Disclosures (TCFD) recommendations. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Strategic report and Directors' report, we also considered whether the disclosures required by the UK Companies Act 2006 have been included.

Based on our work undertaken in the course of the audit, the Companies Act 2006 requires us also to report certain opinions and matters as described below.

Strategic report and Directors' report
In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic report and Directors' report for the year ended 31 December 2022 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements.

In light of the knowledge and understanding of the Group and Parent Company and their environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic report and Directors' report.

Directors' Remuneration
In our opinion, the part of the Directors' remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006.

Corporate governance statement

The Listing Rules require us to review the directors' statements in relation to going concern, longer-term viability and that part of the corporate governance statement relating to the Parent Company's compliance with the provisions of the UK Corporate Governance Code specified for our review. Our additional responsibilities with respect to the corporate governance statement as other information are described in the Reporting on other information section of this report.

Based on the work undertaken as part of our audit, we have concluded that each of the following elements of the corporate governance statement, included within the Directors' report is materially consistent with the financial statements and our knowledge obtained during the audit, and we have nothing material to add or draw attention to in relation to:

- The directors' confirmation that they have carried out a robust assessment of the emerging and principal risks;
- The disclosures in the Annual Report that describe those principal risks, what procedures are in place to identify emerging risks and an explanation of how these are being managed or mitigated;
- The directors' statement in the financial statements about whether they considered it appropriate to adopt the going concern basis of accounting in preparing them, and their identification of any material uncertainties to the Group's and Parent Company's ability to continue to do so over a period of at least twelve months from the date of approval of the financial statements;
- The directors' explanation as to their assessment of the Group's and Parent Company's prospects, the period this assessment covers and why the period is appropriate; and
- The directors' statement as to whether they have a reasonable expectation that the Parent Company will be able to continue in operation and meet its liabilities as they fall due over the period of its assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

Our review of the directors' statement regarding the longer-term viability of the Group and Parent Company was substantially less in scope than an audit and only consisted of making inquiries and considering the directors' process supporting their statement; checking that the statement is in alignment with the relevant provisions of the UK Corporate Governance Code; and considering whether the statement is consistent with the financial statements and our knowledge and understanding of the Group and Parent Company and their environment obtained in the course of the audit.

In addition, based on the work undertaken as part of our audit, we have concluded that each of the following elements of the corporate governance statement is materially consistent with the financial statements and our knowledge obtained during the audit:

- The directors' statement that they consider the Annual Report, taken as a whole, is fair, balanced and understandable, and provides the information necessary for the members to assess the Group's and Parent Company's position, performance, business model and strategy;
- The section of the Annual Report that describes the review of effectiveness of risk management and internal control systems; and
- The section of the Annual Report describing the work of the Audit Committee.

We have nothing to report in respect of our responsibility to report when the directors' statement relating to the Parent Company's compliance with the Code does not properly disclose a departure from a relevant provision of the Code specified under the Listing Rules for review by the auditors.

Responsibilities for the financial statements and the audit

Responsibilities of the directors for the financial statements
As explained more fully in the Statement of directors' responsibilities, the directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The directors are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group's and the Parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the Parent Company or to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the audit of the financial statements
Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud, is detailed below.

Based on our understanding of the Group and industry, we identified that the principal risks of non-compliance with laws and regulations related to the failure to comply with environmental regulations, health and safety regulations, and anti-bribery and corruption laws, and we considered the extent to which non-compliance might have a material effect on the financial statements. We also considered those laws and regulations that have a direct impact on the financial statements such as the Companies Act 2006 and applicable tax legislation in the jurisdictions in which the Group has material operations. We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls), and determined that the principal risks were related to posting inappropriate journal entries and management bias in accounting estimates. The Group engagement team shared this risk assessment with the component auditors so that they could include appropriate audit procedures in response to such risks in their work. Audit procedures performed by the Group engagement team and/or component auditors included:

- Understanding and evaluating the design and implementation of controls designed to prevent and detect irregularities and fraud;
- Inquiry of management, Internal Audit and the Group's legal advisors regarding their consideration of known or suspected instances of non-compliance with laws and regulations and fraud;
- Identifying and testing journal entries, in particular any journal entries posted with unusual account combinations; and
- Challenging assumptions and judgements made by management in respect of critical accounting judgements and significant accounting estimates, and assessing these judgements and estimates for management bias.

There are inherent limitations in the audit procedures described above. We are less likely to become aware of instances of non-compliance with laws and regulations that are not closely related to events and transactions reflected in the financial statements. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

Our audit testing might include testing complete populations of certain transactions and balances, possibly using data auditing techniques. However, it typically involves selecting a limited number of items for testing, rather than testing complete populations. We will often seek to target particular items for testing based on their size or risk characteristics. In other cases, we will use audit sampling to enable us to draw a conclusion about the population from which the sample is selected.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditors' report.

Use of this report
This report, including the opinions, has been prepared for and only for the Parent Company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Other required reporting

Companies Act 2006 exception reporting
Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not obtained all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- certain disclosures of directors' remuneration specified by law are not made; or
- the Parent Company financial statements and the part of the Directors' remuneration report to be audited are not in agreement with the accounting records and returns.

We have no exceptions to report arising from this responsibility.

Appointment
Following the recommendation of the Audit Committee, we were appointed by the members on 5 May 2020 to audit the financial statements for the year ended 31 December 2020 and subsequent financial periods. The period of total uninterrupted engagement is three years, covering the years ended 31 December 2020 to 31 December 2022.

Other matter

As required by the Financial Conduct Authority Disclosure Guidance and Transparency Rule 4.1.14R, these financial statements form part of the ESEF-prepared annual financial report filed on the National Storage Mechanism of the Financial Conduct Authority in accordance with the ESEF Regulatory Technical Standard ('ESEF RTS'). This auditors' report provides no assurance over whether the annual financial report has been prepared using the single electronic format specified in the ESEF RTS.

Mark King (Senior Statutory Auditor)
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
London
22 February 2023

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 8)	2022 Total	2021 Before special items and remeasurements	2021 Special items and remeasurements (note 8)	2021 Total
Revenue	2	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	1, 2	10,924	(1,681)	9,243	17,093	499	17,592
Non-operating special items	8	—	(77)	(77)	—	(207)	(207)
Net income from associates and joint ventures	2, 13	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	4	(342)	15	(327)	(277)	(113)	(390)
Profit before tax		11,223	(1,743)	9,480	17,276	353	17,629
Income tax expense	5	(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	25	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	3	4.97	(1.25)	3.72	7.22	(0.29)	6.93
Diluted	3	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)[1]		
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)[1]		
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

[1] Tax amounts are shown in note 5C.

Consolidated balance sheet
as at 31 December 2022

US$ million	Note	2022	2021
ASSETS			
Non-current assets			
Intangible assets	10	2,828	3,002
Property, plant and equipment	11	41,125	39,501
Environmental rehabilitation trusts	15, 22	107	113
Investments in associates and joint ventures	13	1,056	1,021
Financial asset investments	14	390	340
Inventories	17	809	583
Trade and other receivables	18	440	870
Deferred tax assets	16	198	532
Derivative financial assets	22	49	256
Pension asset surplus and other non-current assets		469	794
Total non-current assets		47,471	47,012
Current assets			
Inventories	17	6,598	5,228
Trade and other receivables	18	4,483	4,309
Current tax assets		201	104
Derivative financial assets	22	204	187
Current financial asset investments	14	38	29
Cash and cash equivalents	20	8,412	9,066
Total current assets		19,936	18,923
Assets classified as held for sale	32	–	50
Total assets		67,407	65,985
LIABILITIES			
Current liabilities			
Trade and other payables	19	(7,380)	(7,930)
Short term borrowings	20, 21	(1,420)	(1,235)
Provisions for liabilities and charges	15	(684)	(579)
Current tax liabilities		(569)	(627)
Derivative financial liabilities	22	(441)	(212)
Total current liabilities		(10,494)	(10,583)
Non-current liabilities			
Trade and other payables	19	(249)	(318)
Medium and long term borrowings	20, 21	(12,945)	(11,621)
Royalty liability	22	(510)	(382)
Retirement benefit obligations	27	(510)	(502)
Deferred tax liabilities	16	(5,178)	(4,865)
Derivative financial liabilities	22	(888)	(317)
Provisions for liabilities and charges	15	(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	24	734	737
Share premium account		2,558	2,558
Own shares	24	(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	25	6,663	6,945
Total equity		34,024	34,770

The 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	4	327	390
Net income from associates and joint ventures	13	(641)	(634)
Non-operating special items	8	77	207
Operating profit	1	9,243	17,592
Revenue and operating special items and remeasurements	8	1,681	(499)
Cash element of special items		(12)	(18)
Depreciation and amortisation	1	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	13	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	12	(6,191)	(5,732)
Cash flows used in derivatives related to capital expenditure	12	—	(8)
Proceeds from disposal of property, plant and equipment	12	7	17
Investments in associates and joint ventures		(37)	(35)
Expenditure on intangible assets		(129)	(68)
Net (issuance)/redemption of financial asset investments	14	(142)	29
Interest received and other investment income		181	87
Net cash inflow on disposals	33	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	20	(1)	95
Dividends paid to Company shareholders	6	(3,549)	(4,047)
Dividends paid to non-controlling interests	25	(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	20	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	20	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 (note 24)	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 33)	(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 (note 24).

Notes to the financial statements

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).

Profit attributable to equity shareholders

$4.5 bn

(2021: $8.6 bn)

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.

1. Operating profit from subsidiaries and joint operations

Overview

US$ million	Note	2022	2021
Revenue before special items and remeasurements		35,127	41,547
Operating costs:			
Employee costs	26	(3,630)	(3,603)
Depreciation of property, plant and equipment		(2,401)	(2,672)
Amortisation of intangible assets		(45)	(43)
Third-party commodity purchases		(6,350)	(5,994)
Consumables, maintenance and production input costs		(5,492)	(6,011)
Logistics, marketing and selling costs		(2,898)	(2,945)
Royalties		(1,238)	(1,173)
Exploration and evaluation		(322)	(257)
Net foreign exchange losses		(6)	(138)
Other operating income		313	292
Other operating expenses		(2,134)	(1,910)
Operating profit before special items and remeasurements		10,924	17,093
Revenue special items and remeasurements	8	(9)	7
Operating special items and remeasurements	8	(1,672)	492
Operating profit		**9,243**	**17,592**

Royalties exclude items which meet the definition of income tax on profit and which have been accounted for as taxes. Exploration and evaluation excludes associated employee costs. The full exploration and evaluation expenditure (including associated employee costs) is presented in the table below.

Operating profit before special items and remeasurements is stated after (charging)/crediting:

US$ million	2022	2021
Exploration expenditure	(155)	(128)
Evaluation expenditure	(191)	(172)
Research and development expenditure	(167)	(144)
Provisional pricing adjustment	(96)	815

Accounting policy

See note 39C for the Group's accounting policy on revenue and exploration and evaluation expenditure.

Financial performance

2. 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 310.

Segment results

							2022
US$ million	Group revenue	Underlying EBITDA	Depreciation and amortisation	Underlying EBIT	Net finance costs and income tax expense	Non-controlling interests	Underlying earnings
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

Financial performance

2. 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 8 and 13 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. See note 39C for the Group's accounting policy on revenue recognition.

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 13.

US$ million	Revenue from contracts with customers	Revenue from other sources	Group revenue	Revenue from contracts with customers	Revenue from other sources	Group revenue
			2022			2021
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.

Financial performance

2. Financial performance by segment continued

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

3. 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 310.

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.

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

4. Net finance costs

Overview

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 (see note 22 for further details). 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.

5. 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.

Financial performance

5. Income tax expense continued

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 310.

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

5. 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		
Current year losses not recognised	390	229
Recognition of losses and temporary differences not previously recognised	(6)	(22)
Utilisation of losses and temporary differences not previously recognised	(55)	(102)
Write-off of losses and temporary differences previously recognised	54	—
Other temporary differences	(23)	(7)
Special items and remeasurements		
Functional currency remeasurements (note 8)	(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 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).

C. Tax amounts included in other comprehensive income

The Consolidated statement of comprehensive income includes a tax credit on the remeasurement of net retirement benefit obligations recognised directly in equity that will not be reclassified to the income statement of $80 million (2021: charge of $66 million). In addition, there is a tax credit on the net revaluation credit on equity investments recognised directly in equity that will not subsequently be reclassified to the income statement of $3 million (2021: $6 million).

D. Tax amounts recognised directly in equity

In 2022, deferred tax of $6 million (2021: $5 million was credited) was debited directly to equity mainly in relation to movements in share-based payments and severance indemnity updates.

Accounting judgement

The Group's tax affairs are governed by complex domestic tax legislations, international tax treaties between countries and the interpretation of these by tax authorities and courts. Given the many uncertainties that could arise from these factors, judgement is often required in determining the tax that is due. Where management is aware of potential uncertainties, and where it is judged not probable that the taxation authorities would accept the uncertain tax treatment, a provision is made following the appropriate requirements set out in IFRIC 23 *Uncertainty over income tax treatments*, and determined with reference to similar transactions and, in some cases, reports from independent experts.

Accounting policy

See note 39G for the Group's accounting policy on tax.

Financial performance

6. 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

Special items and remeasurements are a net loss of $1.5 billion and include a $1.7 billion impairment of Crop Nutrients assets, a $0.3 billion impairment of Iron Ore assets, and a $0.4 billion impairment reversal of Steelmaking Coal assets.

During 2022, the significant accounting matters addressed by management included:

- The assessment of impairment and impairment reversal indicators
- The estimation of cash flow projections for impairment testing
- Quellaveco ramp up and commercial production.

Special items and remeasurements loss

$1.5 bn

(2021: $0.4 bn)

7. Significant accounting matters

In the course of preparing financial statements, management necessarily makes judgements and estimates that can have a significant impact on the financial statements. The critical judgements and key sources of estimation uncertainty that affect the results for the year ended 31 December 2022 are set out below. In addition to these items, further detail on other significant judgements and estimates determined by management is provided, where applicable, in the relevant note to the financial statements.

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
  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.

Significant items

7. Significant accounting matters continued

- 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 73). 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.

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 as outlined in note 39D. 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

7. 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.

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.

Significant items

7. Significant accounting matters continued

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 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 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 8 for further information.

Significant items

8. Special items and remeasurements

Overview

	2022				2021
US$ million	Before tax	Tax	Non-controlling interests	Net	Net
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

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. The Group classifies subsequent adjustments to items classified as special items on initial recognition in subsequent periods as special items. These items, 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 310.

- Operating special items are those that relate to the operating performance of the Group and principally include impairment charges and reversals and restructuring costs.
- Non-operating special items are those that relate to changes in the Group's asset portfolio. This category principally includes profits and losses on disposals of businesses and investments or closure of operations, adjustments relating to business combinations, and adjustments relating to former operations of the Group, such as changes in the measurement of deferred consideration receivable or provisions recognised on disposal or closure of operations in prior periods. This category also includes charges relating to Black Economic Empowerment (BEE) transactions.
- Financing special items are those that relate to financing activities and include realised gains and losses on early repayment of borrowings, and the unwinding of the discount on material provisions previously recognised as special items.
- Tax special items are those that relate to tax charges or credits where the associated cash outflow or inflow is anticipated to be significant due to its size and nature, principally including resolution of tax enquiries.

Remeasurements

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. Remeasurements include mark-to-market movements on derivatives that are economic hedges of transactions not yet recorded in the financial statements, in order to ensure that the overall economic impact of such transactions is reflected within the Group's underlying earnings in the period in which they occur. When the underlying transaction is recorded in the income statement, the realised gains or losses are recorded in underlying earnings within either revenue, operating costs or net finance costs as appropriate. If the underlying transaction is recorded in the balance sheet, for example capital expenditure, the realised amount remains in remeasurements on settlement of the derivative.

- Revenue remeasurements, presented within revenue from other sources, include gains and losses on unsettled derivatives relating to revenue.
- Operating remeasurements include unrealised gains and losses on derivatives relating to operating costs or capital expenditure transactions. They also include the reversal through depreciation and amortisation of a fair value gain or loss, arising on revaluation of a previously held equity interest in a business combination.
- Financing remeasurements include unrealised gains and losses on financial assets and liabilities that represent economic hedges, including accounting hedges, related to financing arrangements.
- Tax remeasurements include foreign exchange impacts arising in US dollar functional currency entities where tax calculations are generated based on local currency financial information and hence tax is susceptible to currency fluctuations.

Significant items

8. Special items and remeasurements continued

Revenue remeasurements

The loss of $9 million ($14 million after tax and non-controlling interests) (2021: gain of $14 million) relates to remeasurements on derivatives presented in revenue from other sources. For further details see note 2.

Operating special items

Impairment reversals

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

Further information on significant accounting matters relating to impairment reversals is provided in note 7.

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 7.

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 and investments

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

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. For further detail with respect to contingent consideration balances, see note 22.

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).

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 310.

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.

	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

9. 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 310.

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 employed	
US$ million	**2022**	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 Consolidated balance sheet:		
Net debt	**(6,918)**	(3,842)
Variable vessel leases excluded from net debt (see note 20)	**(127)**	(74)
Debit valuation adjustment attributable to derivatives hedging net debt	**29**	5
Financial asset investments	**428**	369
Net assets	**34,024**	34,770

Capital base

9. Capital by segment continued

Non-current assets by location

US$ million	Intangible assets, Property, plant and equipment 2022	2021	Total non-current assets 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.

10. Intangible assets

Overview

Intangible assets comprise goodwill acquired through business combinations, brands, contracts and other non-mining assets.

US$ million	2022 Brands	2022 Contracts and other intangibles	2022 Goodwill	2022 Total	2021 Brands	2021 Contracts and other intangibles	2021 Goodwill	2021 Total
Net book value								
At 1 January	517	608	1,877	3,002	517	623	1,963	3,103
Additions	—	153	—	153	—	77	—	77
Amortisation charge for the year	—	(59)	—	(59)	—	(59)	—	(59)
Impairments	—	(40)	—	(40)	—	(2)	—	(2)
Disposals	—	—	—	—	—	(11)	(3)	(14)
Currency movements	—	(22)	(206)	(228)	—	(20)	(83)	(103)
At 31 December	517	640	1,671	2,828	517	608	1,877	3,002
Cost	517	1,183	1,742	3,442	517	1,077	1,948	3,542
Accumulated amortisation and impairment	—	(543)	(71)	(614)	—	(469)	(71)	(540)

Brands, contracts and other intangibles includes $889 million (2021: $924 million) relating to De Beers, principally comprising assets that were recognised at fair value on acquisition of a controlling interest in De Beers in August 2012. At 31 December 2022, $517 million (2021: $517 million) of brands relating to De Beers, were held by the Group that have been assessed to have indefinite useful lives.

Further information

Goodwill relates to the following cash generating units (CGUs) or groups of CGUs:

US$ million	2022	2021
De Beers	1,434	1,535
Copper Chile	124	124
Platinum Group Metals	103	209
Other	10	9
	1,671	1,877

Accounting judgement

Goodwill and brands are tested at least annually for impairment by assessing the recoverable amount of the related CGU or group of CGUs. The recoverable amounts have been determined based on fair value less costs of disposal using discounted cash flow projections. Other than in relation to De Beers as set out in note 7, management believes that any reasonably possible change in a key assumption on which the recoverable amounts are based would not cause the carrying values to exceed their recoverable amounts. The key assumptions used in determining the recoverable amounts are set out in note 7.

Accounting policy

See note 39D for the Group's accounting policies on intangible assets.

Capital base

11. Property, plant and equipment

Overview

Property, plant and equipment comprises the physical assets that make up the Group's operations. These include acquired mineral rights, capitalised waste stripping and mine development costs, processing plants and infrastructure, vehicles and other equipment.

							2022
	Owned and leased assets						
US$ million	Mining properties – Owned	Land and buildings – Owned	Land and buildings – Right-of-use assets	Plant and equipment – Owned	Plant and equipment – Right-of-use assets	Capital works in progress	Total
Net book value							
At 1 January	10,119	1,776	454	13,590	312	13,250	39,501
Additions	586	16	76	102	194	5,860	6,834
Depreciation charge for the year	(890)	(81)	(44)	(1,347)	(195)	—	(2,557)
Impairments	(106)	(82)	(32)	(142)	—	(1,663)	(2,025)
Impairments reversed	181	24	—	197	12	24	438
Disposals	(12)	(1)	(6)	(35)	(7)	(23)	(84)
Reclassifications	664	50	22	1,827	—	(2,563)	—
Currency movements	(510)	(47)	(6)	(193)	(4)	(222)	(982)
At 31 December	10,032	1,655	464	13,999	312	14,663	41,125
Cost	25,896	2,673	648	32,394	987	16,496	79,094
Accumulated depreciation and impairment	(15,864)	(1,018)	(184)	(18,395)	(675)	(1,833)	(37,969)

							2021
	Owned and leased assets						
US$ million	Mining properties – Owned	Land and buildings – Owned	Land and buildings – Right-of-use assets	Plant and equipment – Owned	Plant and equipment – Right-of-use assets	Capital works in progress	Total
Net book value							
At 1 January	10,970	1,755	180	13,332	229	9,953	36,419
Additions	490	6	344	124	354	6,059	7,377
Depreciation charge for the year	(1,019)	(83)	(48)	(1,440)	(255)	—	(2,845)
Impairments	(293)	(29)	(6)	(312)	(1)	(168)	(809)
Impairments reversed	37	20	—	1,425	—	—	1,482
Disposals	(152)	(37)	(11)	(488)	(11)	(207)	(906)
Reclassifications	739	208	—	1,192	—	(2,139)	—
Currency movements	(653)	(64)	(5)	(243)	(4)	(248)	(1,217)
At 31 December	10,119	1,776	454	13,590	312	13,250	39,501
Cost	26,017	2,702	593	31,214	937	13,458	74,921
Accumulated depreciation and impairment	(15,898)	(926)	(139)	(17,624)	(625)	(208)	(35,420)

Additions include $378 million (2021: $207 million) of net interest expense incurred on borrowings which fund the construction of qualifying assets that have been capitalised during the year, principally for the Quellaveco copper project in Peru and the Woodsmith project in the UK.

Depreciation includes $2,401 million (2021: $2,672 million) of depreciation within operating profit, $69 million (2021: $77 million) of depreciation arising due to the fair value uplift on the pre-existing 45% shareholding in De Beers which has been included within operating remeasurements (see note 8), and $87 million (2021: $96 million) of pre-commercial production depreciation on assets used in capital projects which has been capitalised.

Disposals includes disposals of assets and businesses.

Capital base

11. Property, plant and equipment continued

Accounting judgements

Impairment testing

For the purposes of impairment testing, the recoverable amount of each of the cash generating units (CGUs) or group of CGUs has been determined based on a fair value less costs of disposal basis. The key assumptions used in determining fair value less costs of disposal are set out in note 7.

Depreciation

Depreciation is calculated with reference to the Group's best estimate of the impact of climate change on useful economic lives. This includes the impact on reserve lives (as forecast commodity prices impact the amount of material which can be extracted economically).

Deferred stripping

In certain mining operations, rock or soil overlying a mineral deposit, known as overburden, and other waste materials must be removed to access the orebody. The process of removing overburden and other mine waste materials is referred to as stripping.

The Group defers stripping costs onto the balance sheet where they are considered to improve access to ore in future periods. Where the amount to be capitalised cannot be specifically identified it is determined based on the volume of waste extracted compared with expected volume for the identified component of the orebody. This determination is dependent on an individual mine's design and Life of Asset Plan and therefore changes to the design or Life of Asset Plan will result in changes to these estimates. Identification of the components of a mine's orebody is made by reference to the Life of Asset Plan. The assessment depends on a range of factors including each mine's specific operational features.

Accounting policy

See note 39D for the Group's accounting policies on property, plant and equipment.

12. 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 310.

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

13. 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 310.

			2022			2021
US$ million	Associates	Joint ventures	Total	Associates	Joint ventures	Total
At 1 January	388	633	1,021	733	525	1,258
Net income from associates and joint ventures	452	189	641	389	245	634
Dividends received	(398)	(210)	(608)	(342)	(133)	(475)
Investments in equity and capitalised loans	6	31	37	11	24	35
Impairments	(3)	—	(3)	(283)	—	(283)
Disposals	—	—	—	(4)	(12)	(16)
Transfer to assets held for sale	—	—	—	(50)	—	(50)
Other movements	3	(2)	1	(48)	(16)	(64)
Currency movements	(32)	(1)	(33)	(18)	—	(18)
At 31 December	416	640	1,056	388	633	1,021

Further information

The Group's total investments in associates and joint ventures include long term loans of $137 million (2021: $145 million), which in substance form part of the Group's net investment. These loans are not repayable in the foreseeable future.

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

Income statement

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

Balance sheet

US$ million	Associates	Joint ventures	Total
Non-current assets	196	1,003	1,199
Current assets	583	458	1,041
Current liabilities	(309)	(208)	(517)
Non-current liabilities	(54)	(613)	(667)
Net assets as at 31 December 2022	416	640	1,056
Net assets as at 31 December 2021	388	633	1,021

Capital base

13. 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.

Accounting judgements

Impairment

No indicators of impairment were identified for the Group's material investments in associates and joint ventures during 2022.

Accounting policy

See note 39I for the Group's accounting policy on associates and joint arrangements, which includes joint ventures.

Capital base

14. Financial asset investments

Overview

Financial asset investments include three categories. Financial assets at amortised cost principally comprise loans to and deposits with third parties including the Group's associates and joint ventures. Assets classified at fair value through other comprehensive income principally comprise investments in equities of other companies. Financial assets held at fair value through profit and loss comprise financial assets that do not meet the criteria to be classified under either of the other two categories.

	2022				2021			
US$ million	Financial assets at amortised cost	At fair value through profit and loss	At fair value through other comprehensive income	Total	Financial assets at amortised cost	At fair value through profit and loss	At fair value through other comprehensive income	Total
At 1 January	127	60	182	369	207	33	131	371
Additions	—	7	80	87	—	13	25	38
Interest receivable	2	—	—	2	3	—	—	3
Net loans advanced/(repaid)	89	(5)	—	84	(56)	27	—	(29)
Disposals	—	—	(134)	(134)	(10)	(14)	(2)	(26)
Impairments	(2)	—	—	(2)	(12)	—	—	(12)
Impairment reversals	17	—	—	17	—	—	—	—
Fair value and other movements	(12)	(29)	50	9	—	3	35	38
Currency movements	5	2	(11)	(4)	(5)	(2)	(7)	(14)
At 31 December	226	35	167	428	127	60	182	369
Current	14	24	—	38	—	29	—	29
Non-current	212	11	167	390	127	31	182	340

Accounting policy

See note 39D for the Group's accounting policies on financial asset investments.

15. Provisions for liabilities and charges

Overview

US$ million	Environmental restoration	Decommissioning	Employee benefits	Onerous contracts	Legal	Restructuring	Other	Total
At 1 January	(1,645)	(911)	(163)	(11)	(255)	(14)	(207)	(3,206)
Changes in underlying estimates charged to income statement	(353)	(23)	(53)	(22)	(67)	(20)	(17)	(555)
Changes in discount rate	146	186	1	—	—	—	—	333
Capitalised	(23)	(204)	—	—	(1)	—	(85)	(313)
Unwinding of discount	(53)	(29)	(3)	(1)	—	—	—	(86)
Amounts applied	129	42	47	3	39	14	80	354
Unused amounts reversed	1	5	—	—	41	2	36	85
Currency movements	37	28	10	1	(7)	1	25	95
At 31 December	(1,761)	(906)	(161)	(30)	(250)	(17)	(168)	(3,293)
Current	(183)	(118)	(143)	(17)	(64)	(17)	(142)	(684)
Non-current	(1,578)	(788)	(18)	(13)	(186)	—	(26)	(2,609)

Further information

Environmental restoration

The Group has an obligation to undertake restoration, rehabilitation and environmental work when environmental disturbance is caused by the development or ongoing production of a mining property. A provision is recognised for the present value of such costs, based on management's best estimate of the legal and constructive obligations incurred. Changes in legislation could result in changes in provisions recognised. It is anticipated that the majority of these costs will be incurred over a period in excess of 20 years.

Decommissioning

Provision is made for the present value of costs relating to the decommissioning of plant or other site restoration work. It is anticipated that the majority of these costs will be incurred over a period in excess of 20 years.

The pre-tax, real discount rates that have been used in calculating the environmental restoration and decommissioning liabilities as at 31 December 2022, in the principal currencies in which these liabilities are denominated and with matching maturities to the timelines are as follows: US dollar: 1.7%–1.9% (2021: 0.0%–0.1%); South African rand: 4.5%–5.0% (2021: 3.7%–4.3%); Australian dollar: 1.5%–1.8% (2021: 0.0%–0.2%); Chilean peso: 1.7%–2.2% (2021: 2.1%–3.0%); and Brazilian real: 5.6%–6.0% (2021: 5.0%–5.5%).

Movements in environmental restoration and decommissioning provisions resulted in a net charge of $324 million within operating profit (2021: net credit of $205 million).

Capital base

15. Provisions for liabilities and charges continued

Movement in decommissioning and environmental restoration provisions also includes Global Industry Standard for Tailing Management (GISTM) related costs recognised in the year ended 31 December 2022. For further details see note 31 Contingent assets and liabilities.

Employee benefits
Provision is made for statutory or contractual employee entitlements where there is significant uncertainty over the timing or amount of settlement. It is anticipated that these costs will be incurred when employees choose to take their benefits.

Onerous contracts
Provision is made for the present value of certain long term contracts where the unavoidable cost of meeting the Group's obligations is expected to exceed the benefits to be received. It is anticipated that the majority of these costs will be incurred over a period of up to five years.

Other
Other provisions primarily relate to social commitments in Quellaveco and other claims and liabilities.

Environmental rehabilitation trusts

The Group makes contributions to controlled funds that were established to meet the cost of some of its restoration and environmental rehabilitation liabilities in South Africa. The funds comprise the following investments, which with the exception of some cash balances, are held in unit trusts:

US$ million	2022	2021
Equity	74	66
Bonds	13	12
Cash and cash equivalents	20	35
	107	113

These assets are primarily denominated in South African rand. Where not held in a unit trust, cash and cash equivalents are held in short term fixed deposits or earn interest at floating inter-bank rates. Bonds held in unit trusts earn interest at a weighted average fixed rate of 10.0% (2021: 10.0%) for an average period of seven years (2021: seven years).

These funds are not available for the general purposes of the Group (see note 22). All income from these assets is reinvested to meet specific environmental obligations. These obligations are included in provisions as stated above.

Accounting judgements

Environmental restoration and decommissioning provisions
The recognition and measurement of environmental restoration and decommissioning provisions requires judgement and is based on assumptions and estimates, including the required closure and rehabilitation costs, the timing of future cash flows, and the discount rates applied. Future cash flows used to determine environmental restoration and decommissioning provisions are risk adjusted to reflect potential changes in relation to the key assumptions made in the mine closure plan. Discount rates applied to determine environmental restoration and decommissioning provisions represent a market assessment of the time value of money only i.e. a risk-free rate. These rates are calculated on a real basis with reference to the yield for government bonds of the appropriate currency and duration. The Group considers that no reasonably possible change to a single assumption would have a material impact on the provisions, however a combination of changes in multiple assumptions may.

The Group considers the impact of climate change on environmental restoration and decommissioning provisions, specifically the timing of future cash flows, and has concluded that it does not currently represent a key source of estimation uncertainty. Changes to legislation, including in relation to climate change, are factored into the provisions when the legislation becomes enacted.

Accounting policy

See note 39D for the Group's accounting policy on environmental restoration and decommissioning obligations.

Capital base

16. Deferred tax

Overview

The movement in net deferred tax liabilities during the year is as follows:

US$ million	2022	2021
At 1 January	(4,333)	(3,165)
Charged to the income statement	(852)	(1,358)
Credited/(charged) to equity	77	(55)
Disposal of business	—	80
Currency movements	128	165
At 31 December	(4,980)	(4,333)

Further information

Where there is a right of offset of deferred tax balances within the same tax jurisdiction, IAS 12 *Income Taxes* requires these to be presented after such offset in the Consolidated balance sheet. The closing deferred tax balances before this offset are as follows:

US$ million	2022	2021
Deferred tax assets before offset		
Tax losses	875	789
Share-based payments	1	13
Depreciation in excess of capital allowances	163	166
Other temporary differences	744	744
	1,783	1,712
Deferred tax liabilities before offset		
Capital allowances in excess of depreciation	(4,217)	(3,625)
Fair value adjustments	(645)	(682)
Withholding tax	(20)	(92)
Other temporary differences	(1,881)	(1,646)
	(6,763)	(6,045)

The closing deferred tax balances after offset are as follows:

US$ million	2022	2021
Deferred tax assets	198	532
Deferred tax liabilities	(5,178)	(4,865)
	(4,980)	(4,333)

Other temporary differences primarily arise in relation to deferred stripping costs, functional currency differences and post employment benefits.

The amount of deferred tax charged to the Consolidated income statement is as follows:

US$ million	2022	2021
Capital allowances in excess of depreciation	(712)	(144)
Fair value adjustments	1	(25)
Tax losses	(404)	(267)
Provisions	45	(179)
Other temporary differences	218	(743)
	(852)	(1,358)

Deferred tax charged to the income statement includes a credit of $72 million (2021: charge of $349 million) relating to deferred tax remeasurements and a credit of $83 million (2021: charge of $286 million) relating to deferred tax on special items.

Deferred tax assets are recognised to the extent that the business has forecast taxable profits against which the assets can be recovered. While the Group is in an overall net deferred tax liability (2021: liability) position, some deferred tax assets remain unrecognised in jurisdictions where no taxable profits are forecast and no right of offset against the Group's deferred tax liabilities exists.

A net deferred tax liability of $863 million (2021: $701 million) is recognised in Brazil in relation to the Minas-Rio iron ore and Barro Alto nickel mines. This relates primarily to functional currency and fixed asset taxable temporary differences, and is partially offset by tax losses, deductible goodwill and other deductible temporary differences.

Capital base

16. Deferred tax continued

The Group has the following temporary differences for which no deferred tax assets have been recognised:

US$ million	2022				2021 (restated)[1]			
	Tax losses – revenue	**Tax losses – capital**	**Other temporary differences**	**Total**	Tax losses – revenue	Tax losses – capital	Other temporary differences	Total
Expiry date								
Less than five years	8	—	2	10	14	—	155	169
Greater than five years	313	—	—	313	200	—	—	200
No expiry date	5,876	2,501	5,230	13,607	5,599	2,304	4,996	12,899
	6,197	2,501	5,232	13,930	5,813	2,304	5,151	13,268

[1] The 2021 comparative has been restated to include $1,127 million of carried forward UK restricted interest and share-based payment temporary differences.

No deferred tax has been recognised in respect of temporary differences associated with investments in subsidiaries, branches, associates and interests in joint ventures and joint operations where the Group is in a position to control the timing of the reversal of the temporary differences and it is probable that such differences will not reverse in the foreseeable future. Consistent with the Group's impairment testing, the Group uses the Board approved forecasts as the basis for the profits expected to arise in the foreseeable future. The aggregate amount of temporary differences associated with such investments in subsidiaries, branches, associates and interests in joint ventures and joint operations is represented by the contribution of those investments to the Group's retained earnings and amounted to $20,620 million (2021: $20,030 million).

Accounting judgements

Recognition of deferred tax asset

In accordance with the requirements of IAS 12 *Income Taxes*, the Group reassesses the recognition and recoverability of deferred tax assets at the end of each reporting period.

Accounting policy

See note 39G for the Group's accounting policy on tax.

Working capital

This section includes analysis of inventories, receivables and payables. These balances principally relate to current assets and liabilities held to support operating activities.

US$ million	2022	2021
Inventories	7,407	5,811
Trade and other receivables	4,923	5,179
Trade and other payables	(7,629)	(8,248)
	4,701	2,742

Net working capital increased in 2022 led by an inventory build and a decrease in payables due to lower dividends payable to non-controlling interests and completion of the share buyback programme. Receivables remain broadly flat.

17. Inventories

Overview
Inventories represent goods held for sale in the ordinary course of business (finished products), ore being processed into a saleable condition (work in progress) and spares, raw materials and consumables to be used in the production process (raw materials and consumables).

	2022			2021		
US$ million	Expected to be used within one year	Expected to be used after more than one year	Total	Expected to be used within one year	Expected to be used after more than one year	Total
Raw materials and consumables	889	—	889	729	—	729
Work in progress	2,777	798	3,575	2,209	571	2,780
Finished products	2,932	11	2,943	2,290	12	2,302
	6,598	809	7,407	5,228	583	5,811

Further information
The cost of inventories recognised as an expense and included in operating costs amounted to $16,983 million (2021: $16,937 million). The write-down of inventories to net realisable value (net of revaluation of provisionally priced purchases) amounted to $106 million (2021: $54 million).

Accounting judgements
Accounting for inventory involves the use of judgements and estimates, particularly related to the measurement and valuation of work in progress inventory within the production process. Certain estimates, including expected metal recoveries and work in progress volumes, are calculated by engineers using available industry, engineering and scientific data. Estimates used are periodically reassessed by the Group taking into account technical analysis, historical performance and physical counts. During the year, the Platinum Group Metals business updated its estimate of work in progress quantities following the completion of a physical count. This change in estimate reduced the carrying value of inventories by $121 million.

Accounting policy
See note 39E for the Group's accounting policy on inventories.

Working capital

18. Trade and other receivables

Overview

Trade receivables are amounts due from the Group's customers for commodities and services the Group has provided. Many of the Group's sales are provisionally priced, which means that the price is finalised at a date after the sale takes place. When there is uncertainty about the final amount that will be received, the receivable is marked to market based on the forward price.

Trade and other receivables also includes amounts receivable for VAT and other indirect taxes, prepaid expenses and deferred consideration.

US$ million	Due within one year	Due after one year	Total 2022	Due within one year	Due after one year	Total 2021
Trade receivables	2,175	46	2,221	2,322	49	2,371
Tax receivables	978	120	1,098	524	363	887
Accrued income	254	—	254	252	—	252
Prepayments	530	41	571	430	52	482
Contract assets	46	—	46	58	—	58
Other receivables	500	233	733	723	406	1,129
	4,483	440	4,923	4,309	870	5,179

Further information

The Group applies the simplified expected credit loss model for its trade receivables measured at amortised cost, as permitted by IFRS 9 *Financial Instruments*. The expected credit losses on trade receivables are estimated using a provision matrix by reference to past default experience, credit profiles and financial metrics, adjusted as appropriate for current observable data.

As part of its approach to working capital management the Group uses debtor discounting arrangements. These arrangements are on a non-recourse basis and hence the related receivables are derecognised from the Consolidated balance sheet.

Of the year end trade receivables balance, $76 million (2021: $33 million) were past due, stated after an associated impairment provision of $22 million (2021: $23 million). Given the use of payment security instruments and the nature of the related counterparties, these amounts are considered recoverable. The historical level of customer default is minimal and there is no current observable data to indicate a material future default. As a result the credit quality of year end trade receivables is considered to be high.

Trade receivables do not incur any interest, are principally short term in nature and are measured at their nominal value (with the exception of receivables relating to provisionally priced sales, as set out in the revenue recognition accounting policy, see note 39C), net of appropriate provisions for estimated irrecoverable amounts.

19. Trade and other payables

Overview

Trade and other payables include amounts owed to suppliers, tax authorities and other parties that are typically due to be settled within 12 months. The total also includes contract liabilities, which represents monies received from customers but for which we have not yet delivered the associated goods or service. These amounts are recognised as revenue when the goods are delivered or the service is provided. All revenue relating to performance obligations which were incomplete as at 31 December 2021 was recognised during the year. Other payables include deferred consideration in respect of business combinations and dividends payable to non-controlling interests. The share buyback liability represented amounts not yet utilised from the $1 billion share buyback programme announced on 29 July 2021, which completed in February 2022.

US$ million	2022	2021
Trade payables	2,987	2,914
Accruals	2,399	2,331
Contract liabilities and deferred income	1,492	1,753
Tax and social security	131	120
Other payables	620	944
Share buyback liability	—	186
	7,629	8,248

Further information

Trade payables are non-interest bearing and are measured at their nominal value (with the exception of payables relating to provisionally priced commodity purchases which are marked to market using the appropriate forward price) until settled. $249 million (2021: $318 million) of trade and other payables are included within non-current liabilities.

Contract liabilities and deferred income include $1,358 million (2021: $1,645 million) for payments received in advance for metal which is expected to be delivered within six months and $99 million (2021: $86 million) in respect of freight and performance obligations which are expected to be completed within 30 to 45 days.

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% at 31 December 2022.

US$ million	2022	2021
Net assets	34,024	34,770
Net debt including related derivatives (note 20)	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.

20. 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 310.

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).

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.

Accounting policy

See note 39F for the Group's accounting policy on cash and debt.

Net debt and financial risk management

21. 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 Short term borrowings	2022 Medium and long term borrowings	2022 Total borrowings	2022 Contractual repayment at hedge rates	2021 Short term borrowings	2021 Medium and long term borrowings	2021 Total borrowings	2021 Contractual repayment at hedge rates
Secured								
Bank loans and overdrafts	38	96	134	134	22	89	111	111
Leases	184	676	860	860	207	668	875	875
Other loans	—	—	—	—	2	—	2	2
	222	772	994	994	231	757	988	988
Unsecured								
Bank loans and overdrafts	253	509	762	762	—	180	180	180
Bank Sustainability linked loans	—	40	40	40	—	—	—	—
Bonds issued under EMTN programme								
3.5% €433m bond due March 2022	—	—	—	—	495	—	495	572
3.25% €750m bond due April 2023	800	—	800	1,033	—	871	871	1,033
1.625% €600m bond due September 2025	—	595	595	714	—	695	695	714
1.625% €500m bond due March 2026	—	485	485	566	—	573	573	566
3.375% £300m bond due March 2029	—	306	306	395	—	407	407	395
4.75% €745m sustainability linked bond due September 2032	—	749	749	745	—	—	—	—
US bonds								
4.125% $360m bond due September 2022	—	—	—	—	363	—	363	360
3.625% $650m bond due September 2024	—	620	620	650	—	664	664	650
5.375% $193m bond due April 2025	—	192	192	193	—	192	192	193
4.875% $339m bond due May 2025	—	320	320	339	—	348	348	339
4.75% $700m bond due April 2027	—	651	651	700	—	732	732	700
5% $99m bond due May 2027[1]	—	120	120	159	—	113	113	159
4% $650m bond due September 2027	—	595	595	650	—	673	673	650
2.25% $500m bond due March 2028	—	433	433	500	—	491	491	500
4.5% $650m bond due March 2028	—	612	612	650	—	702	702	650
3.875% $500m bond due March 2029	—	454	454	500	—	—	—	—
5.625% $750m bond due April 2030	—	748	748	750	—	744	744	750
2.625% $1bn bond due September 2030	—	780	780	1,000	—	919	919	1,000
2.875% $500m bond due March 2031	—	419	419	500	—	499	499	500
3.95% $500m bond due September 2050	—	490	490	500	—	490	490	500
4.75% $750m bond due March 2052	—	732	732	750	—	—	—	—
Mitsubishi facility	—	2,323	2,323	2,323	—	1,571	1,571	1,571
Interest payable and other loans	145	—	145	145	146	—	146	146
	1,198	12,173	13,371	14,564	1,004	10,864	11,868	12,128
Total borrowings	1,420	12,945	14,365	15,558	1,235	11,621	12,856	13,116

(1) Bond acquired as part of the acquisition of Sirius Minerals plc (Crop Nutrients). At maturity the bond will be redeemed at 160% of par value.

Accounting policy

See note 39F for the Group's accounting policies on bank borrowings and lease liabilities.

Net debt and financial risk management

22. Financial instruments and derivatives

Financial instruments overview

For financial assets and liabilities which are traded on an active market, such as listed investments or listed debt instruments, fair value is determined by reference to market value. For non-traded financial assets and liabilities, fair value is calculated using discounted cash flows, considered to be reasonable and consistent with those that would be used by a market participant, and based on observable market data where available (for example forward exchange rate, interest rate or commodity price curve), unless carrying value is considered to approximate fair value.

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.

All derivatives that have been designated into hedge relationships have been separately disclosed.

						2022
US$ million	**At fair value through profit and loss**	**Financial assets at amortised cost**	**At fair value through other comprehensive income**	**Designated into hedges**	**Financial liabilities at amortised cost**	**Total**
Financial assets						
Trade and other receivables	2,106	1,114	—	—	—	3,220
Derivative financial assets	241	—	—	12	—	253
Cash and cash equivalents	6,447	1,965	—	—	—	8,412
Financial asset investments	35	226	167	—	—	428
Environmental rehabilitation trusts[1]	100	7	—	—	—	107
	8,929	3,312	167	12	—	12,420
Financial liabilities						
Trade and other payables	(735)	—	—	—	(5,271)	(6,006)
Derivative financial liabilities	(592)	—	—	(737)	—	(1,329)
Royalty liability	—	—	—	(80)	(430)	(510)
Borrowings	—	—	—	(8,681)	(5,684)	(14,365)
	(1,327)	—	—	(9,498)	(11,385)	(22,210)
Net financial assets/(liabilities)	7,602	3,312	167	(9,486)	(11,385)	(9,790)

						2021
US$ million	At fair value through profit and loss	Financial assets at amortised cost	At fair value through other comprehensive income	Designated into hedges	Financial liabilities at amortised cost	Total
Financial assets						
Trade and other receivables	2,565	1,200	—	—	—	3,765
Derivative financial assets	176	—	—	267	—	443
Cash and cash equivalents	6,805	2,261	—	—	—	9,066
Financial asset investments	60	127	182	—	—	369
Environmental rehabilitation trusts[1]	110	3	—	—	—	113
	9,716	3,591	182	267	—	13,756
Financial liabilities						
Trade and other payables	(1,104)	—	—	—	(5,271)	(6,375)
Derivative financial liabilities	(452)	—	—	(77)	—	(529)
Royalty liability	—	—	—	—	(382)	(382)
Borrowings	—	—	—	(8,542)	(4,314)	(12,856)
	(1,556)	—	—	(8,619)	(9,967)	(20,142)
Net financial assets/(liabilities)	8,160	3,591	182	(8,352)	(9,967)	(6,386)

(1) These funds are not available for the general purposes of the Group. All income from these assets is reinvested to meet specific environmental obligations. These obligations are included in provisions as per note 15.

The Group's cash and cash equivalents at 31 December 2022 include $6,447 million (2021: $6,805 million) held in high grade money market funds. These funds are selected to ensure compliance with the minimum credit rating requirements and counterparty exposure limits set out in the Group's Treasury policy.

Net debt and financial risk management

22. Financial instruments and derivatives continued

Fair value hierarchy

An analysis of financial assets and liabilities carried at fair value is set out below:

				2022				2021
US$ million	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Financial assets								
At fair value through profit and loss								
Provisionally priced trade receivables	—	1,799	—	1,799	—	1,786	—	1,786
Other receivables	—	—	307	307	—	—	779	779
Derivatives hedging net debt	—	49	—	49	—	12	—	12
Other derivatives	—	192	—	192	—	164	—	164
Cash and cash equivalents	6,447	—	—	6,447	6,805	—	—	6,805
Financial asset investments	—	31	4	35	—	56	4	60
Environmental rehabilitation trusts[1]	—	100	—	100	—	110	—	110
Designated into hedges								
Derivatives hedging net debt	—	12	—	12	—	267	—	267
At fair value through other comprehensive income								
Financial asset investments	60	—	107	167	135	—	47	182
	6,507	2,183	418	9,108	6,940	2,395	830	10,165
Financial liabilities								
At fair value through profit and loss								
Provisionally priced trade payables	—	(368)	—	(368)	—	(640)	—	(640)
Other payables	—	—	(367)	(367)	—	—	(464)	(464)
Derivatives hedging net debt	—	(416)	—	(416)	—	(328)	—	(328)
Other derivatives	—	(205)	—	(205)	—	(129)	—	(129)
Debit valuation adjustment to derivative liabilities	—	29	—	29	—	5	—	5
Designated into hedges								
Derivatives hedging net debt	—	(737)	—	(737)	—	(77)	—	(77)
Royalty liability	—	—	(80)	(80)	—	—	—	—
	—	(1,697)	(447)	(2,144)	—	(1,169)	(464)	(1,633)
Net assets carried at fair value	6,507	486	(29)	6,964	6,940	1,226	366	8,532

(1) These funds are not available for the general purposes of the Group. All income from these assets is reinvested to meet specific environmental obligations. These obligations are included in provisions as per note 15.

Fair value hierarchy	Valuation technique
Level 1	Valued using unadjusted quoted prices in active markets for identical financial instruments. This category includes cash and cash equivalents held in money market funds, listed equity shares and quoted futures.
Level 2	Instruments in this category are valued using valuation techniques where all of the inputs that have a significant effect on the valuation are directly or indirectly based on observable market data. This category includes provisionally priced trade receivables and payables and over-the-counter derivatives.
Level 3	Instruments in this category have been valued using a valuation technique where at least one input (which could have a significant effect on the instrument's valuation) is not based on observable market data. Where inputs can be observed from market data without undue cost and effort, the observed input is used. Otherwise, management determines a reasonable estimate for the input. This category includes deferred consideration, receivables relating to disposals, unlisted equity investments and the embedded derivative relating to the Royalty liability.

The movements in the fair value of the level 3 financial assets and liabilities are shown as follows:

		Assets		Liabilities
US$ million	2022	2021	2022	2021
At 1 January	830	651	(464)	(435)
Net (loss)/profit recorded in the income statement	(79)	439	(73)	(174)
Net profit/(loss) recorded in the statement of comprehensive income	53	1	(80)	—
Reclassification to level 3 financial assets	9	44	—	—
Additions	22	—	—	—
Settlements and disposals	(388)	(239)	153	116
Currency movements	(29)	(66)	17	29
At 31 December	418	830	(447)	(464)

Net debt and financial risk management

22. Financial instruments and derivatives continued

For the level 3 financial assets and liabilities, changing certain estimated inputs to reasonably possible alternative assumptions would impact the fair value as follows:

Level 3 fair value sensitivities

Rustenburg (Platinum Group Metals)
The final settlement amount relating to the Rustenburg deferred consideration is based on actual prices and exchange rates for 2022, therefore it is no longer subject to movements and no sensitivity has been included in 2022.

Union Mine (Platinum Group Metals)
Deferred consideration receivable of $132 million (2021: $214 million) is calculated as 35% of the distributable free cash flows generated by Union Mine over an eleven year period from inception in February 2018. If the cumulative deferred consideration is negative at the end of the eleven year period, Anglo American Platinum will be obligated to repay Siyanda Resources Proprietary Limited the cumulative deferred consideration received. The maximum cap on the deferred consideration is ZAR 6 billion ($0.4 billion). Based on forecasts the cumulative deferred consideration is positive. The discount rate used in the calculation is 16.97% (2021: 15.88%).

Mototolo Mine (Platinum Group Metals)
Deferred consideration of $220 million (2021: $342 million) is payable monthly over a period of 72 months from the effective date of acquisition in November 2018 in monthly instalments, as well as annual top-up payments where applicable. The deferred consideration is remeasured based on the actual PGM 4E prices realised over the deferred consideration period. The maximum amount payable is limited to ZAR 22 billion ($1.3 billion). The discount rate used in the calculation is 9.66% (2021: 7.98%). The movement for the year relates to fluctuations in PGM prices and in the ZAR:USD exchange rate and has been recognised within finance costs due to the linkage to price rather than operational performance of the mine. Movements in the consideration payable have not been recognised as a special item as the income statement impact of the initial transaction was below the Group threshold for special item classification.

US$ million	2022	2021
Deferred consideration/financial assets		
Union Mine deferred consideration		
10% change in exchange rates		
Reduction in profit or loss	29	4
Increase to profit or loss	21	4
10% change in PGM prices		
Reduction in profit or loss	29	4
Increase to profit or loss	21	4
Deferred consideration/financial liabilities		
Mototolo deferred consideration		
10% change in PGM prices		
Reduction in profit or loss	19	34
Increase to profit or loss	19	34
10% change in exchange rates		
Reduction in profit or loss	19	34
Increase to profit or loss	19	34

Further information on financial instruments

Borrowings designated in fair value hedges represent listed debt which is held at amortised cost, adjusted for the fair value of the hedged interest rate risk. The fair value of these borrowings is $8,846 million (2021: $8,820 million), which is measured using quoted indicative broker prices and consequently categorised as level 2 in the fair value hierarchy. The carrying value of the remaining borrowings at amortised cost includes bonds which are not designated into hedge relationships, bank borrowings and lease liabilities. The carrying value of these bonds is $1,608 million (2021: $1,571 million) and the fair value is $1,381 million (2021: $1,812 million). The carrying value of the remaining borrowings at amortised cost are considered to approximate the fair value.

Offsetting of financial assets and liabilities
The Group offsets financial assets and liabilities and presents them on a net basis in the Consolidated balance sheet only where there is a legally enforceable right to offset the recognised amounts, and the Group intends to either settle the recognised amounts on a net basis or to realise the asset and settle the liability simultaneously.

Net debt and financial risk management

22. Financial instruments and derivatives continued

At 31 December 2022, certain over-the-counter derivatives entered into by the Group and recognised at fair value through profit and loss are both subject to enforceable ISDA master netting arrangements and intended to be settled on a net basis. In accordance with the requirements of IAS 32 *Financial Instruments: Presentation*, the positions of these derivatives have been offset; those in a liability position totalling $7 million (2021: $10 million) were offset against those in an asset position totalling $149 million (2021: $321 million). The net asset position of $142 million (2021: $311 million) is presented within derivative assets (2021: within derivative assets) in the Consolidated balance sheet.

If certain credit events (such as default) were to occur, additional derivative instruments would be settled on a net basis under ISDA agreements. Interest rate and cross currency interest rate swaps in an asset position totalling $78 million (2021: $234 million) would be offset against those in a liability position totalling $1,129 million (2021: $410 million). These instruments are presented on a gross basis in the Consolidated balance sheet as the Group does not have a legally enforceable right to offset the amounts in the absence of a credit event occurring.

Royalty liability

When the Group acquired the Woodsmith project, the Hancock royalty liability and related embedded derivative were recognised. The royalty liability and associated derivative does not form part of borrowings 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 Anglo American Crop Nutrients Limited's insolvency).

Derivatives overview

The Group utilises derivative instruments to manage certain market risk exposures; however, it may choose not to designate certain derivatives as hedges for accounting purposes. Such derivatives are classified as 'Held for trading' and fair value movements are recorded in the Consolidated income statement.

The use of derivative instruments is subject to limits and the positions are regularly monitored and reported to senior management.

Fair value hedges

In accordance with the Group's policy, interest rate swaps are taken out to swap the Group's fixed rate borrowings to floating rate. These have been designated as fair value hedges. The carrying value of the hedged debt is adjusted at each balance sheet date to reflect the impact on its fair value of changes in market interest rates. At 31 December 2022, this adjustment was to decrease the carrying value of borrowings by $787 million (2021: $106 million increase). Changes in the fair value of the hedged debt are offset against fair value changes in the interest rate swap and recognised in the Consolidated income statement as financing remeasurements. Recognised in the Consolidated income statement is a gain on fair value hedged items of $894 million (2021: $351 million), offset by a loss on fair value hedging instruments of $906 million (2021: $357 million).

Cash flow hedges

The royalty liability contains an embedded derivative as future payments are linked directly to future revenues. The Group has designated this embedded derivative as a cash flow hedge of future revenue from the Woodsmith project. During the year the Group recognised a loss within other comprehensive income of $80 million and a liability of $80 million within the royalty liability in respect of this derivative.

Held for trading

The Group may choose not to designate certain derivatives as hedges. This may occur where the Group is economically hedged but IFRS 9 *Financial Instruments* hedge accounting cannot be achieved or where gains and losses on both the derivative and hedged item naturally offset in the Consolidated income statement, as is the case for certain cross currency swaps of non-US dollar debt. A fair value loss of $1 million in respect of these cross currency swaps has been recognised in the Consolidated income statement (2021: $196 million) and is presented within financing remeasurements net of foreign exchange gains on the related borrowings of $30 million (2021: $202 million). Fair value changes on held for trading derivatives are recognised in the Consolidated income statement as remeasurements or within underlying earnings in accordance with the policy set out in note 8.

Net debt and financial risk management

22. Financial instruments and derivatives continued

Further information on derivatives

Fair value of derivative positions

The fair value of the Group's open derivative positions at 31 December (excluding normal purchase and sale contracts held off balance sheet) recorded within 'Derivative financial assets' and 'Derivative financial liabilities', is as follows:

	Current				Non-current			
	2022		2021		2022		2021	
US$ million	Asset	Liability	Asset	Liability	Asset	Liability	Asset	Liability
Derivatives hedging net debt								
Fair value hedge								
Interest rate swaps	12	—	23	—	—	(737)	244	(77)
Held for trading								
Cross currency swaps	—	(265)	—	(88)	49	(151)	12	(240)
Debit valuation adjustment to derivative liabilities	—	29	—	5	—	—	—	—
	12	(236)	23	(83)	49	(888)	256	(317)
Other derivatives	192	(205)	164	(129)	—	—	—	—
Total derivatives	204	(441)	187	(212)	49	(888)	256	(317)

Other derivatives primarily relate to forward foreign currency contracts hedging capital expenditure, forward commodity contracts and other commodity contracts that are accounted for as 'Held for trading'. These marked to market valuations are not predictive of the future value of the hedged position, nor of the future impact on the profit of the Group. The valuations represent the cost of closing all hedge contracts at 31 December, at market prices and rates available at the time.

Interest Rate Benchmark Reform

Benchmark transition progress

The Group has continued its transition to alternative interest risk-free rates in the year as a result of interest rate benchmark reform. Further details of the Group's transition is included in note 39F. At 31 December 2022, the Group held the below financial instruments which have not been transitioned to alternative risk-free benchmarks:

	2022
	USD LIBOR
US$ million	Carrying value
Financial liabilities	
Derivative financial liabilities	(905)
Borrowings	(2,958)
Total liabilities exposed to USD LIBOR	(3,863)

At 31 December 2022, the Group held undrawn committed borrowing facilities totalling $4.7 billion with reference to USD LIBOR. The notional amount of derivatives in hedging relationships relating to USD instruments yet to be transitioned to alternative risk-free rates at 31 December 2022 was $6.3 billion (2021: $5.3 billion). During 2021, the Group completed the transition of GBP LIBOR financial instruments to SONIA in advance of its cessation on 31 December 2021 with no impact to Derivative financial liabilities and Borrowings, for details of the instruments affected please see note 21.

Accounting judgements

Fair value of financial instruments

Certain of the Group's financial instruments, principally derivatives, are required to be measured on the balance sheet at fair value. Where a quoted market price for an identical instrument is not available, a valuation model is used to estimate the fair value based on the net present value of the expected cash flows under the contract. Valuation assumptions are usually based on observable market data (for example forward foreign exchange rate, interest rate or commodity price curves) where available.

Accounting policies

See notes 39D and 39F for the Group's accounting policies on financial asset investments, impairment of financial assets, derivative financial instruments and hedge accounting.

Net debt and financial risk management

23. Financial risk management

Overview

The Board approves and monitors the risk management processes, including documented treasury policies, counterparty limits and controlling and reporting structures. The risk management processes of the Group's independently listed subsidiaries are in line with the Group's own policy.

The types of risk exposure, the way in which such exposure is managed and quantification of the level of exposure in the Consolidated balance sheet at 31 December is as follows:

- Liquidity risk
- Credit risk
- Commodity price risk
- Foreign exchange risk
- Interest rate risk.

A. Liquidity risk

The Group ensures that there are sufficient committed loan facilities (including refinancing, where necessary) in order to meet short term business requirements, after taking into account cash flows from operations and its holding of cash and cash equivalents, as well as any Group distribution restrictions that exist. In addition, certain projects may be financed by means of limited recourse project finance, if appropriate.

Certain borrowing facilities within the Group are the subject of financial covenants that vary from facility to facility, but which would be considered normal for such facilities, such as the ratio of debt to tangible net worth. The respective borrowers remain in compliance with these financial covenants at 31 December 2022.

The expected undiscounted cash flows of the Group's financial liabilities, by remaining contractual maturity, based on conditions existing at the balance sheet date, are as follows:

							2022
US$ million	**Amount due for repayment within one year**	**Greater than one year, less than two years**	**Greater than two years, less than three years**	**Greater than three years, less than four years**	**Greater than four years, less than five years**	**Greater than five years**	**Total**
Net financial liabilities							
Borrowings	(1,267)	(773)	(1,340)	(1,056)	(1,568)	(9,077)	(15,081)
Expected future interest payments	(459)	(420)	(379)	(350)	(321)	(2,012)	(3,941)
Derivatives hedging debt – net settled	(237)	(198)	(127)	(87)	(79)	(115)	(843)
Derivatives hedging debt – gross settled:							
– gross inflows	1,044	80	709	563	22	388	2,806
– gross outflows	(1,343)	(104)	(796)	(595)	(22)	(423)	(3,283)
Other financial liabilities	(5,963)	(95)	—	(15)	(14)	(358)	(6,445)
Total	(8,225)	(1,510)	(1,933)	(1,540)	(1,982)	(11,597)	(26,787)

							2021
US$ million	Amount due for repayment within one year	Greater than one year, less than two years	Greater than two years, less than three years	Greater than three years, less than four years	Greater than four years, less than five years	Greater than five years	Total
Net financial liabilities							
Borrowings	(1,076)	(968)	(728)	(1,318)	(750)	(7,817)	(12,657)
Expected future interest payments	(393)	(357)	(325)	(285)	(258)	(1,156)	(2,774)
Derivatives hedging debt – net settled	14	15	15	15	15	60	134
Derivatives hedging debt – gross settled:							
– gross inflows	1,295	865	9	689	569	—	3,427
– gross outflows	(1,418)	(1,070)	(26)	(736)	(569)	—	(3,819)
Other financial liabilities	(6,145)	(107)	(110)	(17)	(11)	(303)	(6,693)
Total	(7,723)	(1,622)	(1,165)	(1,652)	(1,004)	(9,216)	(22,382)

The table above does not include cash flows in relation to the Woodsmith royalty financing on the basis that cash flows under this arrangement are not contractually defined, but instead are wholly dependent upon Woodsmith revenue in future years. However, should the Woodsmith primary subsidiary, Anglo American Crop Nutrients Limited, enter insolvency, then it would be required to repay Hancock the principal value of $250 million upon its request.

Net debt and financial risk management

23. Financial risk management continued

The Group had the following undrawn committed borrowing facilities at 31 December:

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.

B. Credit risk

Credit risk is the risk that a counterparty to a financial instrument will cause a loss to the Group by failing to pay its obligation.

The Group's principal financial assets are cash, trade and other receivables, investments and derivative financial instruments. The Group's maximum exposure to credit risk primarily arises from these financial assets and is as follows:

US$ million	2022	2021
Cash and cash equivalents	8,412	9,066
Trade and other receivables	3,220	3,765
Financial asset investments	261	187
Derivative financial assets	253	443
Environmental rehabilitation trust	107	113
	12,253	13,574

The Group limits credit risk on liquid funds and derivative financial instruments through diversification of exposures with a range of financial institutions. Counterparty limits are set for each financial institution with reference to credit ratings assigned by Standard & Poor's, Moody's and Fitch Ratings, shareholder equity (in case of relationship banks) and fund size (in case of asset managers).

Given the diverse nature of the Group's operations (both in relation to commodity markets and geographically), and the use of payment security instruments (including letters of credit from financial institutions), it does not have significant concentration of credit risk in respect of trade receivables, with exposure spread over a large number of customers.

The classification of trade and other receivables excludes prepayments and tax receivables, the classification of financial asset investments excludes equity investments held at fair value through other comprehensive income.

C. Commodity price risk

The Group's earnings are exposed to movements in the prices of the commodities it produces.

The Group's policy is to sell its products at prevailing market prices and is generally not to hedge commodity price risk, although some hedging may be undertaken for strategic reasons. In such cases, the Group generally uses forward contracts and other derivative instruments to economically hedge the price risk.

Certain of the Group's sales and purchases are provisionally priced, meaning that the selling price is determined normally 30 to 180 days after delivery to the customer, based on quoted market prices stipulated in the contract, and as a result are susceptible to future price movements. The exposure of the Group's financial assets and liabilities to commodity price risk is as follows:

	2022				2021			
	Commodity price linked				Commodity price linked			
US$ million	Subject to price movements	Fixed price	Not linked to commodity price	Total	Subject to price movements	Fixed price	Not linked to commodity price	Total
Total net financial instruments (excluding derivatives)	1,254	203	(10,171)	(8,714)	1,360	452	(8,112)	(6,300)
Derivatives	(13)	—	(1,063)	(1,076)	40	—	(126)	(86)
	1,241	203	(11,234)	(9,790)	1,400	452	(8,238)	(6,386)

Commodity price linked financial instruments subject to price movements include provisionally priced trade receivables and trade payables.

Commodity price linked financial instruments at fixed price include receivables and payables for commodity sales and purchases no longer subject to price adjustment at the balance sheet date.

D. Foreign exchange risk

As a global business, the Group is exposed to many currencies principally as a result of non-US dollar operating costs and, to a lesser extent, from non-US dollar revenue.

Net debt and financial risk management

23. Financial risk management continued

The South African rand, Chilean peso, Brazilian real and Australian dollar are the most significant non-US dollar currencies influencing costs. A strengthening of the US dollar against the currencies to which the Group is exposed has a positive effect on the Group's earnings. The Group's policy is generally not to hedge such exposures given the correlation, over the longer term, with commodity prices and the diversified nature of the Group, although exceptions can be approved by a committee with delegated authority from the Group Management Committee.

In addition, currency exposures exist in respect of non-US dollar capital expenditure projects and non-US dollar borrowings in US dollar functional currency entities. The Group's policy is to evaluate whether or not to hedge its non-US dollar capital expenditure on a case-by-case basis, taking into account the estimated foreign exchange exposure, liquidity of foreign exchange markets and the cost of executing a hedging strategy. Further detail with respect to the Group's non-US dollar borrowings approach is included in note 21.

Net other financial liabilities (excluding net debt related balances, variable vessel leases and cash in disposal groups, but including the debit valuation adjustment attributable to derivatives hedging net debt) are $2,745 million. This includes net assets of $36 million denominated in US dollars, and net liabilities of $383 million denominated in Brazilian real, $324 million denominated in Australian dollars, $631 million denominated in Chilean pesos and $986 million denominated in South African rand.

E. Interest rate risk

Interest rate risk arises due to fluctuations in interest rates which impact the value of short term investments and financing activities. The Group is principally exposed to US and South African interest rates.

USD LIBOR is expected to be replaced by an alternative risk-free rate by June 2023. The Group is managing the transition to alternative risk-free rates with respect to its hedging arrangements and any future transactions in the financial market. Please see note 39F for further details.

The Group's policy is to borrow funds at fixed rates of interest. The Group uses interest rate derivatives to convert the majority of borrowings to floating rates of interest and manage its exposure to interest rate movements on its debt.

In respect of financial assets, the Group's policy is to invest cash at floating rates of interest and to maintain cash reserves in short term investments (less than one year) in order to maintain liquidity.

Analysis of interest rate risk associated with net debt balances and the impact of derivatives to hedge against this risk is included within the table below. Net other financial liabilities (excluding net debt related balances, variable vessel leases and cash in disposal groups, but including the debit valuation adjustment attributable to derivatives hedging net debt) of $2,745 million (2021: $2,470 million) are primarily non-interest bearing.

The table below reflects the exposure of the Group's net debt to currency and interest rate risk:

						2022
US$ million	**Cash and cash equivalents**	**Floating rate borrowings**	**Fixed rate borrowings**	**Derivatives hedging net debt**	**Impact of currency derivatives**	**Total**
US dollar	**6,667**	**(2,994)**	**(7,742)**	**(1,092)**	**(2,985)**	**(8,146)**
Euro	**29**	**—**	**(2,673)**	**—**	**2,669**	**25**
South African rand	**421**	**(11)**	**(168)**	**—**	**—**	**242**
Brazilian real	**735**	**—**	**(18)**	**—**	**—**	**717**
Australian dollar	**161**	**—**	**(45)**	**—**	**—**	**116**
Sterling	**84**	**(6)**	**(613)**	**—**	**316**	**(219)**
Other	**303**	**(1)**	**(82)**	**—**	**—**	**220**
Impact of interest rate derivatives	**—**	**(8,682)**	**8,682**	**—**	**—**	**—**
Total	**8,400**	**(11,694)**	**(2,659)**	**(1,092)**	**—**	**(7,045)**
Reconciliation:						
Variable vessel leases						**127**
Net debt						**(6,918)**

						2021
US$ million	Cash and cash equivalents	Floating rate borrowings	Fixed rate borrowings	Derivatives hedging net debt	Impact of currency derivatives	Total
US dollar	7,636	(1,847)	(7,265)	(126)	(3,097)	(4,699)
Euro	32	—	(2,681)	—	2,679	30
South African rand	695	(7)	(133)	—	—	555
Brazilian real	244	—	(24)	—	—	220
Australian dollar	108	—	(77)	—	—	31
Sterling	19	(7)	(753)	—	418	(323)
Other	323	—	(53)	—	—	270
Impact of interest rate derivatives	—	(8,542)	8,542	—	—	—
Total	9,057	(10,403)	(2,444)	(126)	—	(3,916)
Reconciliation:						
Variable vessel leases						74
Net debt						(3,842)

Based on the net foreign currency and interest rate risk exposures detailed above, and taking into account the effects of the hedging arrangements in place, management considers that earnings and equity are not materially sensitive to reasonable foreign exchange or interest rate movements in respect of the financial instruments held as at 31 December 2022 or 2021.

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.

Total equity

$34.0 bn

(2021: $34.8 bn)

24. Called-up share capital and consolidated equity analysis

Called-up share capital

	2022		2021	
	Number of shares	**US$ million**	Number of shares	US$ million
Ordinary shares of 54 $^{86}/_{91}$ US cents each:				
At 1 January	**1,341,651,975**	**737**	1,363,118,080	749
Shares cancelled[1]	**(4,074,062)**	**(3)**	(21,466,105)	(12)
At 31 December	**1,337,577,913**	**734**	1,341,651,975	737

[1] During the year, 4,074,062 shares were cancelled under the buyback programme. In 2021, 21,466,105 shares were cancelled under the 2021 buyback programme.

The number and carrying value of called-up, allotted and fully paid ordinary shares as at 31 December 2022 (including the shares held by the Group in other structures, as outlined below) was 1,337,577,913 and $734 million (2021: 1,341,651,975 and $737 million).

At general meetings, every member who is present in person has one vote on a show of hands and, on a poll, every member who is present in person or by proxy has one vote for every ordinary share held.

Own shares

	2022		2021	
	Number of shares	**US$ million**	Number of shares	US$ million
Own shares				
Own shares held by subsidiaries and employee benefit trusts	**124,618,014**	**6,272**	123,430,969	6,141
Total	**124,618,014**	**6,272**	123,430,969	6,141

Included in Own shares are 112,300,129 (2021: 112,300,129) Anglo American plc shares held by Epoch Investment Holdings (RF) Proprietary Limited, Epoch Two Investment Holdings (RF) Proprietary Limited and Tarl Investment Holdings (RF) Proprietary Limited, which are consolidated by the Group by virtue of their contractual arrangements with Tenon Investment Holdings Proprietary Limited, a wholly owned subsidiary of Anglo American South Africa Proprietary Limited. Further details of these arrangements are provided in note 39B.

Included in the calculation of the dividend payable are 5,523,624 ($216 million) shares held in the Employee Benefit Trust in respect of forfeitable share awards granted to certain employees. Under the terms of these awards, the shares are beneficially owned by the respective employees, who are entitled to receive dividends in respect of the shares. The shares are released to the employees on vesting of the awards, and any shares that do not vest are returned to the Company or the Employee Benefit Trust. These shares are recognised on the Consolidated balance sheet within Own shares and are excluded from the calculation of basic earnings per share. They are included in the calculation of diluted earnings per share to the extent that the related share awards are dilutive (see note 3).

Equity

24. Called-up share capital and consolidated equity analysis continued

Consolidated equity analysis

Fair value and other reserves comprise:

US$ million	Share-based payment reserve	Financial asset revaluation reserve	Other reserves	Total fair value and other reserves
At 1 January 2021	451	41	144	636
Other comprehensive loss	—	(8)	—	(8)
Equity settled share-based payment schemes	15	—	—	15
Cancellation of treasury shares	—	—	12	12
Other	(6)	(2)	4	(4)
At 31 December 2021	460	31	160	651
Other comprehensive income/(loss)	—	31	(80)	(49)
Equity settled share-based payment schemes	1	—	—	1
Cancellation of treasury shares	—	—	3	3
Other	(4)	(32)	19	(17)
At 31 December 2022	457	30	102	589

Other reserves comprise a capital redemption reserve of $153 million (2021: $150 million) and other reserves.

25. Non-controlling interests

Overview

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

- De Beers plc (De Beers) is a company incorporated in Jersey. It is one of the world's leading diamond companies 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) 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) 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) 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 310.

	2022						2021					
US$ million	De Beers	Anglo American Sur	Anglo American Platinum	Kumba Iron Ore	Other	Total	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	58	582	1,045	1,394	1	3,080
Profit/(loss) attributable to non-controlling interests	103	88	641	586	92	1,510	53	574	1,125	1,388	(3)	3,137
Dividends paid to non-controlling interests	(21)	(234)	(754)	(738)	(47)	(1,794)	(9)	(458)	(808)	(1,535)	(28)	(2,838)
Balance sheet information:												
Equity attributable to non-controlling interests	1,378	1,630	1,202	1,434	1,019	6,663	1,365	1,618	1,338	1,665	959	6,945

Equity

25. 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				2021			
US$ million	De Beers	Anglo American Sur	Anglo American Platinum	Kumba Iron Ore	De Beers	Anglo American Sur	Anglo American Platinum	Kumba Iron Ore
Non-current assets	8,023	4,890	6,125	3,104	8,430	4,316	6,000	3,133
Current assets	5,147	1,231	5,296	1,818	4,475	1,596	6,460	2,061
Current liabilities	(949)	(1,036)	(3,425)	(915)	(806)	(1,121)	(3,587)	(631)
Non-current liabilities	(2,489)	(1,817)	(1,531)	(802)	(2,429)	(1,545)	(1,596)	(856)
Net assets	9,732	3,268	6,465	3,205	9,670	3,246	7,277	3,707
Revenue	6,609	2,758	10,096	4,612	5,591	3,724	14,502	6,944
Profit for the financial year[1]	633	177	3,053	1,247	317	1,149	5,398	2,983
Total comprehensive income/(expense)	57	160	2,592	1,034	(86)	1,173	4,736	2,688
Net cash inflow from operating activities	1,112	772	2,869	1,746	1,163	1,682	6,698	3,366

(1) Stated after special items and remeasurements.

Employees

This section contains information about the Group's current and former employees as well as the associated cost of employment and post employment benefits incurred by the Group.

The Group had on average 62,000 employees during 2022.

Employees[1]

62,000

(2021: 62,000)

[1] Excluding contractors and associates' and joint ventures' employees and including a proportionate share of employees within joint operations.

26. Employee numbers and costs

Employee numbers

The average number of employees, excluding contractors and associates' and joint ventures' employees and including a proportionate share of employees within joint operations, by segment was:

Thousand	2022	2021
De Beers	9	8
Copper	5	5
Nickel	1	1
Platinum Group Metals	32	31
Iron Ore	9	9
Steelmaking Coal	2	2
Crop Nutrients	1	1
Corporate and other	3	5
	62	62

The average number of employees, excluding contractors and associates' and joint ventures' employees and including a proportionate share of employees within joint operations, by principal location of employment was:

Thousand	2022	2021
South Africa	41	41
Other Africa	5	5
South America	9	9
North America	1	1
Australia and Asia	3	3
Europe	3	3
	62	62

Employee costs

Payroll costs in respect of the employees included in the tables above were:

US$ million	2022	2021
Wages and salaries	3,180	3,142
Social security costs	193	197
Post employment benefits	258	268
Share-based payments	218	189
Total payroll costs	3,849	3,796
Reconciliation:		
Less: Employee costs capitalised	(219)	(193)
Employee costs included in operating costs	3,630	3,603

Post employment benefits include contributions to defined contribution pension and medical plans, current and past service costs related to defined benefit pension and medical plans and other benefits provided to certain employees during retirement.

Employees

26. Employee numbers and costs continued

Key management
Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including any director (executive and non-executive) of the Group. Key management comprises members of the Board and the Group Management Committee.

Compensation for key management was as follows:

US$ million	2022	2021
Salaries and short term employee benefits	30	28
Social security costs	12	11
Termination benefits	1	—
Post employment benefits	2	3
Share-based payments	20	21
	65	63

Disclosure of directors' emoluments, pension entitlements, share options and long term incentive plan awards required by the Companies Act 2006 and those specified for audit by Part 3 and Schedule 8 of the Large and Medium-Sized Companies and Groups (Accounts and Reports) (Amendment) Regulations 2013 are included in the Remuneration report.

27. Retirement benefits

Overview
The Group operates a number of defined contribution and defined benefit pension plans with the most significant plans being in South Africa and the United Kingdom. It also operates post employment medical plans, the majority of which are unfunded, principally in South Africa. The post employment medical plans provide health benefits to retired employees and certain dependants.

Defined contribution plans
The charge for the year for defined contribution pension plans (net of amounts capitalised) was $153 million (2021: $143 million) and for defined contribution medical plans (net of amounts capitalised) was $61 million (2021: $68 million).

Defined benefit pension plans and post employment medical plans
Characteristics of plans
The majority of the defined benefit pension plans are funded. The assets of these plans are held separately from those of the Group, in independently administered funds, in accordance with statutory requirements or local practice in the relevant jurisdiction. The responsibility for the governance of the funded retirement benefit plans, including investment and funding decisions, lies with the Trustees of each scheme. The unfunded liabilities are principally in relation to termination indemnity plans in Chile.

South Africa
The pension plans in South Africa are in surplus. All pension plans in South Africa are closed to new members and the majority of plans are closed to future benefit accrual. As the plans are in surplus no employer contributions are currently being made. The Group's provision of anti-retroviral therapy to HIV positive staff does not significantly impact the post employment medical plan liability.

United Kingdom
The Group operates funded pension plans in the United Kingdom. These plans are closed to new members and to the future accrual of benefits. The Group is committed to make payments to certain United Kingdom pension plans under deficit funding plans agreed with the respective Trustees.

Other
Other pension and post employment medical plans primarily comprise obligations in Chile where legislation requires employers to provide for a termination indemnity, entitling employees to a cash payment made on the termination of an employment contract.

Contributions
Employer contributions are made in accordance with the terms of each plan and may vary from year to year. Employer contributions made to funded pension plans in the year ended 31 December 2022 were $4 million (2021: $3 million). In addition, $14 million (2021: $13 million) of benefits were paid in relation to unfunded pension plans and $14 million (2021: $25 million) of benefits were paid in relation to post employment medical plans. The Group expects to contribute $37 million to its pension plans and $14 million to its post employment medical plans in 2023.

Income statement
The amounts recognised in the Consolidated income statement are as follows:

			2022			2021
US$ million	Pension plans	Post employment medical plans	Total	Pension plans	Post employment medical plans	Total
Charged to operating costs	15	2	17	14	2	16
Net charge/(credit) to net finance costs	5	20	25	(2)	32	30
Total net charge to the income statement	20	22	42	12	34	46

Net charge/(credit) to net finance costs includes interest expense on surplus restriction of $15 million (2021: $12 million).

Employees

27. Retirement benefits continued

Comprehensive income

The pre-tax amounts recognised in the Consolidated statement of comprehensive income are as follows:

US$ million	2022 Pension plans	2022 Post employment medical plans	2022 Total	2021 Pension plans	2021 Post employment medical plans	2021 Total
Return on plan assets, excluding interest income	(1,576)	(14)	(1,590)	(146)	1	(145)
Actuarial gains/(losses) on plan liabilities	1,239	26	1,265	321	(2)	319
Movement in surplus restriction	38	—	38	(17)	—	(17)
Remeasurement of net defined benefit obligation	(299)	12	(287)	158	(1)	157

Actuarial gains on plan liabilities comprise net gains from changes in financial and demographic assumptions as well as experience on plan liabilities. The tax amounts arising on remeasurement of the net defined benefit obligations are disclosed in note 5.

Balance sheet

A summary of the movements in the net pension plan assets and retirement benefit obligations on the Consolidated balance sheet is as follows:

US$ million	2022	2021
Net asset recognised at 1 January	284	72
Net income statement charge before special items	(42)	(46)
Remeasurement of net defined benefit obligation	(287)	157
Employer contributions to funded pension plans	4	3
Benefits paid to unfunded plans	28	38
Effects of curtailments/settlements	—	(1)
Other	—	8
Currency movements	(43)	53
Net (liability)/asset recognised at 31 December	(56)	284
Amounts recognised as:		
Defined benefit pension plans in surplus	381	695
Retirement benefit obligation – pension plans	(243)	(198)
Retirement benefit obligation – medical plans	(267)	(304)
Retirement benefit surplus – medical plans	73	91
	(56)	284

The Group, in consultation with scheme and legal advisers, has determined that once all beneficiaries of the schemes have been settled the full economic benefit of the surplus of each of the schemes would become payable to the relevant Group company. Therefore, defined benefit pension plans and post retirement medical plans assets are included in Pension asset surplus and other non-current assets on the Consolidated balance sheet.

Further information

Movement analysis

The changes in the fair value of plan assets are as follows:

US$ million	2022 Pension plans	2022 Post employment medical plans	2022 Total	2021 Pension plans	2021 Post employment medical plans	2021 Total
At 1 January	5,450	102	5,552	5,836	12	5,848
Interest income	142	9	151	131	1	132
Return on plan assets, excluding interest income	(1,576)	(14)	(1,590)	(146)	1	(145)
Contributions paid by employer to funded pension plans	3	1	4	3	—	3
Benefits paid	(214)	(7)	(221)	(225)	(1)	(226)
Effects of curtailments/settlements	—	—	—	(1)	—	(1)
Other	7	—	7	(86)	97	11
Currency movements	(497)	(7)	(504)	(62)	(8)	(70)
As at 31 December	3,315	84	3,399	5,450	102	5,552

Employees

27. Retirement benefits continued

The changes in the present value of defined benefit obligations are as follows:

	2022			2021		
US$ million	Pension plans	Post employment medical plans	Total	Pension plans	Post employment medical plans	Total
At 1 January	(4,811)	(315)	(5,126)	(5,292)	(360)	(5,652)
Current service costs	(15)	(2)	(17)	(14)	(2)	(16)
Interest costs	(132)	(29)	(161)	(117)	(33)	(150)
Actuarial gains/(losses)	1,239	26	1,265	321	(2)	319
Benefits paid	228	21	249	238	26	264
Other	(7)	—	(7)	(34)	31	(3)
Currency movements	430	21	451	87	25	112
As at 31 December	(3,068)	(278)	(3,346)	(4,811)	(315)	(5,126)

The most significant actuarial gain arose from changing financial assumptions totalling $1,353 million (2021: $277 million).

Pension plan assets and liabilities by geography
The split of the present value of funded and unfunded obligations in defined benefit pension plans and the fair value of pension assets at 31 December is as follows:

	2022				2021			
US$ million	South Africa	United Kingdom	Other	Total	South Africa	United Kingdom	Other	Total
Corporate bonds	115	1,621	1	1,737	140	2,871	3	3,014
Government bonds	341	1,566	61	1,968	411	2,723	59	3,193
Debt (Repurchase Agreements)	(27)	(844)	(1)	(872)	(69)	(1,062)	—	(1,131)
Equity	77	1	6	84	95	34	8	137
Cash	39	301	1	341	48	121	—	169
Other	8	49	—	57	2	66	—	68
Fair value of pension plan assets	553	2,694	68	3,315	627	4,753	70	5,450
Active members	(3)	—	(6)	(9)	(4)	—	(16)	(20)
Deferred members	(2)	(576)	(2)	(580)	(2)	(1,201)	(4)	(1,207)
Pensioners	(407)	(1,792)	(57)	(2,256)	(445)	(2,910)	(55)	(3,410)
Present value of funded obligations	(412)	(2,368)	(65)	(2,845)	(451)	(4,111)	(75)	(4,637)
Present value of unfunded obligations	—	(25)	(198)	(223)	—	(22)	(152)	(174)
Net surplus/(deficit) in pension plans	141	301	(195)	247	176	620	(157)	639
Surplus restriction	(109)	—	—	(109)	(142)	—	—	(142)
Recognised retirement benefit assets/(liabilities)	32	301	(195)	138	34	620	(157)	497
Non-current assets – pension asset surplus	32	349	—	381	34	658	3	695
Retirement benefit obligation – pension plans	—	(48)	(195)	(243)	—	(38)	(160)	(198)

Other assets principally comprise debt backed securities, annuities and property.

The fair value of assets is used to determine the funding level of the plans. The fair value of the assets of the funded plans was sufficient to cover 117% (2021: 118%) of the benefits that had accrued to members after allowing for expected increases in future earnings and pensions. The present value of unfunded obligations includes $203 million (2021: $159 million) relating to active members. All material investments are quoted.

In South Africa, the asset recognised is restricted to the amount in the Employer Surplus Account. The Employer Surplus Account is the amount that the Group is entitled to by way of a refund, taking into consideration any contingency reserves as recommended by the funds' actuaries.

Employees

27. Retirement benefits continued

Actuarial assumptions

The principal assumptions used to determine the actuarial present value of benefit obligations and pension charges and credits are detailed below (shown as weighted averages):

	2022			2021		
	South Africa	**United Kingdom**	**Other**	South Africa	United Kingdom	Other
Defined benefit pension plans						
Average discount rate for plan liabilities	**11.4%**	**4.9%**	**6.1%**	10.4%	1.9%	5.8%
Average rate of inflation	**6.6%**	**3.1%**	**3.7%**	6.2%	3.3%	3.0%
Average rate of increase of pensions in payment	**6.6%**	**3.4%**	**3.2%**	6.2%	3.5%	2.8%
Post employment medical plans						
Average discount rate for plan liabilities	**11.4%**	**n/a**	**11.5%**	10.4%	n/a	9.9%
Average rate of inflation	**6.6%**	**n/a**	**7.1%**	6.2%	n/a	6.5%
Expected average increase in healthcare costs	**8.7%**	**n/a**	**9.5%**	7.8%	n/a	8.7%

The weighted average duration of the South African plans is 9 years (2021: 9 years), United Kingdom plans is 13 years (2021: 17 years) and plans in other regions is 13 years (2021: 14 years). This represents the average period, weighted by discounted value, over which future benefit payments are expected to be made.

Mortality assumptions are determined based on standard mortality tables with adjustments, as appropriate, to reflect experience of conditions locally. In South Africa the PA90 tables are used. The main plans in the United Kingdom use CMI tables or Club Vita models with plan specific adjustments based on mortality investigations. The mortality tables used imply that a male or female aged 60 at the balance sheet date has the following future life expectancy (shown as weighted averages):

	Male		Female	
Years	**2022**	2021	**2022**	2021
South Africa	**18.8**	18.8	**23.4**	23.4
United Kingdom	**27.8**	27.9	**29.6**	29.6
Other	**24.2**	24.2	**28.9**	28.2

The table below summarises the expected life expectancy from the age of 60 for a male or female aged 45 at the balance sheet date. When viewed together with the respective life expectancy at age 60 in the table above, this indicates the anticipated improvement in life expectancy (shown as weighted averages):

	Male		Female	
Years	**2022**	2021	**2022**	2021
South Africa	**18.8**	18.8	**23.4**	23.4
United Kingdom	**28.6**	28.6	**30.8**	30.9
Other	**25.6**	25.3	**30.2**	29.2

Risk of plans

The Group has identified the main risk to its defined benefit pension schemes as being interest rate risk due to the impact on the UK discount rate assumption:

Risk	Description	Mitigation
Interest rate risk	An increase in longer term real and nominal interest rates expectations causes gilt yields and corporate bond yields to increase, which results in a higher discount rate being applied to the UK pension liabilities and so, with all else being held equal, the value of the pension scheme liabilities decreases. If the pension scheme assets decrease by more than the decrease in the pension scheme liabilities (caused by the increase in interest rates) then, all else being equal, this will result in a worsening of the pension scheme funding position.	The Trustees' investment strategies vary by plan for the UK and include investing, with the intention of counter-balancing the movements in the liabilities, in fully owned (fully funded) physical credit and gilts, and by gaining unfunded exposure to gilts (via gilt repurchase agreements) and other fixed income based derivatives to match the real and nominal interest rate sensitivity of the pension scheme liabilities. Approximately 75-100% (depending on the scheme) of the pension scheme liabilities are currently hedged against movements in real and nominal interest rates. The Trustees' hedging strategies are typically designed to protect the respective schemes' funding plans against volatility in market yields. The discount rate used to calculate any funding requirement for the schemes is linked to gilt yields rather than to corporate bond yields as required under IAS 19 *Employee Benefits*. Consequently the valuation of the net retirement benefit obligation for accounting purposes remains susceptible to movements in value due to the difference between corporate bond and gilt yields. In addition, since corporate bond yields are typically higher than gilt yields, this can result in the recognition of accounting surpluses in respect of schemes where cash contributions continue to be made to meet funding shortfalls.

Employees

27. Retirement benefits continued

Sensitivity analysis

Significant actuarial assumptions for the determination of pension and medical plan liabilities are the discount rate, inflation rate and mortality. The sensitivity analysis below has been provided by local actuaries on an approximate basis based on changes in the assumptions occurring at the end of the year, assuming that all other assumptions are held constant and the effect of interrelationships is excluded. The effect on plan liabilities is as follows:

	2022			
US$ million	South Africa	United Kingdom	Other	Total
Discount rate – 1% decrease	(52)	(320)	(19)	(391)
Inflation rate – pension plans – 0.5% increase	(15)	(58)	(9)	(82)
Inflation rate – medical plans – 0.5% increase	(12)	—	(4)	(16)
Life expectancy – increase by 1 year	(22)	(84)	(2)	(108)

Independent qualified actuaries carry out full valuations at least every three years using the projected unit credit method. The actuaries have updated the valuations to 31 December 2022. Assumptions are set after consultation with the qualified actuaries. While management believes the assumptions used are appropriate, a change in the assumptions used would impact the Group's other comprehensive income.

Accounting policy

See note 39H for the Group's accounting policy on retirement benefits.

Employees

28. Share-based payments

Overview
During the year ended 31 December 2022 the Group had share-based payment arrangements with employees relating to shares of the Company. All of these Company schemes, as well as any non-cyclical awards, are equity settled either by award of ordinary shares (BSP, LTIP, SIP and Non-cyclical) or award of options to acquire ordinary shares (SAYE). The awards are conditional on employment. LTIPs vest in accordance with the achievement of relative TSR targets and a balanced scorecard of measures including a Group ROCE target, a Sustaining attributable free cash flow target and environmental, social and governance targets. Other schemes in the Group include performance conditions based on Group financial performance.

The total share-based payment charge relating to Anglo American plc shares for the year is split as follows:

US$ million	2022	2021
BSP	99	81
LTIP	82	73
Other schemes	6	6
Share-based payment charge relating to Anglo American plc shares	**187**	160

In addition there are equity settled share-based payment charges of $13 million (2021: $13 million) relating to Kumba Iron Ore Limited shares and $14 million (2021: $12 million) relating to Anglo American Platinum Limited shares. Certain entities also operate cash settled employee share-based payment schemes.

Further information
The movements in the number of shares for the more significant share-based payment arrangements are as follows:

Bonus Share Plan

Ordinary shares of $54^{86}/_{91}$ US cents may be awarded under the terms of this scheme for no consideration.

Number of awards	2022	2021
Outstanding at 1 January	8,891,489	10,862,488
Conditionally awarded in year	2,564,499	2,343,404
Vested in year	(3,084,708)	(4,128,121)
Forfeited or expired in year	(160,686)	(186,282)
Outstanding at 31 December	**8,210,594**	8,891,489

Further information in respect of the BSP, including performance conditions, is shown in the Remuneration report.

Long Term Incentive Plan

Ordinary shares of $54^{86}/_{91}$ US cents may be awarded under the terms of this scheme for no consideration.

Number of awards	2022	2021
Outstanding at 1 January	12,002,419	12,163,678
Conditionally awarded in year	2,734,704	3,538,541
Vested in year	(3,465,625)	(2,824,370)
Forfeited or expired in year	(809,833)	(875,430)
Outstanding at 31 December	**10,461,665**	12,002,419

The early vesting of share awards is permitted at the discretion of the Company upon, *inter alia*, termination of employment, ill health or death. The LTIP awards are contingent on pre-established performance criteria being met. Further information in respect of this scheme is shown in the Remuneration report.

Accounting policy
See note 39H for the Group's accounting policy on share-based payments.

Unrecognised items and uncertain events

This section includes disclosure of items and transactions that are not reflected in the Group's results because they are uncertain or have been incurred after the end of the year. These disclosures are considered relevant to an understanding of the Group's financial position and the effect of expected or possible future events.

29. 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 6), there have been no further reportable events since 31 December 2022.

30. Commitments

Overview

A commitment is a contractual obligation to make a payment in the future which is not provided for in the Consolidated balance sheet. The Group also has purchase obligations relating to take or pay agreements which are legally binding and enforceable.

Capital commitments (including cancellable and non-cancellable contracts) for subsidiaries and joint operations relating to the acquisition of property, plant and equipment are $4,531 million (2021: $3,647 million), of which 55% (2021: 56%) relates to expenditure to be incurred within the next year.

The Group's outstanding commitments relating to take or pay agreements are $14,233 million (2021: $13,092 million), of which 11% (2021: 10%) relate to expenditure to be incurred within the next year.

31. 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

31. 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.

Accounting judgement
Where the existence of an asset is contingent on uncertain future events which are outside the Group's control, the asset is only recognised once it becomes virtually certain that the Group will receive future economic benefits.

A provision is recognised where, based on the Group's legal views and, in some cases, independent advice, it is considered probable that an outflow of resources will be required to settle a present obligation that can be measured reliably.

Group structure

This section includes details about the composition of the Group and how this is reflected in the Consolidated financial statements. It also includes disclosures of significant corporate transactions such as acquisitions and disposals.

32. 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.

33. 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).

Group structure

34. Basis of consolidation

Overview

The principal subsidiaries, joint operations, joint ventures and associates of the Group and the Group percentage of equity capital are set out below. All these interests are held indirectly by the Parent Company and are consolidated within these financial statements.

A complete list of the Group's related undertakings can be found in note 35.

Segment and asset	Location	Accounting treatment	Percentage of equity owned 2022	2021
De Beers[1]			85%	85%
Debswana[2], comprising:	Botswana	Joint operation	19.2%	19.2%
Jwaneng				
Orapa regime				
Namdeb Holdings[3], comprising:	Namibia	Joint operation	50%	50%
Namdeb Diamond Corporation				
Debmarine Namibia				
De Beers Consolidated Mines[4], comprising:	South Africa	Full consolidation	100%	100%
Venetia				
De Beers Canada, comprising:				
Snap Lake	Canada	Full consolidation	100%	100%
Victor	Canada	Full consolidation	100%	100%
Gahcho Kué	Canada	Joint operation	51%	51%
Sales, comprising:				
De Beers Global Sightholder Sales	Botswana	Full consolidation	100%	100%
De Beers Sightholder Sales South Africa	South Africa	Full consolidation	100%	100%
Auction Sales	Singapore	Full consolidation	100%	100%
DTC Botswana	Botswana	Joint operation	50%	50%
Namibia DTC	Namibia	Joint operation	50%	50%
Element Six, comprising:				
Element Six Technologies	Global	Full consolidation	100%	100%
Element Six Abrasives	Global	Full consolidation	60%	60%
Brands, comprising:				
Forevermark	Global	Full consolidation	100%	100%
De Beers Jewellers	Global	Full consolidation	100%	100%
Copper				
Copper Chile				
Los Bronces	Chile	Full consolidation	50.1%	50.1%
El Soldado	Chile	Full consolidation	50.1%	50.1%
Chagres	Chile	Full consolidation	50.1%	50.1%
Collahuasi	Chile	Joint operation	44%	44%
Copper Peru				
Quellaveco	Peru	Full consolidation	60%	60%
Nickel				
Barro Alto	Brazil	Full consolidation	100%	100%
Platinum Group Metals[5]			79%	79%
Mogalakwena Mine	South Africa	Full consolidation	100%	100%
Amandelbult complex[6]	South Africa	Full consolidation	100%	100%
Twickenham Mine	South Africa	Full consolidation	100%	100%
Unki Mine	Zimbabwe	Full consolidation	100%	100%
Platinum Refining	South Africa	Full consolidation	100%	100%
Modikwa Platinum Joint Operation	South Africa	Joint operation	50%	50%
Mototolo	South Africa	Full consolidation	100%	100%
Kroondal Pooling and Sharing Agreement[7]	South Africa	Joint operation	50%	50%
Bokoni[8]	South Africa	Equity accounted associate	—%	49%

See page 269 for footnotes.

Group structure

34. Basis of consolidation continued

Segment and asset	Location	Accounting treatment	Percentage of equity owned 2022	2021
Iron Ore				
Kumba Iron Ore	South Africa	Full consolidation	**69.7%**	69.7%
Sishen[9]	South Africa	Full consolidation	**76.3%**	76.3%
Kolomela[9]	South Africa	Full consolidation	**76.3%**	76.3%
Minas-Rio	Brazil	Full consolidation	**100%**	100%
Ferroport[10]	Brazil	Equity accounted joint venture	**50%**	50%
Steelmaking Coal				
Coal Australia and Canada, comprising:				
Moranbah	Australia	Joint operation	**88%**	88%
Grosvenor	Australia	Joint operation	**88%**	88%
Capcoal	Australia	Joint operation	**70%**	70%
Dawson	Australia	Joint operation	**51%**	51%
Jellinbah[11][12]	Australia	Equity accounted associate	**33.3%**	33.3%
Dalrymple Bay Coal Terminal Pty Ltd	Australia	Equity accounted associate	**25.3%**	25.3%
Peace River Coal	Canada	Full consolidation	**100%**	100%
Manganese				
Samancor[11][13]	South Africa and Australia	Equity accounted joint venture	**40%**	40%
Crop Nutrients				
Woodsmith	United Kingdom	Full consolidation	**100%**	100%
Corporate and other				
Carbones del Cerrejón[14]	Colombia	Equity accounted associate	**—%**	33.3%

(1) 85% should be applied to all holdings within De Beers to determine the Group's attributable share of the asset.
(2) De Beers owns 50% of equity in Debswana, but consolidates 19.2% of Debswana on a proportionate basis, reflecting the economic interest. The Group's effective interest in Debswana is 16.3% (taking into account the Group's 85% interest in De Beers Group).
(3) The 50% interest in Namdeb Holdings is held indirectly through De Beers. The Group's effective interest in Namdeb Holdings is 42.5%.
(4) De Beers' legal ownership of De Beers Consolidated Mines (DBCM) and its subsidiaries is 74%. For accounting purposes De Beers consolidates 100% of DBCM as it is deemed to control the BEE entity, Ponahalo, which holds the remaining 26%. The Group's effective interest in DBCM is 85%.
(5) The Group's effective interest in Anglo American Platinum is 79.2% (2021: 79.2%), which excludes shares issued as part of a community empowerment deal.
(6) Amandelbult complex comprises Tumela mine and Dishaba mine.
(7) On 31 January 2022, Anglo American Platinum agreed to dispose of its 50% interest in the Kroondal pool-and-share agreement and Marikana pool-and-share agreement to Sibanye-Stillwater Limited, the other 50% owner. The completion of the disposal is subject to conditions precedent to be met in 2024.
(8) Anglo American Platinum disposed of its 49% interest in Bokoni during the year.
(9) Sishen and Kolomela are fully owned by Sishen Iron Ore Company Proprietary Limited (SIOC). Kumba Iron Ore Limited has a 76.3% interest in SIOC (2021: 76.3%). Including shares held by Kumba Iron Ore in relation to its own employee share schemes, the Group's effective interest in Kumba Iron Ore is 69.97% (2021: 69.97%). The Group's effective interest in SIOC is 53.4% (2021: 53.4%).
(10) Ferroport owns and operates the iron ore handling and shipping facilities at the port of Açu.
(11) These entities have a 30 June year end.
(12) The Group's effective interest in the Jellinbah operation is 23.3%.
(13) Samancor is comprised of investments in Groote Eylandt Mining Company Proprietary Limited, Samancor Marketing Pte. Limited and Samancor Holdings Proprietary Limited. Samancor Holdings Proprietary Limited is the parent company of Hotazel Manganese Mines (HMM) and the Metalloys Smelter. BEE shareholders hold a 26% interest in HMM and therefore the Group's effective ownership interest in HMM is 29.6%.
(14) The sale of the Group's 33.3% shareholding in Cerrejón was agreed on 28 June 2021 and completed in January 2022.

Accounting judgements

Joint arrangements

Joint arrangements are classified as joint operations or joint ventures according to the rights and obligations of the parties, as described in note 39I. Judgement is required in determining this classification through an evaluation of the facts and circumstances arising from each individual arrangement. When a joint arrangement has been structured through a separate vehicle, consideration has been given to the legal form of the separate vehicle, the terms of the contractual arrangement and, when relevant, other facts and circumstances. When the activities of an arrangement are primarily designed for the provision of output to the parties and, the parties are substantially the only source of cash flows contributing to the continuity of the operations of the arrangement, this indicates that the parties to the arrangement have rights to the assets and obligations for the liabilities. Certain joint arrangements that are structured through separate vehicles including Collahuasi, Debswana and Namdeb Holdings are accounted for as joint operations. These arrangements are primarily designed for the provision of output to the parties sharing joint control, indicating that the parties have rights to substantially all the economic benefits of the assets. The liabilities of the arrangements are in substance satisfied by cash flows received from the parties; this dependence indicates that the parties effectively have obligations for the liabilities. It is primarily these facts and circumstances that give rise to the classification as joint operations.

Group structure

35. Related undertakings of the Group

The Group consists of the Parent Company, Anglo American plc, incorporated in the United Kingdom and its subsidiaries, joint operations, joint ventures and associates. In accordance with Section 409 of the Companies Act 2006 a full list of related undertakings, the country of incorporation and the effective percentage of equity owned as at 31 December 2022 is disclosed below. Unless otherwise disclosed all entities with an indirect equity holding of greater than 51% are considered subsidiary undertakings. See note 34 for the Group's principal subsidiaries, joint operations, joint ventures and associates.

As disclosed in the Group's published tax strategy, the Group does not use tax haven jurisdictions to manage taxes. There remain a small number of undertakings in the Group which are registered in tax haven jurisdictions and have remained so for other business purposes. The Group is well advanced in our strategy to remove legacy undertakings from tax haven jurisdictions, and, where possible, these entities are resident for tax purposes in the United Kingdom regardless of where they are registered. Where the tax residency of a related undertaking is different from its country of incorporation, this is referenced in the notes to the list below.

See page 283 for footnotes.

Country of incorporation[1][2]	Name of undertaking	Percentage of equity owned[3]	Share class	Registered address
Angola	Anglo American Discovery (Cunene) - Prospeccao E Exploracao Mineira (SU), LDA	100%	Quota	Edifício Kilamba, 20.º Andar, Avenida 4 de Fevereiro, Marginal de Luanda, Luanda
Angola	Anglo American Discovery (Moxico) - Prospeccao E Exploracao Mineira (SU), LDA	100%	Quota	Edifício Kilamba, 20.º Andar, Avenida 4 de Fevereiro, Marginal de Luanda, Luanda
Angola	De Beers Angola Holdings SARL	85%	Quota	Rua Rainha Ginga 87, 9th Floor, Luanda
Angola	De Beers Angola Lunda Norte, Limitada	77%	Quota	Rua Rainha Ginga 87, 9th Floor, Luanda
Angola	De Beers Angola Lunda Sul, Limitada	77%	Quota	Rua Rainha Ginga 87, 9th Floor, Luanda
Argentina	Minera Anglo American Argentina S.A.U	100%	Ordinary Nominative Non-Endorsable	Esteban Echeverría 1776, Piso 2, Godoy Cruz, Mendoza
Australia	Anglo American Australia Finance Limited	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo American Australia Holdings Pty Limited	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo American Australia Limited	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo American Energy Solutions (Australia) Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo American Exploration (Australia) Pty Limited	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo American Steelmaking Coal Assets Eastern Australia Limited	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo American Steelmaking Coal Assets Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo American Steelmaking Coal Finance Limited	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo American Steelmaking Coal Holdings Limited	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo American Steelmaking Coal Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo Coal (Archveyor Management) Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo Coal (Capcoal Management) Pty Limited	100%	A Class Ordinary B Class Ordinary C Class Ordinary D Class Ordinary E Class Ordinary F Class Ordinary G Class Ordinary H Class Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo Coal (Dawson Management) Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo Coal (Dawson Services) Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo Coal (Dawson South Management) Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo Coal (Dawson South) Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000

Group structure

35. Related undertakings of the Group continued

Country of incorporation[(1)(2)]	Name of undertaking	Percentage of equity owned[(3)]	Share class	Registered address
See page 283 for footnotes.				
Australia	Anglo Coal (Dawson) Holdings Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo Coal (Dawson) Limited	100%	Limited by guarantee	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo Coal (German Creek) Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo Coal (Grasstree Management) Pty Limited	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo Coal (Grosvenor Management) Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo Coal (Grosvenor) Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo Coal (Jellinbah) Holdings Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo Coal (Moranbah North Management) Pty Limited	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo Coal (Roper Creek) Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo Coal (Theodore South) Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Anglo Operations (Australia) Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Bowen Basin Coal Pty. Ltd.	23%	Ordinary	Level 7, 12 Creek Street, Brisbane QLD 4000
Australia	Capricorn Coal Developments Joint Venture	70%	N/A	N/A
Australia	Dalrymple Bay Coal Terminal Pty. Ltd.	25%	Ordinary	Martin Armstrong Drive, Hay Point QLD 4740
Australia	Dawson Coal Processing Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Dawson Highwall Mining Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Dawson Joint Venture	51%	N/A	N/A
Australia	Dawson Sales Pty Ltd	51%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Dawson South Exploration Joint Venture	51%	N/A	N/A
Australia	Dawson South Joint Venture	51%	N/A	N/A
Australia	Dawson South Sales Pty Ltd	51%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	De Beers Australia Exploration Limited	85%	Fully paid ordinary shares	23 North Street, Mount Lawley, WA 6050
Australia	German Creek Coal Pty. Limited	70%	B Class Ordinary C Class Ordinary D Class Ordinary E Class Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Groote Eylandt Mining Company Proprietary Limited	40%	Ordinary	Level 35, 108 St Georges Terrace, Perth WA 6000
Australia	Jellinbah Group Pty Ltd	33%	Ordinary A Class Ordinary E Class Ordinary F Class Ordinary	Level 7, 12 Creek Street, Brisbane QLD 4000
Australia	Jellinbah Joint Venture	23%	N/A	N/A
Australia	Jellinbah Mining Pty Ltd	33%	Ordinary	Level 7, 12 Creek Street, Brisbane QLD 4000
Australia	Jellinbah Resources Pty Ltd	33%	Ordinary	Level 7, 12 Creek Street, Brisbane QLD 4000
Australia	Jena Pty. Limited	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Jena Unit Trust	100%	N/A	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	JG Land Company Pty Ltd	23%	Ordinary	Level 7, 12 Creek Street, Brisbane QLD 4000
Australia	Lake Vermont Joint Venture	23%	N/A	N/A
Australia	Lake Vermont Marketing Pty Ltd	33%	Ordinary	Level 7, 12 Creek Street, Brisbane QLD 4000
Australia	Lake Vermont Resources Pty Ltd	33%	Ordinary	Level 7, 12 Creek Street, Brisbane QLD 4000
Australia	Monash Energy Coal Limited	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Moranbah North Coal (No2) Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Moranbah North Coal (Sales) Pty Ltd	88%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Moranbah North Coal Joint Venture	88%	N/A	N/A
Australia	Moranbah North Coal Pty Ltd	100%	Ordinary	Level 11, 201 Charlotte Street, Brisbane QLD 4000
Australia	Moranbah South Exploration Joint Venture	50%	N/A	N/A
Australia	QCMM (Lake Vermont Holdings) Pty Ltd	33%	Ordinary	Level 7, 12 Creek Street, Brisbane QLD 4000

Group structure

35. Related undertakings of the Group continued

Country of incorporation[(1)(2)]	Name of undertaking	Percentage of equity owned[(3)]	Share class	Registered address
See page 283 for footnotes.				
Australia	QCMM Finance Pty Ltd	33%	Ordinary	Level 7, 12 Creek Street, Brisbane QLD 4000
Australia	Roper Creek Joint Venture	86%	N/A	N/A
Australia	Theodore South Joint Venture	51%	N/A	N/A
Australia	Tremell Pty. Ltd.	33%	Ordinary	Level 7, 12 Creek Street, Brisbane QLD 4000
Belgium	De Beers Auction Sales Belgium NV	85%	Ordinary	21 Schupstraat, 2018 Antwerp
Belgium	International Institute of Diamond Grading and Research (Belgium) NV	85%	Ordinary	21 Schupstraat, 2018 Antwerp
Bermuda	Coromin Insurance Limited	100%	Common	Power House, 7 Par-la-Ville Road, Hamilton
Bermuda	Holdac Insurance Limited	100%	Common	Power House, 7 Par-la-Ville Road, Hamilton
Botswana	Ambase Prospecting (Botswana) (Pty) Ltd	100%	Ordinary	Plot 32, Unit G3 Victoria House, Independence Avenue, Gaborone, Ad54 Acj
Botswana	Anglo American Corporation Botswana (Services) Limited	100%	Ordinary	Plot 67977,Fairground Office Park, Gaborone
Botswana	Broadhurst Primary School (Proprietary) Limited	45%	Ordinary	Plot 113, Unit 28 Kgale Mews, Gaborone International Finance Park, Gaborone
Botswana	De Beers Global Sightholder Sales (Pty) Ltd	85%	Ordinary	3rd Floor, DTCB Building,Plot 63016, Block 8, Airport Road, Gaborone
Botswana	De Beers Holdings Botswana (Pty) Ltd	85%	Ordinary	5th Floor, Debswana House, Main Mall, Gaborone
Botswana	Debswana Diamond Company (Proprietary) Limited[(4)]	43%	Ordinary	First Floor Debswana Corporate Centre, Plot 64288 Airport Road, Block 8, Gaborone
Botswana	Debswana Wellness Fund	43%	N/A	First Floor Debswana Corporate Centre, Plot 64288 Airport Road, Block 8, Gaborone
Botswana	Diamond Trading Company Botswana (Pty) Ltd	43%	Ordinary	Plot 63016,Airport Road, Block 8, Gaborone
Botswana	Naledi Mining Services Company (Proprietary) Limited	43%	Ordinary	First Floor Debswana Corporate Centre, Plot 64288 Airport Road, Block 8, Gaborone
Botswana	Sesiro Insurance Company (Proprietary) Limited	43%	Ordinary	First Floor Debswana Corporate Centre, Plot 64288 Airport Road, Block 8, Gaborone
Botswana	The Diamond Trust	21%	N/A	Debswana House, The Mall, Gaborone
Botswana	Tokafala (Proprietary) Limited	57%	Ordinary	3rd Floor, DTCB Building, Plot 63016, Block 8, Airport Road, Gaborone
Brazil	Anglo American Investimentos - Minério de Ferro Ltda.	100%	Membership interest	Rua Maria Luiza Santiago, nº 200, 16º andar, sala 1603, bairro Santa Lúcia, CEP 30360-740, Belo Horizonte, Minas Gerais
Brazil	Anglo American Minério de Ferro Brasil S.A	100%	Ordinary	Rua Maria Luiza Santiago, nº 200, 16º andar, sala 1601, bairro Santa Lucia, CEP 30360-740, Belo Horizonte, Minas Gerais
Brazil	Anglo American Niquel Brasil Ltda.	100%	Membership interest	Rua Maria Luiza Santiago, nº. 200, 8º andar (parte), Santa Lúcia, CEP 30360-740, Belo Horizonte, Minas Gerais
Brazil	Anglo Ferrous Brazil Participações S.A.	100%	Ordinary	Rua Maria Luiza Santiago, nº 200, 16º andar (parte), bairro Santa Lúcia, CEP 30360-740, Belo Horizonte, Minas Gerais
Brazil	Ferroport Logística Comercial Exportadora S.A.	50%	Ordinary	Rua da Passagem, nº 123, 11º andar, sala 1101, Botafogo, CEP 22290-030, Rio de Janeiro/RJ
Brazil	GD Empreendimentos Imobiliários S.A.	33%	Ordinary Preference	Rua Visconde de Ouro Preto, nº 5, 11º andar (parte), Botafogo, Rio de Janeiro/RJ
Brazil	Guaporé Mineração Ltda.	49%	Membership interest	Rua Maria Luiza Santiago, nº. 200, 8º andar (parte), bairro Santa Lúcia, CEP 30.360-740, Belo Horizonte, Minas Gerais
Brazil	Mineração Tanagra Ltda.	49%	Membership interest	Rua Maria Luiza Santiago, nº. 200, 20º andar (parte), bairro Santa Lúcia, CEP 30.360-740, Belo Horizonte, Minas Gerais
Brazil	Ventos de Santa Alice Energias Renováveis S/A	98%	Ordinary	Rodovia Doutor Mendel Steinbruch, nº 10.800, sala 236, Distrito Industrial, Maracanaú/CE, CEP 61939-906

Group structure

35. Related undertakings of the Group continued

Country of incorporation[1][2]	Name of undertaking	Percentage of equity owned[3]	Share class	Registered address
See page 283 for footnotes.				
Brazil	Ventos de Santa Alice Holding S/A	98%	Ordinary	Rodovia Doutor Mendel Steinbruch, nº 10.800, sala 241, Distrito Industrial, Maracanaú/CE, CEP 61939-906
Brazil	Ventos de Santa Sara Energias Renováveis S/A	98%	Ordinary	Rodovia Doutor Mendel Steinbruch, nº 10.800, sala 226, Distrito Industrial, Maracanaú/CE, CEP 61939-906
Brazil	Ventos de Santa Sara Holding S/A	98%	Ordinary	Rodovia Doutor Mendel Steinbruch, nº 10.800, sala 246, Distrito Industrial, Maracanaú/CE, CEP 61939-906
Brazil	Ventos de São Felipe Energias Renováveis S/A	98%	Ordinary	Rodovia Doutor Mendel Steinbruch, nº 10.800, sala 290, Distrito Industrial, Maracanaú/CE, CEP 61939-906
Brazil	Ventos de São Felipe Holding S/A	98%	Ordinary	Rodovia Doutor Mendel Steinbruch, nº 10.800, sala 244, Distrito Industrial, Maracanaú/CE, CEP 61939-906
British Virgin Islands	De Beers Centenary Angola Properties Ltd	85%	Ordinary	Craigmuir Chambers, Road Town, Tortola, VG1110
British Virgin Islands	Delibes Holdings Limited[5]	85%	A Ordinary B Ordinary	Craigmuir Chambers, Road Town, Tortola, VG1110
British Virgin Islands	Loma de Niquel Holdings Limited[5]	94%	Class A1 Class A2 Class B Class C	Craigmuir Chambers, Road Town, Tortola, VG1110
Canada	0912055 B.C. Ltd.	100%	Common	c/o McCarthy Tetrault, Suite 2400, 745 Thurlow Street, Vancouver BC V6E 0C5
Canada	Anglo American Exploration (Canada) Ltd.	100%	Common Class B Preference Class C Preference	c/o Anglo American Exploration (Canada) Ltd., Suite 620 – 650 West Georgia Street, Vancouver, BC, V6B 4N8
Canada	Auspotash Corporation	100%	N/A	333 Bay Street, Suite 2400, Toronto, Ontario, M5H
Canada	Central Ecuador Holdings Ltd.	70%	Class A Common Class B Common	c/o Borden Ladner Gervais, 1200 Waterfront Centre, 200 Burrard Street, Vancouver, British Columbia, V6C 3L6
Canada	De Beers Canada Holdings Inc.	85%	A Ordinary B Ordinary	2400-333 Bay St, Toronto ON, M5H2T6
Canada	De Beers Canada Inc.	85%	Preference	2400-333 Bay St, Toronto ON, M5H2T6
Canada	Lion Battery Technologies Inc.	36%	Class A Preferred	Suite 2600, Three Bentall Centre, 595 Burrard Street, P.O. Box 49314, Vancouver Bc V7x 1l3
Canada	Peace River Coal Inc.	100%	Common Class A Non-Voting Preference	c/o McCarthy Tetrault, Suite 2400, 745 Thurlow Street, Vancouver BC V6E 0C5
Canada	Peregrine Diamonds Ltd	85%	Common Preference	2400-333 Bay St, Toronto ON, M5H2T6
Chile	Anglo American Chile Ltda	100%	Ordinary	Isidora Goyenechea 2800, piso 46, Las Condes, Santiago
Chile	Anglo American Copper Finance SpA	100%	Ordinary	Isidora Goyenechea 2800, piso 46, Las Condes, Santiago
Chile	Anglo American Marketing Chile SpA	100%	Ordinary	Torre Titanium, 2800 Isidora Goyenechea, piso 46, Las Condes, Santiago 7550647
Chile	Anglo American Sur S.A.	50%	Ordinary	Isidora Goyenechea 2800, piso 46, Las Condes, Santiago
Chile	Compañía Minera Dona Ines De Collahuasi SCM	44%	Ordinary	Avda Andres Bello 2687, P 11 Edif. el Pacifico, Las Condes, Santiago, Región Metropolitana.
Chile	Compañía Minera Westwall S.C.M	50%	Ordinary	Isidora Goyenechea 2800, piso 46, Las Condes, Santiago
Chile	Inversiones Anglo American Norte SpA	100%	Ordinary	Isidora Goyenechea 2800, piso 46, Las Condes, Santiago
Chile	Inversiones Anglo American Sur SpA	100%	Ordinary	Isidora Goyenechea 2800, piso 46, Las Condes, Santiago
Chile	Inversiones Minorco Chile SpA	100%	Ordinary	Isidora Goyenechea 2800, piso 46, Las Condes, Santiago

Group structure

35. Related undertakings of the Group continued

Country of incorporation[(1)(2)]	Name of undertaking	Percentage of equity owned[(3)]	Share class	Registered address
See page 283 for footnotes.				
China	Anglo American Resources Trading (China) Co. Ltd.	100%	Equity interest	Units 01, 02A, 07A, 08, Floor 32, No. 1198 Century Avenue, Pudong New Area, Shanghai
China	De Beers Jewellers Commercial (Shanghai) Co., Ltd	85%	Equity interest	Suite 4607, The Park Place, No.1601 Nan Jing West Road, Shanghai, PRC
China	Element Six Trading (Shanghai) Co., Ltd	51%	Equity interest	Room 807, Floor 8, No 390-408 East Beijing Road, Huangpu District, Shanghai
China	Forevermark Marketing (Shanghai) Company Limited	85%	Equity interest	Suite 4601, 4602 and 4608, The Park Place, No.1601 Nan Jing West Road, Shanghai, PRC
China	Platinum Guild International (Shanghai) Co., Limited	78%	Ordinary	Room 601, L'avenue,99 XianXia Road, Shanghai 200051
China	Suzhou Yibai Environmental Protection Technologies Co., Ltd	24%	N/A	No. 558, Fenhu Avenue, Lili Town, Wujiang District, Suzhou, PRC
Colombia	Anglo American Colombia Exploration S.A.	100%	Ordinary	Carrera 7 No. 71-52 Torre B, Piso 9, Bogotá, Colombia
Democratic Republic of Congo	Ambase Exploration Africa (DRC) SPRL	100%	Ordinary	c/o KPMG, 500b. Av. Mpala/Quartier Golf, Lubumbashi
Ecuador	Anglo American Ecuador S.A.	100%	Ordinary	Av. Patria E4-69 y Av. Amazonas, Cofiec, 16th Floor
Ecuador	Central Ecuador EC-CT S.A.	70%	Ordinary	Av. Patria E4-69 y Av. Amazonas, Edif.COFIEC, piso 17, Quito
Finland	AA Sakatti Mining Oy	100%	Ordinary	AA Sakatti Mining Oy, Tuohiaavantie 2, 99600, Sodankylä
Gabon	Samancor Gabon SA	40%	Ordinary	C/- Fiduge SARL, Battery IV, Soraya Building, PO Box 15.950, Liberville
Germany	Element Six GmbH	51%	Ordinary	Staedeweg 18, 36151, Burghaun
Germany	Kupfer Copper Germany GmbH	80%	Ordinary	c/o Simmons & Simmons LLP, Koenigsalle 2a, 40212, Dusseldorf
Germany	Anglo American Exploration Germnay GmbH	100%	Ordinary	c/o Simmons & Simmons LLP, Koenigsalle 2a, 40212, Dusseldorf
Greenland	NAIP West Exploration A/S	25%	Ordinary	Issortarfimmut 6, 3905 Nuussuaq
Hong Kong	De Beers Auction Sales Holdings Limited	85%	Ordinary	RM 02B&03-06 26/F, Kinwick Centre, 32 Hollywood Road Central
Hong Kong	De Beers Jewellers (Hong Kong) Limited	85%	Ordinary	RM 02B&03-06 26/F, Kinwick Centre, 32 Hollywood Road Central
Hong Kong	Forevermark Limited	85%	Ordinary	RM 02B&03-06 26/F, Kinwick Centre, 32 Hollywood Road Central
Hong Kong	Platinum Guild International (Hong Kong) Limied	78%	Ordinary	Suites 2901-2, Global Trade Square, No.21 Wong Chuk Hang Road
India	Anglo American Crop Nutrients (India) Private Limited	100%	Ordinary	Regus Elegance, 2F, Elegance, Jasola Districe Centre Old Mathura Road, New Delhi, 110025
India	Anglo American Services (India) Private Limited	100%	Equity	A- 1/292, Janakpuri, New Delhi - 110058
India	De Beers India Private Ltd	85%	Ordinary Equity Preference Equity	601, 6th floor, TCG Financial Centre, C -53, G Block, Bandra Kurla Complex, Bandrar (East), Mumbai - 400 058
India	Hindustan Diamond Company Private Limited	43%	Ordinary equity	Office No. 12, 14th Floor, Navjivan Society Building, No.3, Lamington Road, Mumbai - 400 008
India	Platinum Guild India Private Limited	78%	Ordinary	Notan Classic, 3rd Floor, 114 Turner Road, Bandra West, Mumbai 400 050
Indonesia	PT Anglo American Indonesia	100%	Ordinary	Pondok Indah Office Tower 3, 17th Floor, Jl. Sultan Iskandar Muda, Kav. 5-TA RT.004/RW.003 Pondok Indah, Jakarta Selatan 12310
Indonesia	PT Minorco Services Indonesia	100%	Ordinary	Pondok Indah Office Tower 3, 17th Floor, Jl. Sultan Iskandar Muda, Kav. 5-TA RT.004/RW.003 Pondok Indah, Jakarta Selatan 12310
Ireland	Coromin Insurance (Ireland) DAC	100%	Ordinary	4th Floor, 25/28 Adelaide Road, Dublin D02 RY98

Group structure

35. Related undertakings of the Group continued

Country of incorporation[(1)(2)]	Name of undertaking	Percentage of equity owned[(3)]	Share class	Registered address
Ireland	Element Six (Holdings) Limited	51%	Ordinary	Shannon Airport, Shannon, Co.Clare
Ireland	Element Six (Trade Marks) Limited	51%	Ordinary A Ordinary	Shannon Airport, Shannon, Co.Clare
Ireland	Element Six Abrasives Treasury Limited	51%	Ordinary	Shannon Airport, Shannon, Co.Clare
Ireland	Element Six Limited	51%	Ordinary	Shannon Airport, Shannon, Co.Clare
Ireland	Element Six Treasury Limited	85%	Ordinary	Shannon Airport, Shannon, Co.Clare
Isle of Man	Element Six (Legacy Pensions) Limited	85%	Ordinary A Ordinary	1st Floor, 18-20 North Quay, Douglas, IM1 4LE
Israel	De Beers Auction Sales Israel Ltd	85%	Ordinary	11th Floor, Yahalom (Diamond) Building, 21 Tuval Street Ramat Gan 5252236
Italy	Forevermark Italy S.R.L.	85%	Ordinary	Via Burlamacchi Francesco 14, 20135, Milan
Japan	De Beers Jewellers Japan K.K.	85%	Common stock	New Otani Garden Court 7th Floor, 4-1 Kioi-cho, Chiyoda-ku, Tokyo
Japan	De Beers K.K.	50%	Common stock	New Otani Garden Court, 7th Floor, 4-1 Kioi-cho, Chiyoda-ku, Tokyo
Japan	Element Six Limited	51%	Ordinary	9F PMO Hatchobori, 3-22-13 Hatchobori, Chuo-ku, Tokyo, 104
Japan	Forevermark KK	85%	Common stock	New Otani Garden Court, 7th Floor, 4-1 Kioi-cho, Chiyoda-ku, Tokyo
Japan	Furuya Eco-Front Technology Co., Ltd	31%	Common	MSB-21 Minami Otsuka Building, 2-37-5 Minami Otsuka, Toshima-ku, Tokyo
Japan	PGI KK	78%	Ordinary	Imperial Hotel Tower 17F, 1-1-1 Uchisaiwai-cho, Chiyoda-ku,Tokyo, 100-8575
Jersey	A.R.H. Investments Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	A.R.H. Limited[(5)]	100%	Class A Class B Class C	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Ambras Holdings Limited[(5)(6)]	100%	Repurchaseable Class A Ordinary Repurchaseable Class B Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Ammin Coal Holdings Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo African Exploration Holdings Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo American Amcoll UK Ltd [(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo American Buttercup Company Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo American Chile Investments UK Ltd[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo American Clarent UK Ltd[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo American Corporation de Chile Holdings Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo American Exploration Colombia Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo American Exploration Overseas Holdings Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo American Finland Holdings 2 Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo American Midway Investment Limited[(5)]	100%	A Shares B Shares	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo American Overseas Limited[(5)(7)]	100%	Repurchaseable Class A Ordinary Repurchaseable Class B Ordinary Repurchaseable Class C Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG

See page 283 for footnotes.

Group structure

35. Related undertakings of the Group continued

See page 283 for footnotes.

Country of incorporation[(1)(2)]	Name of undertaking	Percentage of equity owned[(3)]	Share class	Registered address
Jersey	Anglo Australia Investments Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo Diamond Investments Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo Iron Ore Investments Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo Operations (International) Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo Peru Investments Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo Quellaveco Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo South American Investments Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Anglo Venezuela Investments Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Aval Holdings Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Cheviot Holdings Limited[(5)]	85%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	De Beers Centenary Limited[(5)]	85%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	De Beers Exploration Holdings Limited[(5)]	85%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	De Beers Holdings Investments Limited[(5)]	85%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	De Beers Investments plc[(5)]	85%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	De Beers plc[(5)]	85%	A Ordinary B Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Highbirch Limited[(5)]	100%	Class A Class B	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Kumba International Trading Limited[(5)]	53%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Minorco Overseas Holdings Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Minorco Peru Holdings Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Minpress Investments Limited[(5)]	100%	Ordinary	3rd Floor, 44 Esplanade, St Helier, JE4 9WG
Jersey	Sirius Minerals Finance Limited[(5)]	100%	Ordinary Preference	47 Esplanade, St Helier, JE1 0BD
Jersey	Sirius Minerals Finance No.2 Limited[(5)]	100%	Ordinary Preference	47 Esplanade, St Helier, JE1 0BD
Luxembourg	Kumba Iron Ore Holdings Sarl	53%	Ordinary	58 rue Charles Martel, L-2134
Macau	De Beers Jewellers (Macau) Company Limited	85%	Ordinary	Avenida da Praia Grande No. 409, China Law Building 16/F – B79
Madagascar	Societe Civille De Prospection De Nickel A Madagascar	32%	N/A	Unknown
Mauritius	Anglo American International Limited[(5)]	100%	Normal Class A Ordinary Ordinary-B Repurchaseable Class A Ordinary	c/o AXIS Fiduciary Ltd, 2nd Floor, The AXIS, 26 Bank Street, Cybercity Ebene, 72201
Mexico	Anglo American Mexico S.A. de C.V.	100%	Common	c/o Sanchez Mejorada, Velasco y Ribe, S.C. Paseo de la Reforma No. 450, Col. Lomas de Chapultepec, 11000, Ciudad de Mexico
Mexico	Servicios Anglo American Mexico S.A. de C.V.	100%	Common	c/o Sanchez Mejorada, Velasco y Ribe, S.C. Paseo de la Reforma No. 450, Col. Lomas de Chapultepec, 11000, Ciudad de Mexico
Mozambique	Anglo American Corporation Mocambique Servicos Limitada	100%	Quota	PricewaterhouseCoopers, Ltda. Avenida Vladimir Lenine, No 174, 4o andar. Edifício Millennium Park Maputo
Namibia	Ambase Prospecting (Namibia) (Pty) Ltd	100%	Ordinary	c/o SGA, 24 Orban Street, Klein Windhoek, Windhoek
Namibia	De Beers Marine Namibia (Pty) Ltd	43%	Ordinary	4th Floor, Namdeb Centre, 10 Dr Frans, Indongo Street, Windhoek
Namibia	De Beers Namibia Holdings (Pty) Ltd	85%	Ordinary	6th floor, Namdeb Centre, 10 Dr Frans, Indongo Street, Windhoek
Namibia	Debmarine Namdeb Foundation	43%	N/A	10th Floor, Namdeb Centre, 10 Dr Frans Indongo Street, Windhoek

Group structure

35. Related undertakings of the Group continued

Country of incorporation[(1)(2)]	Name of undertaking	Percentage of equity owned[(3)]	Share class	Registered address
See page 283 for footnotes.				
Namibia	DTC Valuations Namibia (Pty) Ltd	85%	Ordinary	4th Floor, Namdeb Centre, 10 Dr Frans, Indongo Street, Windhoek
Namibia	Exclusive Properties (Pty) Ltd	43%	Ordinary	10th Floor, Namdeb Centre, 10 Dr Frans Indongo Street, Windhoek
Namibia	Longboat Trading (Pty) Ltd	100%	Ordinary	24 Orban Street, Klein Windhoek, Windhoek
Namibia	Mamora Mines & Estates Limited	28%	Ordinary	10th Floor, Namdeb Centre, 10 Dr Frans Indongo Street, Windhoek
Namibia	Namdeb Diamond Corporation (Pty) Ltd	43%	Ordinary	10th Floor, Namdeb Centre, 10 Dr Frans Indongo Street, Windhoek
Namibia	Namdeb Holdings (Pty) Ltd	43%	Ordinary	10th Floor, Namdeb Centre, 10 Dr Frans Indongo Street, Windhoek
Namibia	Namdeb Properties (Pty) Ltd	43%	Ordinary	10th Floor, Namdeb Centre, 10 Dr Frans Indongo Street, Windhoek
Namibia	Namibia Diamond Trading Company (Pty) Ltd	43%	Ordinary	9th Floor, Namdeb Centre, 10 Dr Frans Indongo Street, Windhoek
Namibia	OMDis Town Transformation Agency	43%	N/A	Unit 6, Gold Street Business Park, Gold Street, Prosperita, Windhoek
Namibia	Oranjemund Private Hospital (Proprietary) Limited	43%	Ordinary	10th Floor, Namdeb Centre, 10 Dr Frans Indongo Street, Windhoek
Namibia	Oranjemund Town Management Company (Pty) Ltd	43%	Ordinary	10th Floor, Namdeb Centre, 10 Dr Frans Indongo Street, Windhoek
Namibia	Namdeb Hospital Pharmacy (Pty) Ltd	43%	Ordinary	10th Floor, Namdeb Centre, 10 Dr Frans Indongo Street, Windhoek
Netherlands	Anglo American (TIH) B.V.[(5)]	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA, United Kingdom
Netherlands	Anglo American Exploration B.V.[(5)]	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA, United Kingdom
Netherlands	Anglo American Exploration (Philippines) B.V.[(5)]	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA, United Kingdom
Netherlands	Anglo American International B.V.[(5)]	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA, United Kingdom
Netherlands	Anglo American Netherlands B.V.[(5)]	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA, United Kingdom
Netherlands	Anglo Operations (Netherlands) B.V.[(5)]	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA, United Kingdom
Netherlands	Element Six N.V.	85%	Ordinary	De Nieuwe Erven 2, 5431 NT, Cuijk
Netherlands	Erabas B.V. [(5)]	77%	Ordinary	17 Charterhouse Street, London, EC1N 6RA, United Kingdom
Netherlands	Loma de Niquel Holdings B.V.[(5)]	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA, United Kingdom
Netherlands	Minorco Exploration (Indonesia) B.V.[(5)]	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA, United Kingdom
Papua New Guinea	Anglo American (Star Mountain) Limited	100%	Ordinary	c/o Pacific Legal Group Lawyers, Ground Floor, Iaraguma Haus, Lot 30 Section 38 Off Cameron Road, Gordons, National Capital District
Papua New Guinea	Anglo American Exploration (PNG) Limited	100%	Ordinary	c/o Pacific Legal Group Lawyers, Ground Floor, Iaraguma Haus, Lot 30 Section 38 Off Cameron Road, Gordons, National Capital District
Peru	Anglo American Marketing Peru S.A.	100%	Ordinary	Calle Esquilache 371 Piso 10 San Isidro, Lima 27
Peru	Anglo American Peru S.A.	100%	Ordinary	Calle Esquilache 371 Piso 10 San Isidro, Lima 27
Peru	Anglo American Quellaveco S.A.	60%	Class A Ordinary Class B Non-Voting	Calle Esquilache 371 Piso 10 San Isidro, Lima 27
Peru	Anglo American Servicios Perú S.A. en Liquidación	100%	Ordinary	Calle Esquilache 371 Piso 10 San Isidro, Lima 27

Group structure

35. Related undertakings of the Group continued

Country of incorporation[(1)(2)]	Name of undertaking	Percentage of equity owned[(3)]	Share class	Registered address
See page 283 for footnotes.				
Peru	Asociación Michiquillay en Liquidación	100%	N/A	Calle Esquilache 371 Piso 10 San Isidro, Lima 27
Peru	Asociación Quellaveco	100%	N/A	Calle Esquilache 371 Piso 10 San Isidro, Lima 27
Peru	Cobre del Norte S.A.	100%	Ordinary	Calle Esquilache 371 Piso 10 San Isidro, Lima 27
Philippines	Anglo American Exploration (Philippines) Inc.	100%	Ordinary	c/o SyCipLaw Center, 105 Paseo de Roxas, Makati City 1226, Metro Manila
Republic of North Macedonia	Anglo American Exploration West Tetyan Skopje	100%	Ordinary	Str. Risto Ravanovski no. 13A, 1000, Skopje, Municipality of Karpos
Sierra Leone	Gemfair (SL) Limited	85%	Ordinary	31 Lightfoot Boston Street, Freetown
Singapore	Anglo American Crop Nutrients (Singapore) Pte Ltd	100%	Ordinary	80 Robinson Road, #02-00, 068898
Singapore	Anglo American Shipping Pte.Limited	100%	Ordinary	10 Collyer Quay, #38-00 Ocean Financial Centre, 049315
Singapore	De Beers Auction Sales Singapore Pte. Ltd.	85%	Ordinary	10 Collyer Quay, #03-04 Ocean Financial Centre, 049315
Singapore	Kumba Singapore Pte. Ltd.	53%	Ordinary	10 Collyer Quay, #38-00 Ocean Financial Centre, 049315
Singapore	MR Iron Ore Marketing Services Pte.Ltd.	50%	Ordinary	10 Collyer Quay, #38-00 Ocean Financial Centre, 049315
Singapore	Samancor Marketing Pte.Ltd.	40%	Ordinary	16 Collyer Quay #18-00 Collyer Quay Centre, 049318
Singapore	Sulista Forte Pte. Ltd.	100%	Ordinary	77 Robinson Road, #13-00 Robinson 77, 068896
South Africa	Peglerae Hospital (Pty) Ltd	31%	Ordinary	21 Oxford Manor, Rudd & Chaplin Roads, Illovo, Johannesburg, 2196
South Africa	AEF Mining Services (Pty) Ltd	25%	Ordinary	Zommerlust Building, Rietbok Road, Kathu, Northern Cape, 8446
South Africa	African Pipe Industries North (Pty) Ltd	40%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Amaprop Townships Ltd	100%	Ordinary	61 Katherine Street, Sandton, 2196
South Africa	Ambase Investment Africa (Botswana) (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Ambase Investment Africa (DRC) (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Ambase Investment Africa (Namibia) (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Ambase Investment Africa (Tanzania) (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Ambase Investment Africa (Zambia) (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo American Corporation of South Africa (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo American EMEA Shared Services (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo American Farms (Pty) Ltd	100%	Ordinary	Vergelegen Wine Farm, Lourensford Road, Somerset West, 7130
South Africa	Anglo American Farms Investment Holdings (Pty) Ltd	100%	Ordinary	Vergelegen Wine Farm, Lourensford Road, Somerset West, 7130
South Africa	Anglo American Group Employee Shareholder Nominees (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo American Marketing South Africa	77%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo American Platinum Limited	79%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo American Properties Ltd	100%	Ordinary	61 Katherine Street, Sandton, 2196

Group structure

35. Related undertakings of the Group continued

Country of incorporation[(1)(2)]	Name of undertaking	Percentage of equity owned[(3)]	Share class	Registered address
See page 283 for footnotes.				
South Africa	Anglo American Prospecting Services (Pty) Ltd	100%	Ordinary	55 Marshall Street, Johannesburg, 2001
South Africa	Anglo American SA Finance Proprietary Limited	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo American Sebenza Fund (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo American SEFA Mining Fund (Pty) Ltd	50%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo American South Africa Investments Proprietary Limited	100%	Ordinary and Preference	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo American South Africa Proprietary Limited	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo American Zimele (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo American Zimele Community Fund (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo American Zimele Loan Fund (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo Coal Investment Africa (Botswana) (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo Coal Investment Botswana (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo Corporate Enterprises (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo Corporate Services South Africa Proprietary Limited	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo Platinum Management Services (Pty) Ltd	79%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo South Africa (Pty) Ltd	100%	Ordinary Redeemable Preference	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anglo South Africa Capital (Pty) Ltd	100%	Ordinary Redeemable Preference	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Anseld Holdings Proprietary Limited	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Atomatic Trading (Pty) Limited	57%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Balgo Nominees (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Blinkwater Farms 244KR (Pty) Ltd	77%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Damelin Emalahleni (Pty) Ltd	20%	Ordinary	Cnr O R Tambo & Beatrix Avenue, Witbank, 1035
South Africa	DBCM Holdings (Pty) Ltd	63%	Ordinary Redeemable Preference	36 Stockdale Street, Kimberley, 8301
South Africa	De Beers Consolidated Mines (Pty) Ltd[(8)]	63%	Ordinary Redeemable Preference	36 Stockdale Street, Kimberley, 8301
South Africa	De Beers Group Services (Pty) Ltd	85%	Ordinary Redeemable Preference	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	De Beers Marine (Pty) Ltd	85%	Ordinary	Cornerstone, Corner Diamond Drive and Crownwood Road, Theta, Johannesburg, 2013
South Africa	De Beers Matlafalang Business Development (Pty) Ltd	63%	Ordinary	Cornerstone, Corner Diamond Drive and Crownwood Road, Theta, Johannesburg, 2013

Group structure

35. Related undertakings of the Group continued

Country of incorporation[(1)(2)]	Name of undertaking	Percentage of equity owned[(3)]	Share class	Registered address
See page 283 for footnotes.				
South Africa	De Beers Sightholder Sales South Africa (Pty) Ltd	63%	Ordinary	Cornerstone, Corner Diamond Drive and Crownwood Road, Theta, Johannesburg, 2013
South Africa	Dido Nominees (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Dingleton Home Owners Resettlement Trust	53%	N/A	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Element Six (Production) Proprietary Limited	51%	Ordinary	Debid Road, Nuffield, Springs,1559
South Africa	Element Six Technologies Proprietary Limited	85%	Ordinary	Debid Road, Nuffield, Springs,1559
South Africa	Envusa Energy Proprietary Limited	50%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Hotazel Manganese Mines Proprietary Limited	30%	Ordinary Preference	39 Melrose Boulevard, Melrose Arch, Johannesburg, 2076
South Africa	Khongoni Haaskraal Coal (Pty) Ltd	20%	Ordinary	Unit 3, Bauhinia Street, Highveld Technopark, Centurion, 0157
South Africa	KIO Investments Holdings (Pty) Ltd	70%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Kroondal UJV	38%	N/A	N/A
South Africa	Kumba BSP Trust	53%	N/A	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Kumba Iron One Rehabilitation Trust	70%	N/A	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Kumba Iron Ore Limited	70%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Lexshell 49 General Trading (Pty) Ltd	35%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Longboat (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Main Place Holdings Limited	39%	Ordinary	Suite 801, 76 Regent Road, Sea Point, Western Cape 8005
South Africa	Marikana Ferrochrome Limited	100%	Ordinary	44 Main Street, Johannesburg, 2001
South Africa	Marikana Minerals (Pty) Ltd	100%	Ordinary	55 Marshall Street, Johannesburg, 2001
South Africa	Marikana UJV	38%	N/A	N/A
South Africa	Matthey Rustenburg Refiners (Pty) Ltd	77%	A Redeemable cumulative Preference shares B Redeemable cumulative Preference shares A Ordinary Shares B Ordinary Shares	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Metalloys Manganese Smelter Proprietary Limited	40%	Ordinary NPV	39 Melrose Boulevard, Melrose Arch, Johannesburg, 2076
South Africa	Micawber 146 (Pty) Ltd	77%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Modikwa Mining Personnel Services (Pty) Ltd	38%	Ordinary	29 Impala Road, Chislehurston, Standton, 2196
South Africa	Modikwa Platinum Mine (Pty) Ltd	38%	Ordinary	16 North Road, Dunkeld Court, Dunkeld West, 2196
South Africa	Mogalakwena Platinum Limited	79%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Newshelf 480 (Pty) Ltd	55%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Norsand Holdings (Pty) Ltd	77%	Ordinary B Ordinary Non-Cumulative Redeemable Preference	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Platmed (Pty) Ltd	77%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Platmed Properties (Pty) Ltd	77%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196

Group structure

35. Related undertakings of the Group continued

Country of incorporation[(1)(2)]	Name of undertaking	Percentage of equity owned[(3)]	Share class	Registered address
See page 283 for footnotes.				
South Africa	Polokwane Iron Ore Company (Pty) Ltd	27%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Precious Metals Refiners Proprietary Limited	77%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Pro Enviro (Pty) Ltd	20%	Ordinary	Greenside Colliery, PTN 0ff 331, Blackhills, 1032
South Africa	Resident Nominees (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Rustenburg Base Metals Refiners Proprietary Limited	77%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Rustenburg Platinum Mines Limited	77%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Samancor Holdings Proprietary Limited	40%	Ordinary	39 Melrose Boulevard, Melrose Arch, Johannesburg, 2076
South Africa	Samancor Manganese Proprietary Limited	40%	Ordinary NPV	39 Melrose Boulevard, Melrose Arch, Johannesburg, 2076
South Africa	Sheba's Ridge Platinum (Pty) Ltd	27%	Ordinary	Harrowdene Office Park Building 5, Woodmead, 2128
South Africa	Sibelo Resource Development (Pty) Ltd	53%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	SIOC Employee Benefit Trust	53%	N/A	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	SIOC Employee Share Ownership Plan Trust	53%	N/A	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	SIOC Solar SPV (Pty) Ltd	53%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Sishen Iron Ore Company (Pty) Ltd	53%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Spectrem Air Pty Ltd	93%	Ordinary no par value	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Tenon Investment Holdings (Pty) Ltd	100%	Ordinary	144 Oxford Road, Rosebank, Melrose, Johannesburg, 2196
South Africa	Terra Nominees Proprietary Limited	40%	Ordinary	39 Melrose Boulevard, Melrose Arch, Johannesburg, 2076
South Africa	UHPU Manufacturing Proprietary Limited	51%	N/A	Debid Road, Nuffield, Springs,1559
South Africa	Venetia Solar Project Pty Ltd	100%	Ordinary	De Beers House, Corner Diamond Drive and Crownwood Road, Theta, Johannesburg, 2013
South Africa	Vergelegen Wine Estate (Pty) Ltd	100%	Ordinary	Vergelegen Wine Farm, Lourensford Road, Somerset West, 7130
South Africa	Vergelegen Wines (Pty) Ltd	100%	Ordinary	Vergelegen Wine Farm, Lourensford Road, Somerset West, 7130
South Africa	Whiskey Creek Management Services (Pty) Ltd	77%	Ordinary	144 Oxford Road, Rosebank, Melrose 2196, Johannesburg
South Africa	WPIC Holdings Pty Ltd	40%	Ordinary	Rosebank Towers, 19 Biermann Ave, Rosebank, Johannesburg, 2196
South Africa	Main Street 1252 (Pty) Ltd (RF)	63%	Ordinary	Cornerstone, Corner of Daimond Drive and Crownwood Road, Theta, Johannesburg, 2013
Sweden	Element Six AB	51%	Ordinary	c/o Advokatbyrån Kaiding, Box 385, 931 24 Skellefteå
Switzerland	De Beers Centenary AG[(5)]	85%	Ordinary	c/o Telemarketing, Plus AG, Sonnenplatz 6, 6020, Emmenbrücke
Switzerland	PGI SA	78%	Ordinary	Avenue Mon- Repos 24, Case postale 656, CH- 1001 Lausanne
Switzerland	Synova S.A.	28%	Ordinary	13 Route de Genolier; 1266 Duillier
Tanzania	Ambase Prospecting (Tanzania) (Pty) Ltd	100%	Ordinary	c/o Mawalla Advocates, Mawalla Road, Mawalla Heritage Park, Plot No. 175/20, Arusha
United Arab Emirates	De Beers DMCC	85%	Ordinary	Office 4D, Almas Tower, Jumeirah Lakes Towers, Dubai
United Kingdom	Anglo American Australia Investments Limited[(9)]	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Capital Australia Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American CMC Holdings Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA

Group structure

35. Related undertakings of the Group continued

Country of incorporation[(1)(2)]	Name of undertaking	Percentage of equity owned[(3)]	Share class	Registered address
See page 283 for footnotes.				
United Kingdom	Anglo American Corporate Secretary Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Crop Nutrients Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Diamond Holdings Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Energy Solutions Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Finance (UK) Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Holdings Limited	100%	Ordinary 8% Preference 8.3% Preference B shares	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American International Holdings Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Investments (UK) Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Marketing Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Medical Plan Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Medical Plan Trust	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Prefco Limited[(9)]	100%	Ordinary Capital Preference Preference	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Projects UK Limited	100%	Ordinary	1 More London Place, London, SE1 2AF
United Kingdom	Anglo American Rand Capital Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American REACH Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Services (UK) Ltd.[(9)]	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Technical & Sustainability Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Technical & Sustainability Services Ltd	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Woodsmith (Teesside) Limited	100%	Ordinary Non-voting	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo American Woodsmith Limited	100%	Ordinary B preference Non-voting	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo Base Metals Marketing Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo Platinum Marketing Limited	77%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Anglo UK Pension Trustee Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	AP Ventures Fund I LP	38%	N/A	16 Littleworth Lane, Esher, Surrey, KT10 9PF
United Kingdom	Birchall Gardens LLP	50%	N/A	Bardon Hall, Copt Oak Road, Markfield, LE67 9PJ
United Kingdom	Charterhouse CAP Limited	85%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Curtis Fitch Limited	21%	Ordinary B	Formal House, 60 St George's Place, Cheltenham, Gloucestershire, GL50 3PN
United Kingdom	De Beers Capital Southern Africa Limited	85%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	De Beers Intangibles Limited	85%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	De Beers Jewellers Limited	85%	A Ordinary B Ordinary Deferred Share Special Dividend Share	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	De Beers Jewellers Trade Mark Limited	85%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	De Beers Jewellers UK Limited	85%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	De Beers UK Limited	85%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Debcore Limited	43%	Ordinary-A	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Ebbsfleet Property Limited	50%	Ordinary	Bardon Hall, Copt Oak Road, Markfield, LE67 9PJ
United Kingdom	Element Six (UK) Limited	51%	Ordinary	Global Innovation Centre, Fermi Avenue, Harwell, Oxford, Didcot, Oxfordshire, OX11 0QR
United Kingdom	Element Six Abrasives Holdings Limited	51%	Ordinary Preference	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Element Six Holdings Limited	85%	Ordinary	17 Charterhouse Street, London, EC1N 6RA

Group structure

35. Related undertakings of the Group continued

Country of incorporation[1][2]	Name of undertaking	Percentage of equity owned[3]	Share class	Registered address
See page 283 for footnotes.				
United Kingdom	Element Six Limited	85%	Ordinary	Global Innovation Centre, Fermi Avenue, Harwell, Oxford, Didcot, Oxfordshire, OX11 0QR
United Kingdom	Element Six Technologies Limited	85%	Ordinary	Global Innovation Centre, Fermi Avenue, Harwell, Oxford, Didcot, Oxfordshire, OX11 0QR
United Kingdom	Ferro Nickel Marketing Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	First Mode IPP Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Forevermark Limited	85%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Gemfair Limited	85%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	IIDGR (UK) Limited	85%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Lightbox Jewelry Ltd.	85%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Rhoanglo Trustees Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Sach 1 Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Sach 2 Limited	100%	Ordinary Redeemable Preference	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Security Nominees Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Sirius Minerals Holdings Limited	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	Swanscombe Development LLP	50%	N/A	Bardon Hall, Copt Oak Road, Markfield, LE67 9PJ
United Kingdom	Tarvos Limited	19%	N/A	Unit 107, 121 Upper Richmond Road, London, SW15 2DW
United Kingdom	The Diamond Trading Company Limited	85%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	TRACR Limited	85%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United Kingdom	York Potash Holdings Limited	100%	Ordinary	1 More London Place, London, SE1 2AF
United Kingdom	York Potash Intermediate Holdings Limited	100%	Ordinary	1 More London Place, London, SE1 2AF
United Kingdom	YPF Ltd	100%	Ordinary	17 Charterhouse Street, London, EC1N 6RA
United States of America	Anglo American Crop Nutrients (USA), LLC	100%	Membership interest	120 W Sweet Ave, Bismarck, ND 58504-5566
United States of America	Anglo American US Holdings Inc.	100%	Ordinary	c/o Corporation Service Company, 251 Little Falls Drive, Wilmington Delaware, 19808
United States of America	De Beers Jewellers US, Inc.	85%	Common shares	300 First Stamford place, Stamford, CT 06902
United States of America	Element Six Technologies (OR) Corp.	85%	Ordinary	23055 SE Stark Street, Gresham, Oregon, 97030
United States of America	Element Six Technologies US Corporation	85%	Ordinary	3901 Burton Drive, Santa Clara CA 95054
United States of America	Element Six US Corporation	51%	Common stock	24900 Pitkin Road, Suite 250, Spring TX 77386
United States of America	Forevermark US Inc.	85%	Ordinary	300 First Stamford Place, Stamford, CT, 06902
United States of America	Lightbox Jewelry Inc.	85%	Common	3500 South Dupont Highway, Dover, County of Kent DE 19901
United States of America	Platinum Guild International (U.S.A.) Jewelry Inc.	78%	Common shares	125 Park Avenue, 25th Floor, New York, New York 10017
Venezuela	Minera Loma de Niquel C.A.	100%	Class A	Torre Humboldt, floor 9, office 09-07, Rio Caura Street, Prados del Este, Caracas 1080
Zambia	Anglo Exploration (Zambia) (Pty) Ltd	100%	Ordinary	11 Katemo Road, Rhodes Park, Lusaka
Zimbabwe	Amzim Holdings Limited	79%	Ordinary	28 Broadlands Road, Emerald Hill, Harare
Zimbabwe	Southridge Limited	79%	Ordinary	28 Broadlands Road, Emerald Hill, Harare
Zimbabwe	Unki Mines (Private) Limited	79%	Ordinary	28 Broadlands Road, Emerald Hill, Harare

(1) All the companies with an incorporation in the United Kingdom are registered in England and Wales.
(2) The country of tax residence is disclosed where different from the country of incorporation.
(3) All percentages have been rounded.
(4) The interest in Debswana Diamond Company (Pty) Ltd is held indirectly through De Beers and is consolidated on a 19.2% proportionate basis, reflecting economic interest. The Group's effective interest in Debswana Diamond Company (Pty) Ltd is 16.3%.
(5) Tax resident in the United Kingdom.
(6) 2% direct holding by Anglo American plc.
(7) 0.03% direct holding by Anglo American plc.
(8) A 74% interest in De Beers Consolidated Mines (Pty) Ltd (DBCM) and its subsidiaries is held indirectly through De Beers. The 74% interest represents De Beers' legal ownership share in DBCM. For accounting purposes De Beers consolidates 100% of DBCM as it is deemed to control the BEE entity, Ponahalo, which holds the remaining 26%. The Group's effective interest in DBCM is 85%.
(9) 100% direct holding by Anglo American plc.

Other items

This section includes disclosures about related party transactions, auditors' remuneration, leases and accounting policies.

36. Related party transactions

The Group has related party relationships with its subsidiaries, joint operations, associates and joint ventures (see notes 34 and 35). Members of the Board and the Group Management Committee are considered to be related parties.

The Company and its subsidiaries, in the ordinary course of business, enter into various sale, purchase and service transactions with joint operations, associates, joint ventures and others in which the Group has a material interest. These transactions are under terms that are no less favourable to the Group than those arranged with third parties.

	Associates		Joint ventures		Joint operations	
US$ million	**2022**	2021	**2022**	2021	**2022**	2021
Transactions with related parties						
Sale of goods and services	—	—	16	—	181	158
Purchase of goods and services	—	—	(190)	(169)	(4,253)	(3,466)
Balances with related parties						
Trade and other receivables from related parties	—	—	7	1	17	18
Trade and other payables to related parties	—	—	(18)	(16)	(250)	(273)
Loans receivable from related parties	2	2	147	76	—	—

Balances and transactions with joint operations or joint operation partners represent the portion that the Group does not have the right to offset against the corresponding amount recorded by the respective joint operations. These amounts primarily relate to purchases by De Beers and Platinum Group Metals from their joint operations in excess of the Group's attributable share of their production.

Loans receivable from related parties are included in Financial asset investments on the Consolidated balance sheet.

Remuneration and benefits received by directors are disclosed in the Remuneration report. Remuneration and benefits of key management personnel, including directors, are disclosed in note 26. Information relating to pension fund arrangements is disclosed in note 27.

37. Auditors' remuneration

	2022				2021			
	Paid/payable to PwC			**Paid/payable to auditor (if not PwC)**	Paid/payable to PwC			Paid/payable to auditor (if not PwC)
US$ million	**United Kingdom**	**Overseas**	**Total**	**United Kingdom and overseas**	United Kingdom	Overseas	Total	United Kingdom and overseas
Paid to the Company's auditor for audit of the Anglo American plc Annual Report[1]	6.0	1.7	7.7	—	5.9	1.4	7.3	—
Paid to the Company's auditor for other services to the Group								
Audit of the Company's subsidiaries	1.1	7.4	8.5	0.3	1.0	6.8	7.8	0.4
Total audit fees	7.1	9.1	16.2	0.3	6.9	8.2	15.1	0.4
Audit related assurance services	0.9	0.8	1.7	—	0.9	0.8	1.7	—
Other assurance services	0.4	0.1	0.5	—	1.1	1.0	2.1	—
Total non-audit fees	1.3	0.9	2.2	—	2.0	1.8	3.8	—

(1) $0.6 million of audit fees paid in 2021 related to the audit for the year ended 31 December 2020.

Audit related assurance services includes $1.7 million (2021: $1.7 million) for the interim review.

Other items

38. Leases

Overview
Lease agreements give rise to the recognition of a right-of-use asset (see note 11) and a related liability for future lease payments (see note 21).

Further information
Amounts recognised in the Consolidated balance sheet
The Consolidated balance sheet shows the following amounts relating to leases:

Right-of-use assets are detailed in note 11. Per requirements of IFRS 16 *Leases*, lease agreements give rise to the recognition of a right-of-use asset and a related liability for future lease payments. The cost of leases other than short term leases less than 12 months, variable leasing costs and leases of low value assets are allocated between the depreciation of right-of-use assets and a finance charge representing the unwind of the discount on lease liabilities.

Leases relate principally to corporate offices, diamond jewellery retail outlets and shipping vessels. The Group leases land and buildings for its office space, for employee accommodation and retail stores for De Beers Jewellers. The leases for office space typically run for 5 to 25 years, employee accommodation up to 25 years and leases of retail stores 5 to 25 years. Some longer leases incorporate fixed increases in rentals or provide for annual uplifts based upon an index, typically a measure of inflation. Leases for shipping vessels typically run for 1 to 10 years and the majority are priced with reference to a freight index.

Lease liabilities balance and maturity analysis:

US$ million	2022	2021
Amount due for repayment within one year	204	230
Greater than one year, less than two years	121	125
Greater than two years, less than three years	96	90
Greater than three years, less than four years	80	66
Greater than four years, less than five years	67	58
Greater than five years	579	636
Total due for repayment after more than one year	943	975
Total	1,147	1,205
Effect of discounting	(287)	(330)
Lease liability	860	875

Amounts recognised in the statement of profit or loss
The statement of profit or loss shows the following amounts relating to leases:

US$ million	2022	2021
Depreciation (see note 11)	239	303
Interest expense (included in finance costs, see note 4)	42	40
Expense relating to short term leases less than 12 months, variable leasing costs and leases of low value	167	102

Amounts recognised in the Consolidated cash flow statement
In the Consolidated cash flow statement for the year ended 31 December 2022, the total amount of cash paid in respect of leases recognised on the Consolidated balance sheet are split between repayments of principal of $266 million (2021: $336 million) and repayments of interest of $31 million (2021: $31 million), both presented within cash flows from financing activities. The repayment of both principal and interest forms part of both the Attributable free cash flow and Sustaining attributable free cash flow Alternative Performance Measures.

Further disclosures
In addition to the lease commitments above, the Group has lease commitments in relation to leases not yet commenced of $324 million.

Further disclosures required by IFRS 16 *Leases* are presented in notes 4, 11 and 21.

Accounting judgements
At the date of inception of a new contract or significant modification of an existing contract, the Group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the asset for a period of time in exchange for consideration. To identify lease arrangements, the Group assesses whether:

- The contract specifies the use of an identified asset or collection of assets
- The Group has the right to obtain substantially all of the economic benefits from the use of the identified asset(s)
- The Group has the right to direct the use of the asset(s).

The Group has paid particular attention to the judgement over whether the lessor has a substantive right to substitute the specified assets for alternatives.

- Many assets used by the Group are highly specialised in nature and are purpose-built or modified to meet the Group's specification. Judgement is required to assess whether the assets can be substituted and used for other purposes without significant additional modification.
- The remote location of some of the Group's operations presents practical difficulties to the substitution of assets. Judgement is required to determine whether assets in remote locations can be relocated to other locations within a reasonable timeframe and cost.

Other items

38. Leases continued

- At some locations, high levels of security restrict the movement of assets to alternative locations, limiting the ability to substitute assets.
- The Group's health and safety standards exceed statutory requirements in some jurisdictions. This places limitations on the ability to substitute certain assets, such as vehicles. Judgement is required to assess whether equivalent assets meeting the Group's requirements can be sourced within required operational timeframes.

The Group recognises a lease liability and a corresponding right-of-use asset at the commencement date of the lease.

Accounting policy

Accounting policies applied to lease liabilities and corresponding right-of-use assets are set out respectively in notes 39F and 39D.

Other items

39. Accounting policies

A. Basis of preparation

Basis of preparation

The financial statements have been prepared in accordance with the requirements of the Companies Act 2006, UK-adopted International Accounting Standards and those parts of the Companies Act 2006 applicable to companies reporting under those standards and the requirements of the Disclosure and Transparency rules of the Financial Conduct Authority in the United Kingdom as applicable to periodic financial reporting. The financial statements have been prepared under the historical cost convention as modified by the revaluation of pension assets and liabilities and certain financial instruments. A summary of the principal Group accounting policies is set out below.

The preparation of financial statements in conformity with generally accepted accounting principles requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Although these estimates are based on management's best knowledge of the amount, event or actions, actual results ultimately may differ from those estimates.

The Group's results are presented in US dollars, the currency in which its business is primarily conducted.

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.

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 80–83. Further details of our policy on financial risk management are set out in note 23 to the financial statements on pages 252–254. 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 note 21 and note 23 on pages 246 and 252-254 respectively, and net debt is set out in note 20 on page 245.

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 within the Group Viability Statement on pages 67 and 68. In the downside scenario 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.

New IFRS accounting standards, amendments and interpretations not yet adopted

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. The following new or amended IFRS accounting standards, amendments and interpretations not yet adopted are not expected to have a significant impact on the Group:

- Amendments to IAS 1 *Presentation of financial statements: disclosure of accounting policies*
- Amendments to IAS 1 *Presentation of financial statements: non-current liabilities with covenants*
- Amendments to IAS 8 *Accounting policies, changes in accounting estimates and errors: definition of accounting estimates*
- Amendments to IAS 12 *Income Taxes: deferred tax related to Assets and Liabilities arising from a Single Transaction*
- Amendments to IFRS 16 *Leases: Lease Liability in a Sale and Leaseback*
- IFRS 17 *Insurance Contracts*
- Amendments to IFRS 17, Initial Application of IFRS 17 and IFRS 9 – Comparative Information.

Other items

39. Accounting policies continued

B. Basis of consolidation

Basis of consolidation

The financial statements incorporate a consolidation of the financial statements of the Company and entities controlled by the Company (its subsidiaries). Control is achieved where the Company is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

The results of subsidiaries acquired or disposed of during the year are included in the income statement from the effective date of acquisition or up to the effective date of disposal, as appropriate.

Where necessary, adjustments are made to the results of subsidiaries, joint arrangements and associates to bring their accounting policies into line with those used by the Group. Intra-group transactions, balances, income and expenses are eliminated on consolidation, where appropriate.

For non-wholly owned subsidiaries, non-controlling interests are presented in equity separately from the equity attributable to shareholders of the Company. Profit or loss and other comprehensive income are attributed to the shareholders of the Company and to non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Changes in ownership interest in subsidiaries that do not result in a change in control are accounted for in equity. The carrying amounts of the controlling and non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiary. Any difference between the amount by which the non-controlling interest is adjusted and the fair value of the consideration paid or received is recorded directly in equity and attributed to the shareholders of the Company.

Foreign currency transactions and translation

Foreign currency transactions by Group companies are recognised in the functional currencies of the companies at the exchange rate ruling on the date of the transaction. At each reporting date, monetary assets and liabilities that are denominated in foreign currencies are retranslated at the rates prevailing on the reporting date. Gains and losses arising on retranslation are included in the income statement for the period and are classified in the income statement according to the nature of the monetary item giving rise to them.

Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

On consolidation, the assets and liabilities of the Group's foreign operations are translated into the presentation currency of the Group at exchange rates prevailing on the reporting date. Income and expense items are translated at the average exchange rates for the period where these approximate the rates at the dates of the transactions. Any exchange differences arising are classified within the statement of comprehensive income and transferred to the Group's cumulative translation adjustment reserve. Exchange differences on foreign currency balances with foreign operations for which settlement is neither planned nor likely to occur in the foreseeable future, and therefore form part of the Group's net investment in these foreign operations, are offset in the cumulative translation adjustment reserve.

Cumulative translation differences are recycled from equity and recognised as income or expense on disposal of the operation to which they relate.

Goodwill and fair value adjustments arising on the acquisition of foreign entities are treated as assets of the foreign entity and translated at the closing rate.

Tenon

Tenon Investment Holdings Proprietary Limited (Tenon), a wholly owned subsidiary of Anglo American South Africa Proprietary Limited (AASA), has entered into agreements with Epoch Investment Holdings (RF) Proprietary Limited (Epoch), Epoch Two Investment Holdings (RF) Proprietary Limited (Epoch Two) and Tarl Investment Holdings (RF) Proprietary Limited (Tarl) (collectively the Investment Companies), each owned by independent charitable trusts whose trustees are independent of the Group. Under the terms of these agreements, the Investment Companies have purchased Anglo American plc shares on the market and have granted to Tenon the right to nominate a third party (which may include Anglo American plc but not any of its subsidiaries) to take transfer of the Anglo American plc shares each has purchased on the market. Tenon paid the Investment Companies 80% of the cost of the Anglo American plc shares including associated costs for this right to nominate, which together with subscriptions by Tenon for non-voting participating redeemable preference shares in the Investment Companies, provided all the funding required to acquire the Anglo American plc shares through the market. These payments by Tenon were sourced from the cash resources of AASA. Tenon is able to exercise its right of nomination at any time up to 31 December 2025 against payment of an average amount of $3.20 per share to Epoch, $4.98 per share to Epoch Two and $4.13 per share to Tarl which will be equal to 20% of the total costs respectively incurred by Epoch, Epoch Two and Tarl in purchasing shares nominated for transfer to the third party. These funds will then become available for redemption of the preference shares issued by the Investment Companies. The amount payable by the third party on receipt of the Anglo American plc shares will accrue to Tenon and, as these are own shares of the Company, any resulting gain or loss recorded by Tenon will not be recognised in the Consolidated income statement of Anglo American plc.

Under the agreements, the Investment Companies will receive dividends on the shares they hold and have agreed to waive the right to vote on those shares. The preference shares issued to the charitable trusts are entitled to a participating right of up to 10% of the profit after tax of Epoch and 5% of the profit after tax of Epoch Two and Tarl. The preference shares issued to Tenon will carry a fixed coupon of 3% plus a participating right of up to 80% of the profit after tax of Epoch and 85% of the profit after tax of Epoch Two and Tarl. Any remaining distributable earnings in the Investment Companies, after the above dividends, are then available for distribution as ordinary dividends to the charitable trusts.

The structure effectively provides Tenon with a beneficial interest in the price risk on these shares together with participation in future dividend receipts. The Investment Companies will retain legal title to the shares until Tenon exercises its right to nominate a transferee.

At 31 December 2022 the Investment Companies together held 112,300,129 (2021: 112,300,129) Anglo American plc shares, which represented 8.4% (2021: 8.4%) of the ordinary shares in issue (excluding treasury shares) with a market value of $4,400 million (2021: $4,574 million). The Investment Companies are not permitted to hold more than an aggregate of 10% of the issued share capital of Anglo American plc at any one time.

The Investment Companies are considered to be structured entities. Although the Group has no voting rights in the Investment Companies and cannot appoint or remove trustees of the charitable trusts, the Group considers that the agreement outlined above, including Tenon's right to nominate the transferee of the Anglo American plc shares held by the Investment Companies, results in the Group having control over the Investment Companies as defined under IFRS 10 *Consolidated Financial Statements*. Accordingly, the Investment Companies are required to be consolidated by the Group.

Other items

39. Accounting policies continued

C. Financial performance

Revenue recognition

Revenue from contracts with customers is recognised in a manner that depicts the pattern of the transfer of goods and services to customers. The amount recognised reflects the amount to which the Group expects to be entitled in exchange for those goods and services. Sales contracts are evaluated to determine the performance obligations, the transaction price and the point at which there is transfer of control. The transactional price is the amount of consideration due in exchange for transferring the promised goods or services to the customer, and is allocated against the performance obligations and recognised in accordance with whether control is recognised over a defined period or at a specific point in time.

Revenue is derived principally from commodity sales. A sale is recognised when control has been transferred. This is usually when title and insurance risk have passed to the customer and the goods have been delivered to a contractually agreed location. Revenue from contracts with customers is measured at the fair value of consideration received or receivable as at the date control is transferred, after deducting discounts, volume rebates, value added tax and other sales taxes. Sales of metal concentrate are stated at their invoiced amount which is net of treatment and refining charges.

Sales of certain commodities are provisionally priced such that the price is not settled until a predetermined future date and is based on the market price at that time or a specified period to that date. These sales are marked to market at each reporting date using the forward price for the period equivalent to that outlined in the contract. Revenue on provisionally priced sales is recognised with reference to the forward market price when control passes to the customer and is classified as revenue from contracts with customers. Subsequent mark-to-market adjustments are recognised in revenue from other sources.

Revenues from the sale of material by-products are recognised within revenue from contracts with customers at the point control passes. Where a by-product is not regarded as significant, revenue may be credited against operating costs.

Physically-settled contracts relating to the purchase and sale of material produced by third parties (third-party sales) are presented on a net basis within revenue from other sources where these contracts are entered into and managed collectively to generate a trading margin as part of the Group's Marketing business and are accounted for as derivatives prior to settlement. This includes third-party material purchased for blending activities conducted to benefit from short term pricing differentials (usually of less than twelve months). The sale and purchase of third-party material to mitigate shortfalls in the Group's own production are shown on a gross basis with sales reported within revenue from contracts with customers as such contracts are used to maintain customer relationships and fulfil physical sale commitments rather than to generate a trading margin.

Where the Group enters into commodity sale or purchase agreements in the course of its commodity trading activities in which the seller has a right to repurchase, consideration is given to whether the risks and rewards of ownership have been transferred as a result of the sale. This assessment is made with reference to the criteria in IFRS 9 *Financial Instruments*. Key considerations in this assessment include whether the purchaser has a practical ability to use the commodity and whether price risk has been transferred.

Where risks and rewards have been transferred, the sale or purchase contract is accounted for separately from the repurchase obligation (which is recorded as a derivative financial instrument). Where risks and rewards have not been transferred or the arrangements do not relate to the Group's commodity trading activities, any consideration received or paid is recorded as a liability or asset as appropriate and no adjustment is made to revenue or inventory.

Revenue from services is recognised over time in line with the policy above. For contracts which contain separate performance obligations for the sale of commodities and the provision of freight services, the portion of the revenue representing the obligation to perform the freight service is deferred and recognised over time as the obligation is fulfilled. In situations where the Group is acting as an agent, amounts billed to customers are offset against the relevant costs.

Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable.

Dividend income from investments is recognised when the shareholders' rights to receive payment have been established.

Exploration and evaluation expenditure

Exploration and evaluation expenditure is expensed in the year in which it is incurred.

Exploration expenditure is the cost of exploring for Mineral Resources other than that occurring at existing operations and projects and comprises geological and geophysical studies, exploratory drilling and sampling and Mineral Resource development.

Evaluation expenditure includes the cost of conceptual and pre-feasibility studies and evaluation of Mineral Resources at existing operations.

When a decision is taken that a mining project is technically feasible and commercially viable, usually after a pre-feasibility study has been completed, subsequent directly attributable expenditure, including feasibility study costs, are considered development expenditure and are capitalised within property, plant and equipment.

Exploration properties acquired are recognised on the balance sheet when management considers that their value is recoverable. These properties are measured at cost less any accumulated impairment losses.

Short term and low value leases

Leases with a term of less than 12 months or those with committed payments of less than $5,000 are not recognised in the balance sheet. The Group recognises payments for these leases as an expense on a straight-line basis over the lease term within operating costs in underlying EBITDA.

Borrowing costs

Interest on borrowings directly relating to the financing of qualifying assets in the course of construction is added to the capitalised cost of those projects under 'Capital works in progress', until such time as the assets are substantially ready for their intended use or sale.

Where funds have been borrowed specifically to finance a project, the amount capitalised represents the actual borrowing costs incurred. Where the funds used to finance a project form part of general borrowings, the amount capitalised is calculated using a weighted average of rates applicable to relevant general borrowings of the Group during the period. All other borrowing costs are recognised in the income statement in the period in which they are incurred.

All cash flows relating to interest on borrowings are presented within interest paid in the cash flow statement.

Other items

39. Accounting policies continued

D. Capital base

Business combinations and goodwill arising thereon

The identifiable assets, liabilities and contingent liabilities of a subsidiary, a joint arrangement or an associate, which can be measured reliably, are recorded at their provisional fair values at the date of acquisition. The estimation of the fair value of identifiable assets and liabilities is subjective and the use of different valuation assumptions could have a significant impact on financial results. Goodwill is the fair value of the consideration transferred (including contingent consideration and previously held non-controlling interests) less the fair value of the Group's share of identifiable net assets on acquisition.

Where a business combination is achieved in stages, the Group's previously held interests in the acquiree are remeasured to fair value at the acquisition date and the resulting gain or loss is recognised in the income statement.

Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in other comprehensive income are reclassified to the income statement, where such treatment would be appropriate if that interest were disposed of.

Transaction costs incurred in connection with the business combination are expensed. Provisional fair values are finalised within 12 months of the acquisition date.

Goodwill in respect of subsidiaries and joint operations is included within intangible assets. Goodwill relating to associates and joint ventures is included within the carrying value of the investment.

Where the fair value of the identifiable net assets acquired exceeds the cost of the acquisition, the surplus, which represents the discount on the acquisition, is recognised directly in the income statement in the period of acquisition.

For non-wholly owned subsidiaries, non-controlling interests are initially recorded at the non-controlling interests' proportion of the fair values of net assets recognised at acquisition.

Impairment of goodwill, intangible assets and property, plant and equipment

Goodwill arising on business combinations is allocated to the group of cash generating units (CGUs) that is expected to benefit from synergies of the combination, and represents the lowest level at which goodwill is monitored by the Group's Board of directors for internal management purposes. The recoverable amount of the CGU, or group of CGUs, to which goodwill has been allocated is tested for impairment annually, or when events or changes in circumstances indicate that it may be impaired.

Any impairment loss is recognised immediately in the income statement. Impairment of goodwill is not subsequently reversed.

At each reporting date, the Group reviews the carrying amounts of its property, plant and equipment and intangible assets to determine whether there is any indication that those assets are impaired. If such an indication exists, the recoverable amount of the asset is estimated in order to determine the extent of any impairment. Where the asset does not generate cash flows that are independent from other assets, the Group estimates the recoverable amount of the CGU to which the asset belongs. An intangible asset with an indefinite useful life is tested for impairment annually and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value less costs of disposal and value in use (VIU) assessed using discounted cash flow models, as explained in note 7. In assessing VIU, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset or CGU is estimated to be less than its carrying amount, the carrying amount of the asset or CGU is reduced to its recoverable amount. An impairment loss is recognised in the income statement.

Where an impairment loss subsequently reverses, the carrying amount of the asset or CGU is increased to the revised estimate of its recoverable amount, to the extent that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment been recognised for the asset or CGU.

A reversal of an impairment loss is recognised in the income statement.

In addition, in making assessments for impairment, management necessarily applies its judgement in allocating assets, including goodwill, that do not generate independent cash inflows to appropriate CGUs.

Subsequent changes to the CGU allocation, to the timing of cash flows or to the assumptions used to determine the cash flows could impact the carrying value of the respective assets.

Non-mining licences and other intangible assets

Non-mining licences and other intangible assets are measured at cost less accumulated amortisation and accumulated impairment losses. Intangible assets acquired as part of an acquisition of a business are capitalised separately from goodwill if the asset is separable or arises from contractual or legal rights and the fair value can be measured reliably on initial recognition. Intangible assets are amortised over their estimated useful lives, usually between 3 and 20 years, except goodwill and those intangible assets that are considered to have indefinite lives. For intangible assets with a finite life, the amortisation period is determined as the period over which the Group expects to obtain benefits from the asset, taking account of all relevant facts and circumstances including contractual lives and expectations about the renewal of contractual arrangements without significant incremental costs. An intangible asset is deemed to have an indefinite life when, based on an analysis of all of the relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate cash flows for the Group. Indefinite lived intangible assets are principally brands for which there is global recognition with no foreseeable timeframe of expected contribution that the Group is continuing to invest and actively market. Amortisation methods, residual values and estimated useful lives are reviewed at least annually.

Deferred stripping

The removal of rock or soil overlying a mineral deposit, overburden and other waste materials is often necessary during the initial development of an open pit mine site, in order to access the orebody. The process of removing overburden and other mine waste materials is referred to as stripping. The directly attributable cost of this activity is capitalised in full within 'Mining properties – owned', until the point at which the mine is considered to be capable of operating in the manner intended by management. This is classified as growth or life-extension capital expenditure, within investing cash flows.

The removal of waste material after the point at which depreciation commences is referred to as production stripping. When the waste removal activity improves access to ore extracted in the current period, the costs of production stripping are charged to the income statement as operating costs in accordance with the principles of IAS 2 *Inventories*.

Other items

39. Accounting policies continued

Where production stripping activity both produces inventory and improves access to ore in future periods the associated costs of waste removal are allocated between the two elements. The portion that benefits future ore extraction is capitalised within 'Mining properties – owned'. This is classified as stripping and development capital expenditure, within investing cash flows. If the amount to be capitalised cannot be specifically identified it is determined based on the volume of waste extracted compared with expected volume for the identified component of the orebody. This determination is dependent on an individual mine's design and Life of Asset Plan and therefore changes to the design or Life of Asset Plan will result in changes to these estimates. Identification of the components of a mine's orebody is made by reference to the Life of Asset Plan. The assessment depends on a range of factors including each mine's specific operational features and materiality.

In certain instances significant levels of waste removal may occur during the production phase with little or no associated production. This may occur at both open pit and underground mines, for example longwall development.

The cost of this waste removal is capitalised in full to 'Mining properties – owned'.

All amounts capitalised in respect of waste removal are depreciated using the unit of production method for the component of the orebody to which they relate, consistent with depreciation of property, plant and equipment.

The effects of changes to the Life of Asset Plan on the expected cost of waste removal or remaining Ore Reserves for a component are accounted for prospectively as a change in estimate.

Property, plant and equipment

Property, plant and equipment is stated at cost, less accumulated depreciation and accumulated impairment losses. Cost is the fair value of consideration required to acquire and develop the asset and includes the purchase price, acquisition of mineral rights, costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, the initial estimate of any decommissioning obligation and, for assets that take a substantial period of time to get ready for their intended use, borrowing costs. Revenue and costs arising from assets before they are capable of operating in the manner intended by management are recognised in the income statement.

Gains or losses on disposal of property, plant and equipment are determined by comparing the net proceeds from disposal with the carrying amount. The gain or loss is recognised in the income statement.

Depreciation of property, plant and equipment

Mining properties are depreciated to their residual values using the unit of production method based on Proved and Probable Ore Reserves and, in certain limited circumstances, other Mineral Resources included in the Life of Asset Plan. These other Mineral Resources are included in depreciation calculations where, taking into account historical rates of conversion to Ore Reserves, there is a high degree of confidence that they will be extracted in an economic manner. This is the case principally for diamond operations, where depreciation calculations are based on Diamond Reserves and Diamond Resources included in the Life of Asset Plan. This reflects the unique nature of diamond deposits where, due to the difficulty in estimating grade, Life of Asset Plans frequently include significant amounts of Inferred Resources.

Buildings and items of plant and equipment for which the consumption of economic benefit is linked primarily to utilisation or to throughput rather than production, are depreciated to their residual values at varying rates on a straight-line basis over their estimated useful lives, or the Reserve Life, whichever is shorter. Estimated useful lives normally vary from up to 20 years for items of plant and equipment to a maximum of 50 years for buildings. Under limited circumstances, items of plant and equipment may be depreciated over a period that exceeds the Reserve Life by taking into account additional Mineral Resources other than Proved and Probable Reserves included in the Life of Asset Plan, after making allowance for expected production losses based on historical rates of Mineral Resource to Ore Reserve conversion.

'Capital works in progress' are measured at cost less any recognised impairment. Depreciation commences when the assets are capable of operating in the manner intended by management, at which point they are transferred to the appropriate asset class.

Land is not depreciated.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components).

Depreciation methods, residual values and estimated useful lives are reviewed at least annually.

Leased right-of-use assets

Leased right-of-use assets are included within property, plant and equipment, and on inception of the lease are recognised at the amount of the corresponding lease liability, adjusted for any lease payments made at or before the lease commencement date, plus any direct costs incurred and an estimate of costs for dismantling, removing, or restoring the underlying asset and less any lease incentives received.

The right-of-use asset is depreciated on a straight-line basis over the term of the lease, or, if shorter, the useful life of the asset. The useful lives of right-of-use assets are estimated on the same basis as those of owned property, plant and equipment.

Financial assets

Investments, other than investments in subsidiaries, joint arrangements and associates, are financial asset investments and are initially recognised at fair value. The Group's financial assets are classified into the following measurement categories: debt instruments at amortised cost, equity instruments and debt instruments designated at fair value through other comprehensive income (OCI), and debt instruments, derivatives and equity instruments at fair value through profit and loss. Financial assets are classified as at amortised cost only if the asset is held within a business model whose objective is to collect the contractual cash flows and the contractual terms of the asset give rise to cash flows that are solely payments of principal and interest.

At subsequent reporting dates, financial assets at amortised cost are measured at amortised cost less any impairment losses. Other investments are classified as either at fair value through profit or loss (which includes investments held for trading) or at fair value through OCI. Both categories are subsequently measured at fair value. Where investments are held for trading purposes, unrealised gains and losses for the period are included in the income statement within other gains and losses.

The Group has elected to measure equity instruments, which are neither held for trading nor are contingent consideration in a business combination, at fair value through OCI as this better reflects the strategic nature of the Group's equity investments. For equity instruments at fair value through OCI, changes in fair value, including those related to foreign exchange, are recognised in other comprehensive income and there is no subsequent reclassification of fair value gains and losses to profit or loss.

Other items

39. Accounting policies continued

Impairment of financial assets
A financial asset not measured at fair value through profit or loss is assessed at each reporting date to determine whether there is any objective evidence that it is impaired. The Group assesses on a forward-looking basis the expected credit losses, defined as the difference between the contractual cash flows and the cash flows that are expected to be received, associated with its assets carried at amortised cost and fair value through OCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk. For trade receivables only, the simplified approach permitted by IFRS 9 is applied, which requires expected lifetime losses to be recognised from initial recognition of the receivables.

Losses are recognised in the income statement. When a subsequent event causes the amount of impairment loss to decrease, the decrease in impairment loss is reversed through the income statement.

Impairment losses relating to equity instruments at fair value through OCI are not reported separately from other changes in fair value.

Derecognition of financial assets and financial liabilities
Financial assets are derecognised when the right to receive cash flows from the asset has expired, the right to receive cash flows has been retained but an obligation to on-pay them in full without material delay has been assumed or the right to receive cash flows has been transferred together with substantially all the risks and rewards of ownership.

Financial liabilities are derecognised when the associated obligation has been discharged, cancelled or has expired.

Environmental restoration and decommissioning obligations
An obligation to incur environmental restoration, rehabilitation and decommissioning costs arises when disturbance is caused by the development or ongoing production of a mining asset. Costs for restoration of site damage, rehabilitation and environmental costs are estimated using either the work of external consultants or internal experts. Such costs arising from the decommissioning of plant and other site preparation work, discounted to their net present value, are provided for and capitalised at the start of each project, as soon as the obligation to incur such costs arises.

These costs are recognised in the income statement over the life of the operation, through the depreciation of the asset and the unwinding of the discount on the provision. Costs for restoration of subsequent site damage which is created on an ongoing basis during production are provided for at their net present values and recognised in the income statement as ore extraction progresses.

The amount recognised as a provision represents management's best estimate of the consideration required to complete the restoration and rehabilitation activity, the application of the relevant regulatory framework and timing of expenditure. These estimates are inherently uncertain and could materially change over time. Changes in the measurement of a liability relating to the decommissioning of plant or other site preparation work (that result from changes in the estimated timing or amount of the cash flow or a change in the discount rate), are added to or deducted from the cost of the related asset in the current period. If a decrease in the liability exceeds the carrying amount of the asset, the excess is recognised immediately in the income statement. If the asset value is increased and there is an indication that the revised carrying value is not recoverable, an impairment test is performed in accordance with the accounting policy set out above.

For some South African operations annual contributions are made to dedicated environmental rehabilitation trusts to fund the estimated cost of rehabilitation during and at the end of the life of the relevant mine. The Group exercises full control of these trusts and therefore the trusts are consolidated. The trusts' assets are disclosed separately on the balance sheet as non-current assets.

The trusts' assets are measured based on the nature of the underlying assets in accordance with accounting policies for similar assets.

E. Working capital

Inventories
Inventory and work in progress are measured at the lower of cost and net realisable value, except for inventory held by commodity broker-traders which is measured at fair value less costs to sell and are disclosed separately to the extent that they are material. The production cost of inventory includes an appropriate proportion of depreciation and production overheads. Cost is determined on the following basis:

- Raw materials and consumables are measured at cost on a first in, first out (FIFO) basis or a weighted average cost basis
- Work in progress and finished products are measured at raw material cost, labour cost and a proportion of production overhead expenses
- Metal and coal stocks are included within finished products and are measured at average cost.

At precious metals operations that produce 'joint products', cost is allocated among precious metal products according to production volumes.

Inventory is recognised as a current asset where it is expected to be consumed in the next 12 months. Stockpiles are classified as non-current where stockpiles are not expected to be processed in the next 12 months and there is no market to sell the product in its current state.

Metal leasing
Where the Group enters into metal leasing arrangements and metal is received or provided to counterparties for a specific period of time in return for a lease fee, consideration is given to the purpose of the arrangement and whether control of the metal inventory has been transferred.

Key considerations in this assessment include whether the lessee has a practical ability to use the commodity and whether price risk has been transferred.

Where control of the inventory has been transferred to the counterparty, inventory is derecognised and a financial receivable is recorded for the future receipt of metal. The financial receivable forms part of trade and other receivables where the purpose of the arrangement is to generate a trading margin and is otherwise presented within financial asset investments.

Where the Group receives control of inventory as a result of a lease arrangement, inventory is recognised and a payable is recorded to reflect the future return obligation. This liability forms part of trade and other payables where the purpose of the arrangement is to generate a trading margin or manage physical delivery requirements and is otherwise presented within financing liabilities.

Where control of the inventory is not transferred, the arrangement has no impact on the value of inventory recorded.

Other items

39. Accounting policies continued

F. Net debt and financial risk management

Cash and debt

Cash and cash equivalents

Cash and cash equivalents comprise cash in hand and on demand deposits, together with short term, highly liquid investments that are readily convertible to a known amount of cash and that are subject to an insignificant risk of changes in value. Initial margin relating to the Group's commodity trading activities is presented within cash and cash equivalents as the terms of the agreement allow the Group to request closure of the open positions and return of the margin within three days. Bank overdrafts are shown within short term borrowings in current liabilities on the balance sheet.

Cash and cash equivalents in the cash flow statement are shown net of overdrafts. Cash and cash equivalents are measured at amortised cost except for money market fund investments which are held at fair value as they are redeemed through the sale of units in the funds and not solely through the recovery of principal and interest.

Financial liabilities and equity instruments

Financial liabilities and equity instruments are classified and accounted for as debt or equity according to the substance of the contractual arrangements entered into.

Borrowings

Interest bearing borrowings and overdrafts are initially recognised at fair value, net of directly attributable transaction costs. Finance charges, including premiums payable on settlement or redemption and direct issue costs, are recognised in the income statement using the effective interest method. They are added to the carrying amount of the instrument to the extent that they are not settled in the period in which they arise.

Where interest or principal payments are linked to non-financial ESG targets, the best estimate of the future payment is included in the calculation of the effective interest rate at inception. If this best estimate changes in subsequent periods, the carrying value of the borrowing is adjusted to reflect the revised forecast, discounted using the effective interest rate determined at inception and any resulting gain or loss is recognised in the income statement.

Lease liabilities

Lease liabilities recognised on balance sheet are recognised within borrowings, and with the exception of variable vessel leases are recognised as part of net debt. On inception, the lease liability is recognised as the present value of the expected future lease payments, calculated using the Group's incremental borrowing rate, adjusted to reflect the length of the lease and country of location. For a minority of leases where it is possible to determine the interest rate implicit in the lease, it is used in place of the Group's incremental borrowing rate.

Lease payments included in the lease liability consist of each of the following:

- Fixed payments, including in-substance fixed payments
- Payments whose variability is dependent only upon an index or a rate, measured initially using the index or rate at the lease commencement date. The lease liability is revalued when there is a change in future lease payments arising from a change in an index or rate
- Any amounts expected to be payable under a guarantee of residual value
- The exercise price of a purchase option that the Group is reasonably certain to exercise, the lease payments after the date of a renewal option if the Group is reasonably certain to exercise its option to renew the lease, and penalties for exiting a lease agreement unless the Group is reasonably certain not to exit the lease early.

Variable leasing costs (other than those referred to above) and the costs of non-lease components are not included in the lease liability and are charged to operating costs in underlying EBITDA as they are incurred.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a change to the forecast lease payments. When the lease liability is remeasured, an adjustment is made to the corresponding right-of-use asset.

Derivative financial instruments and hedge accounting

In order to hedge its exposure to foreign exchange, interest rate and commodity price risk, the Group enters into forward, option and swap contracts. Commodity based (own use) contracts that meet the scope exemption in IFRS 9 are recognised in earnings when they are settled by physical delivery. Commodity contracts which do not meet the own use criteria are accounted for as derivatives.

All derivatives are held at fair value in the balance sheet within 'Derivative financial assets' or 'Derivative financial liabilities' except if they are linked to settlement and delivery of an unquoted equity instrument and the fair value cannot be measured reliably, in which case they are carried at cost. A derivative cannot be measured reliably where the range of reasonable fair value estimates is significant and the probabilities of various estimates cannot be reasonably assessed. Derivatives are classified as current or non-current depending on the contractual maturity of the derivative.

Changes in the fair value of derivative financial instruments that are designated and effective as hedges of future cash flows (cash flow hedges) are recognised directly in equity. The gain or loss relating to the ineffective portion is recognised immediately in the income statement. If the cash flow hedge of a firm commitment or forecast transaction results in the recognition of a non-financial asset or liability, then, at the time the asset or liability is recognised, the associated gains or losses on the derivative that had previously been recognised in equity are included in the initial measurement of the asset or liability. For hedges that do not result in the recognition of a non-financial asset or liability, amounts deferred in equity are recognised in the income statement in the same period in which the hedged item affects profit or loss.

For an effective hedge of an exposure to changes in fair value, the hedged item is adjusted for changes in fair value attributable to the risk being hedged. The corresponding entry and gains or losses arising from remeasuring the associated derivative are recognised in the income statement within financing remeasurements.

Hedge effectiveness is determined at the inception of the hedge relationship, and through periodic prospective effectiveness assessments to ensure that an economic relationship exists between the hedged item and hedging instrument. The Group's material hedging instruments are interest rate swaps that have similar critical terms to the related debt instruments, such as payment dates, maturities and notional amount. As all critical terms matched during the year, there was no material hedge ineffectiveness. The Group also uses cross currency swaps to manage foreign exchange risk associated with borrowings denominated in foreign currencies. These are not designated in an accounting hedge as there is a natural offset against foreign exchange movements on associated borrowings.

The Group has designated the embedded derivative component of the royalty liability (see note 22) as a cash flow hedge of future revenue cash flows from the Woodsmith project. In future periods, assuming the hedge remains effective, fair value derivative gains and losses as a result of changing forecast price and production forecasts will be recorded within other comprehensive income and recycled to revenue as the related revenue is recognised.

Other items

39. Accounting policies continued

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, exercised, revoked, or no longer qualifies for hedge accounting. At that time, any cumulative gain or loss on the hedging instrument recognised in equity is retained until the forecast transaction occurs. If a hedge transaction is no longer expected to occur, the net cumulative gain or loss previously recognised in equity is recycled to the income statement for the period.

Changes in the fair value of any derivative instruments that are not designated in a hedge relationship are recognised immediately in the income statement.

Derivatives embedded in other financial instruments or non-financial host contracts (other than financial assets in the scope of IFRS 9) are treated as separate derivatives when their risks and characteristics are not closely related to those of their host contracts and the host contracts themselves are not carried at fair value with unrealised gains or losses reported in the income statement.

Derivatives embedded in contracts which are financial assets in the scope of IFRS 9 are not separated and the whole contract is accounted for at either amortised cost or fair value.

Interest Rate Benchmark Reform: IFRS 9 *Financial Instruments* and IFRS 7 *Financial Instruments: Disclosures*

The Group uses interest rate derivatives to swap the majority of its Euro, Sterling and US dollar bonds from fixed interest rates to EURIBOR, SONIA, USD LIBOR and SOFR respectively. Any non-USD interest rate derivatives are swapped to USD LIBOR or SOFR using cross currency interest rate swaps which are not designated into hedges. The interest rate derivatives are designated into fair value hedges.

USD LIBOR is expected to be replaced by alternative risk-free rates as part of inter-bank offer rate (IBOR) reform.

The Group is continuing its transition to incorporate alternative risk-free rates and the principal benchmarks used are EURIBOR, USD LIBOR and RFR. The Group is continuing to monitor the market and discussing the potential changes with its counterparties in order to effectively transition to alternative risk-free rates. During the year, the Group has adhered to International Swaps and Derivative Association (ISDA) fallback protocol to ensure appropriate rates may be applied to relevant derivative instruments on cessation in the event transition to alternative risk-free rates is not completed in advance of cessation. The Group does not hold any material lease agreements that contain references to existing benchmarks and as a result there is no material impact on the lease liabilities or right-of-use assets at 31 December 2022.

See note 22 for a summary of the Group's current transition of financial instruments to alternative risk-free rates.

See note 21 for a list of the Group's Euro, Sterling and US dollar bonds which in turn reflects the nominal amount of the hedging instruments for those bonds which have been hedged.

G. Taxation

Tax

The tax expense includes the current tax and deferred tax charge recognised in the income statement.

Current tax payable is based on taxable profit for the year. Taxable profit differs from profit before tax as reported in the income statement because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are not taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the reporting date.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax liabilities are generally recognised for all taxable temporary differences and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised. Probable taxable profits are based on evidence of historical profitability and taxable profit forecasts limited by reference to the criteria set out in IAS 12 *Income Taxes*. Such assets and liabilities are not recognised if the temporary differences arise from the initial recognition of goodwill or of an asset or liability in a transaction (other than in a business combination) that affects neither taxable profit nor accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences arising on investments in subsidiaries, joint arrangements and associates except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at each reporting date and is adjusted to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the asset to be recovered.

Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised, based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax is charged or credited to the income statement, except when it relates to items charged or credited directly to equity, in which case the deferred tax is also taken directly to equity.

Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis with that taxation authority.

H. Employees

Retirement benefits

The Group's accounting policy involves the use of 'best estimate' assumptions in calculating the schemes' valuations in accordance with the accounting standard. This valuation methodology differs from that applied in calculating the funding valuations, which require the use of 'prudent' assumptions, such as lower discount rates, higher assumed rates of future inflation expectations and greater improvements in life expectancy, leading to a higher value placed on the liabilities. The funding valuations are carried out every three years, using the projected unit credit method, by independent qualified actuaries and are used to determine the money that must be put into the funded schemes. The Group operates both defined benefit and defined contribution pension plans for its employees as well as post employment medical plans. For defined contribution plans the amount recognised in the income statement is the contributions paid or payable during the year.

For defined benefit pension and post employment medical plans, full actuarial valuations are carried out at least every three years using the projected unit credit method and updates are performed for each financial year end. The average discount rate for the plans' liabilities is based on AA rated corporate bonds of a suitable duration and currency or, where there is no deep market for such bonds, is based on government bonds. Pension plan assets are measured using year end market values.

Other items

39. Accounting policies continued

Remeasurements comprising actuarial gains and losses, movements in asset surplus restrictions and the return on scheme assets (excluding interest income) are recognised immediately in the statement of comprehensive income and are not recycled to the income statement. Any increase in the present value of plan liabilities expected to arise from employee service during the year is charged to operating profit. The net interest income or cost on the net defined benefit asset or liability is included in investment income or interest expense respectively.

The retirement benefit obligation recognised on the balance sheet represents the present value of the deficit or surplus of the defined benefit plans. Any recognised surplus is limited to the present value of available refunds or reductions in future contributions to the plan.

Share-based payments

The Group makes equity settled share-based payments to certain employees, which are measured at fair value at the date of grant and expensed on a straight-line basis over the vesting period, based on the Group's estimate of shares that will eventually vest. For those share schemes with market related vesting conditions, the fair value is determined using the Monte Carlo model at the grant date. The fair value of share options issued with non-market vesting conditions has been calculated using the Black Scholes model.

For all other share awards, the fair value is determined by reference to the market value of the shares at the grant date. For all share schemes with non-market vesting conditions, the likelihood of vesting has been taken into account when determining the relevant charge. Vesting assumptions are reviewed during each reporting period to ensure they reflect current expectations.

I. Group structure

Associates and joint arrangements

Associates are investments over which the Group has significant influence, which is the power to participate in the financial and operating policy decisions of the investee, but without the ability to exercise control or joint control. Typically the Group owns between 20% and 50% of the voting equity of its associates.

Joint arrangements are arrangements in which the Group shares joint control with one or more parties. Joint control is the contractually agreed sharing of control of an arrangement, and exists only when decisions about the activities that significantly affect the arrangement's returns require the unanimous consent of the parties sharing control.

Judgement is required in determining this classification through an evaluation of the facts and circumstances arising from each individual arrangement. Joint arrangements are classified as either joint operations or joint ventures based on the rights and obligations of the parties to the arrangement. In joint operations, the parties have rights to the assets and obligations for the liabilities relating to the arrangement, whereas in joint ventures, the parties have rights to the net assets of the arrangement.

Joint arrangements that are not structured through a separate vehicle are always joint operations. Joint arrangements that are structured through a separate vehicle may be either joint operations or joint ventures depending on the substance of the arrangement. In these cases, consideration is given to the legal form of the separate vehicle, the terms of the contractual arrangement and, when relevant, other facts and circumstances. When the activities of an arrangement are primarily designed for the provision of output to the parties, and the parties are substantially the only source of cash flows contributing to the continuity of the operations of the arrangement, this indicates that the parties to the arrangements have rights to the assets and obligations for the liabilities.

Certain joint arrangements that are structured through separate vehicles including Collahuasi, Debswana and Namdeb are accounted for as joint operations. These arrangements are primarily designed for the provision of output to the parties sharing joint control, indicating that the parties have rights to substantially all the economic benefits of the assets. The liabilities of the arrangements are in substance satisfied by cash flows received from the parties; this dependence indicates that the parties effectively have obligations for the liabilities. It is primarily these facts and circumstances that give rise to the classification as joint operations.

The Group accounts for joint operations by recognising the assets, liabilities, revenue and expenses for which it has rights or obligations, including its share of such items held or incurred jointly.

Investments in associates and joint ventures are accounted for using the equity method of accounting except when classified as held for sale. The Group's share of associates' and joint ventures' net income is based on their most recent audited financial statements or unaudited interim statements drawn up to the Group's balance sheet date.

The total carrying values of investments in associates and joint ventures represent the cost of each investment including the carrying value of goodwill, the share of post-acquisition retained earnings, any other movements in reserves and any long term debt interests which in substance form part of the Group's net investment, less any cumulative impairments. The carrying values of associates and joint ventures are reviewed on a regular basis and if there is objective evidence that an impairment in value has occurred as a result of one or more events during the period, the investment is impaired. Investments which have been previously impaired are regularly reviewed for indicators of impairment reversal.

The Group's share of an associate's or joint venture's losses in excess of its interest in that associate or joint venture is not recognised unless the Group has an obligation to fund such losses. Unrealised gains arising from transactions with associates and joint ventures are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way, but only to the extent that there is no evidence of impairment.

Non-current assets and disposal groups held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is met only when a sale is highly probable within one year from the date of classification, management is committed to the sale and the asset or disposal group is available for immediate sale in its present condition.

Non-current assets and disposal groups are classified as held for sale from the date these conditions are met and are measured at the lower of carrying amount and fair value less costs to sell. Any resulting impairment loss is recognised in the income statement.

On classification as held for sale the assets are no longer depreciated. Comparative amounts are not adjusted.

Black Economic Empowerment (BEE) transactions

Where the Group disposes of a portion of a South African based subsidiary or operation to a BEE company at a discount to fair value, the transaction is considered to be a share-based payment (in line with the principle contained in South Africa interpretation AC 503 *Accounting for Black Economic Empowerment (BEE) Transactions*).

The discount provided or value given is calculated in accordance with IFRS 2 *Share-based Payments* and the cost, representing the fair value of the BEE credentials obtained by the subsidiary, is recorded in the income statement.

Financial statements of the Parent Company

Balance sheet of the Parent Company, Anglo American plc, as at 31 December 2022

US$ million	Note	2022	2021
Fixed assets			
Investment in subsidiaries	1	32,971	31,796
Financial asset investments		7	3
		32,978	31,799
Current assets			
Amounts due from Group undertakings		—	574
Cash at bank and in hand		2	—
		2	574
Creditors due within one year			
Amounts owed to Group undertakings		(1,874)	(224)
Other payables		—	(186)
		(1,874)	(410)
Net current (liabilities)/assets		(1,872)	164
Total assets less current liabilities		31,106	31,963
Net assets		31,106	31,963
Capital and reserves			
Called-up share capital	2	734	737
Share premium account	2	2,558	2,558
Capital redemption reserve	2	153	150
Other reserves	2	1,955	1,955
Retained earnings	2	25,706	26,563
Total shareholders' funds		31,106	31,963

Statement of changes in equity of the Parent Company

US$ million	Called-up share capital	Share premium account	Capital redemption reserve	Other reserves	Retained earnings	Total
At 1 January 2021	749	4,358	138	1,955	24,541	31,741
Profit for the financial year	—	—	—	—	4,989	4,989
Dividends[(1)]	—	—	—	—	(2,983)	(2,983)
Share buyback	—	—	—	—	(1,000)	(1,000)
Net purchase of treasury shares under employee share schemes	—	—	—	—	(227)	(227)
Shares cancelled during the year	(12)	—	12	—	—	—
Capital contribution to Group undertakings	—	—	—	—	161	161
In specie return of capital relating to Thungela demerger	—	(1,800)	—	—	1,085	(715)
Other	—	—	—	—	(3)	(3)
At 31 December 2021	737	2,558	150	1,955	26,563	31,963
Profit for the financial year	—	—	—	—	1,921	1,921
Dividends[(1)]	—	—	—	—	(2,661)	(2,661)
Net purchase of treasury shares under employee share schemes	—	—	—	—	(307)	(307)
Shares cancelled during the year	(3)	—	3	—	—	—
Capital contribution to Group undertakings	—	—	—	—	187	187
Other	—	—	—	—	3	3
At 31 December 2022	734	2,558	153	1,955	25,706	31,106

(1) Dividends relate only to shareholders on the United Kingdom principal register excluding dividends waived by Wealth Nominees Limited as nominees for Estera Trust (Jersey) Limited, the trustee for the Anglo American employee share scheme. Dividends paid to shareholders on the Johannesburg branch register are distributed by a South African subsidiary in accordance with the terms of the Dividend Access Share Provisions of Anglo American plc's Articles of Association. The directors are proposing a final dividend in respect of the year ended 31 December 2022 of 74 US cents per share (see note 6 to the Consolidated financial statements). The profit after tax for the year of the Parent Company amounted to $1,921 million (2021: $4,989 million).

The 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

1. Investment in subsidiaries

US$ million	2022	2021
Cost		
At 1 January	31,804	31,659
Capital contributions[1]	167	145
Additions	1,000	719
Disposals	—	(719)
At 31 December	32,971	31,804
Provisions for impairment		
At 1 January	(8)	(8)
Impairment reversal	8	—
At 31 December	—	(8)
Net book value	32,971	31,796

[1] This amount represents the Group share-based payment charge and is net of $20 million (2021: $16 million) of intra-group recharges.

Further information about subsidiaries is provided in note 35 to the Consolidated financial statements.

2. Accounting policies: Anglo American plc (the Company)

The Parent Company balance sheet and related notes have been prepared under the historical cost convention and in accordance with Financial Reporting Standard 100 *Application of Financial Reporting Requirements* (FRS 100) and Financial Reporting Standard 101 *Reduced Disclosure Framework* (FRS 101).

The Parent Company financial statements have been prepared in accordance with the requirements of the Companies Act 2006 and The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 (SI 2008/410).

A summary of the principal accounting policies is set out below.

The preparation of financial statements in compliance with FRS 101 requires the use of certain critical accounting estimates. It also requires management to exercise judgement in applying the Parent Company's accounting policies.

As permitted by section 408 of the Companies Act 2006, the statement of comprehensive income of the Parent Company is not presented as part of these financial statements.

The Parent Company has taken advantage of the following disclosure exemptions under FRS 101:

- the requirements of paragraphs 45(b) and 46-52 of IFRS 2 *Share-based Payments*
- the requirements of IFRS 7 *Financial Instruments: Disclosures*
- the requirements of paragraphs 91-99 of IFRS 13 *Fair Value Measurement*
- the requirement in paragraph 38 of IAS 1 *Presentation of Financial Statements* to present comparative information in respect of paragraph 79(a)(iv) of IAS 1
- the requirements of paragraphs 10(d), 10(f), 16, 38A, 38B, 38C, 38D, 40A, 40B, 40C, 40D, 111 and 134-136 of IAS 1 *Presentation of Financial Statements*
- the requirements of IAS 7 *Statement of Cash Flows*
- the requirements of paragraphs 30 and 31 of IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*
- the requirements of paragraph 17 and 18A of IAS 24 *Related Party Disclosures*
- the requirements in IAS 24 *Related Party Disclosures* to disclose related party transactions entered into between two or more members of a group, provided that any subsidiary which is a party to the transaction is wholly owned by such a member.

Significant accounting policies

Investments
Investments represent equity holdings in subsidiaries and are measured at cost less accumulated impairment.

Financial instruments
The Parent Company recognises financial instruments when it becomes a party to the contractual arrangements of the instrument. Financial instruments are derecognised when they are discharged or when the contractual terms expire.

Dividends
Interim equity dividends are recognised when declared. Final equity dividends are recognised when approved by the shareholders at an Annual General Meeting.

Share-based payments
The Parent Company has applied the requirements of IFRS 2 *Share-based Payments*.

2. Accounting policies: Anglo American plc (the Company) continued

The Parent Company makes equity settled share-based payments to the directors, which are measured at fair value at the date of grant and expensed on a straight-line basis over the vesting period, based on the Parent Company's estimate of shares that will eventually vest. For those share schemes with market related vesting conditions, the fair value is determined using the Monte Carlo model at the grant date. The fair value of share options issued with non-market vesting conditions has been calculated using the Black Scholes model. For all other share awards, the fair value is determined by reference to the market value of the shares at the grant date. For all share schemes with non-market vesting conditions, the likelihood of vesting has been taken into account when determining the relevant charge. Vesting assumptions are reviewed during each reporting period to ensure they reflect current expectations.

The Parent Company also makes equity settled share-based payments to certain employees of certain subsidiary undertakings. Equity settled share-based payments that are made to employees of the Parent Company's subsidiaries are treated as increases in equity over the vesting period of the award, with a corresponding increase in the Parent Company's investments in subsidiaries, based on an estimate of the number of shares that will eventually vest.

Any payments received from subsidiaries are applied to reduce the related increases in Investments in subsidiaries.

Insurance contracts

IFRS 17 *Insurance Contracts* was issued in May 2017 and became effective for the Parent Company from 1 January 2023.

The Parent Company has undertaken an accounting impact analysis and internal accounting guidance has been developed. Work is under way to embed the collection of new data requirements into existing systems and processes.

The principal impact of adopting the new accounting standard is expected to be on issued financial guarantee contracts, which have previously been asserted to be insurance contacts under IFRS 4 *Insurance Contracts*. On transition to the new standard, the Parent Company has elected to account for the majority of such arrangements under IFRS 9 *Financial Instruments*. This is expected to result in the recognition of additional liabilities under these arrangements of an immaterial value.

Taxation

Current and deferred tax is recognised in the statement of comprehensive income of the Parent Company, except that a charge attributable to an item of income and expense recognised as other comprehensive income or to an item recognised directly in equity is also recognised in other comprehensive income or directly in equity respectively.

The only income of the Parent Company is dividend income from subsidiaries. This income is non-taxable and there is no tax charge for the year (2021: nil).

3. Fees for non-audit services

Fees payable to PwC for non-audit services to the Parent Company are not required to be disclosed because they are included within the consolidated disclosure in note 37 to the Consolidated financial statements.

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 310.

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 300 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	453	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 – South Africa[29]	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

(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 310.

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.

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.

Ore Reserves and Mineral Resources

as at 31 December 2022

The Ore Reserve and Mineral Resource estimates presented in this report were prepared in accordance with the Anglo American Group Ore Reserves and Mineral Resources Reporting Policy. This policy stipulates that the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 edition (the JORC Code) be used as a minimum standard. This section should be read in conjunction with the Ore Reserves and Mineral Resources Report 2022.

Some Anglo American subsidiaries have a primary listing in South Africa where public reporting is carried out in accordance with the South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves (the SAMREC Code). The SAMREC Code is similar to the JORC Code and the Ore Reserve and Mineral Resource terminology appearing in this section follows the definitions in both the JORC (2012) and SAMREC (2016) Codes. Ore Reserves in the context of this report have the same meaning as 'Mineral Reserves' as defined by the SAMREC Code and the CIM (Canadian Institute of Mining Metallurgy and Petroleum) Definition Standards on Mineral Resources and Mineral Reserves.

The Anglo American Mineral Resources and Reserves (MinRes) team is responsible for ensuring the implementation of the Ore Reserve and Mineral Resource Reporting Policy and associated Requirements Document by all Anglo American business units. This team provides technical assurance, through the Group Director – Technical, to the Anglo American Audit Committee and the Anglo American Board of Directors on the integrity of the published estimates. MinRes's role is to plan and manage the annual reporting process, to validate the information supplied by the business units and from that, compile the Ore Reserves and Mineral Resources Report. Anglo American has well-established governance processes and internal controls to support the generation and publication of Ore Reserves and Mineral Resources, including a series of peer reviews.

The information on Ore Reserves and Mineral Resources was prepared by or under the supervision of Competent Persons (CPs) as defined in the JORC or SAMREC Codes. All CPs have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking. All the CPs consent to the inclusion in this report of the information in the form and context in which it appears. The names of the CPs, along with their Recognised Professional Organisation (RPO) affiliation and years of relevant experience, are listed in the Ore Reserves and Mineral Resources Report 2022.

The Anglo American Group of companies is subject to reviews aimed at providing assurance in respect of Ore Reserve and Mineral Resource estimates. The reviews are conducted by suitably qualified CPs from within the Group or independent consultants. The frequency and depth of review are a function of the perceived risks and/or uncertainties associated with a particular Ore Reserve and Mineral Resource. The overall value of the entity and time that has elapsed since an independent third-party review are also considered. Those operations/projects subjected to independent third-party reviews during the year are indicated in footnotes to the tables in the Ore Reserves and Mineral Resources Report 2022.

Both the JORC and SAMREC Codes require due consideration of reasonable prospects for eventual economic extraction for Mineral Resource definition. These include long range commodity price forecasts, which are prepared by in-house specialists using estimates of future supply and demand and long term economic outlooks. The calculation of Ore Reserve and Mineral Resource estimates is based on long term price assumptions. Ore Reserves are dynamic and likely to be affected by fluctuations in the prices of commodities, uncertainties in production costs, processing costs and other mining, infrastructure, legal, environmental, social and governmental factors which may impact the financial condition and prospects of the Group. Mineral Resource estimates also change in time and tend to be mostly influenced by new information pertaining to the understanding of the deposit, as well as by conversion to Ore Reserves.

Mineral Resource classification defines the confidence associated with different parts of the Mineral Resource. The confidence that is assigned refers collectively to the reliability of estimates of grade and tonnage. This includes considering the quality of the underlying sample data, the demonstrated continuity of the geology and the likely precision of grade and density estimates that collectively affect confidence in the Mineral Resource. Most business units have developed commodity-specific approaches to the classification of their Mineral Resources.

The appropriate Mineral Resource classification is determined by the appointed Competent (or Qualified) Persons. The choice of appropriate category of Mineral Resource depends upon the quantity, distribution and quality of geoscientific information available and the level of confidence in this data.

Anglo American makes use of a web-based group reporting database called the Anglo Reserve and Resource Reporting system (ARR) for the compilation, review and approval of Ore Reserve and Mineral Resource reporting. The system allows the CPs to capture the estimates, year-on-year reconciliations and other supplementary information, thus supporting the Ore Reserves and Mineral Resources publication.

The estimates of Ore Reserves and Mineral Resources are stated as at 31 December 2022. The figures in the tables are rounded and, if used to derive totals and averages, minor differences may result. Unless stated otherwise, Mineral Resources are additional to (i.e. exclusive of) those resources converted to Ore Reserves and are reported on a dry tonnes basis. Mineral Resources should not be added to Ore Reserves, as Modifying Factors have been applied to Ore Reserves.

The Ore Reserves and Mineral Resources Report 2022 should be considered the only valid source of Ore Reserve and Mineral Resource information for the Group exclusive of Kumba Iron Ore and Anglo American Platinum Limited, which publish their own independent annual reports.

It is accepted that mine planning may include some Inferred Mineral Resources. Inferred Mineral Resources in the Life of Asset Plan (LOAP) are described as 'Inferred (in LOAP)' separately from the remaining Inferred Mineral Resources described as 'Inferred (ex. LOAP)', as required. These resources are declared without application of Modifying Factors. Reserve Life reflects the scheduled extraction period in years for the total Ore Reserves in the approved LOAP.

The ownership (attributable) percentage that Anglo American holds in each operation and project is presented beside the name of each entity and reflects the Group's share of equity owned. The reported estimates represent 100% of the Ore Reserves and Mineral Resources. Operations and projects which fall below the internal threshold for reporting (25% attributable interest) are not reported. Operations or projects which were disposed of during 2022 and hence not reported are: Bokoni (Platinum Group Metals) and Cerrejón (Coal).

Ore Reserves and Mineral Resources are reported for properties over which mineral tenure has been granted and are valid, or where applications have been submitted or will be submitted at the appropriate time and there is a reasonable expectation that the rights will be granted in due course (any associated comments appear in the footnotes in the Ore Reserves and Mineral Resources Report 2022).

The effective management of risk is integral to good management practice. Anglo American is committed to an effective, robust system of risk identification and an appropriate response to such risks, in order to support the achievement of our objectives. Risk registers related to Ore Reserves and Mineral Resources are maintained for each operation, covering key risks pertaining to, but not limited to, technical, environmental, social, health, safety, economic and political aspects. Mitigation measures are identified and actioned to address the material risks at each operation.

— The detailed Ore Reserve and Mineral Resource estimates, Ore Reserve and Mineral Resource reconciliation overview, Definitions and Glossary are contained in the separate Ore Reserves and Mineral Resources Report 2022, which is available in the Annual Reporting Centre on the Anglo American website.

Estimated Ore Reserves[1]

as at 31 December 2022

Detailed Proved and Probable estimates appear on the referenced pages in the Ore Reserves and Mineral Resources Report 2022.

DIAMOND[4] OPERATION – DBCi (See page 20 in R&R Report for details)		Ownership %	Mining Method	LOA[2] (years)	Total Proved and Probable Saleable Carats (Mct)	Treated Tonnes (Mt)	Recovered Grade (cpht)
Gahcho Kué	Kimberlite	43.4	OP	8	34.7	24.0	144.6

DIAMOND[4] OPERATION – DBCM (See page 23 in R&R Report for details)		Ownership %	Mining Method	LOA[2] (years)	Saleable Carats (Mct)	Treated Tonnes (Mt)	Recovered Grade (cpht)
Venetia (UG)	Kimberlite	62.9	UG	25	67.6	93.1	72.7

DIAMOND[4] OPERATIONS – Debswana (See pages 26 & 27 in R&R Report for details)		Ownership %	Mining Method	LOA[2] (years)	Saleable Carats (Mct)	Treated Tonnes (Mt)	Recovered Grade (cpht)
Jwaneng	Kimberlite	42.5	OP	14	128.6	102.5	125.4
Letlhakane	TMR	42.5	n/a	21	5.2	26.5	19.4
Orapa	Kimberlite	42.5	OP	15	139.4	91.0	153.2

DIAMOND[4] OPERATIONS – Namdeb (See pages 30 & 32 in R&R Report for details)		Ownership %	Mining Method	LOA[2] (years)	Saleable Carats (kct)	Treated Tonnes (kt)	Recovered Grade (cpht)
Mining Area 1	Beaches	42.5	OC	20	28	363	7.71
Orange River	Fluvial placers	42.5	OC	2	49	5,720	0.86

		Ownership %	Mining Method	LOA[2] (years)	Saleable Carats (kct)	Area k (m^2)	Recovered Grade (cpm^2)
Atlantic 1	Marine placers	42.5	MM	35	8,879	165,742	0.05

COPPER OPERATIONS (See page 37 in R&R Report for details)		Ownership %	Mining Method	Reserve Life[3] (years)	Contained Copper (kt)	ROM Tonnes (Mt)	Grade (%TCu)
Collahuasi	Sulphide (direct feed)	44.0	OP	84	25,444	2,632.6	0.97
	Low grade sulphide (incl. stockpile)				7,462	1,527.6	0.49
El Soldado	Sulphide – flotation	50.1	OP	5	276	36.1	0.76
Los Bronces	Sulphide – flotation	50.1	OP	34	6,857	1,266.7	0.54
	Sulphide – dump leach				1,245	443.8	0.28
Quellaveco	Sulphide – flotation	60.0	OP	35	8,682	1,648.5	0.53

NICKEL OPERATIONS (See page 43 in R&R Report for details)		Ownership %	Mining Method	Reserve Life[3] (years)	Contained Nickel (kt)	ROM Tonnes (Mt)	Grade (%Ni)
Barro Alto	Saprolite	100	OP	19	554	42.9	1.29
Niquelândia	Saprolite	100	OP	13	77	6.2	1.24

PGMs[5] OPERATIONS (See pages 49 & 50 in R&R Report for details)		Ownership %	Mining Method	Reserve Life[3] (years)	Contained Metal (4E Moz)	ROM Tonnes (Mt)	Grade (4E g/t)
Amandelbult complex	MR & UG2 Reefs	78.7	UG	>18	13.1	89.5	4.53
Mogalakwena	Platreef (incl. stockpiles)	78.7	OP	>18	115.4	1,216.0	2.95
Mototolo complex	UG2 Reef	78.7	UG	>18	13.6	129.0	3.27
Unki	Main Sulphide Zone	78.7	UG	20	5.4	51.2	3.29
Non-managed	UG2 Reef	44.4	UG	n/a	6.7	55.2	3.76

Operations = Mines in steady-state or projects in ramp-up phase.
Mining method: OP = Open pit, UG = Underground, OC = Opencast/cut, MM = Marine mining. TMR = Tailings Mineral Resource.
Mct = Million carats. Mt = Million tonnes. kct = thousand carats. kt = thousand tonnes. k (m^2) = thousand square metres.
Diamond Recovered Grade is quoted as carats per hundred metric tonnes (cpht) or as carats per square metre (cpm^2).
Values reported as 0.0 represent estimates less than 0.05.
TCu = Total copper. 4E is the sum of platinum, palladium, rhodium and gold.
Moz = Million troy ounces. g/t = grams per tonne.
ROM = Run of mine.
MR = Merensky Reef.
Non-managed = Kroondal, Modikwa mines and Siphumelele 3 shaft.

Estimated Ore Reserves continued

Total Proved and Probable

KUMBA IRON ORE OPERATIONS (See page 57 in R&R Report for details)		Ownership %	Mining Method	Reserve Life[3] (years)	Saleable Product (Mt)	Grade (%Fe)
Kolomela	Haematite (incl. stockpile)	52.5	OP	12	133	64.3
Sishen	Haematite (incl. stockpile)	52.5	OP	17	399	63.2

IRON ORE BRAZIL OPERATION (See page 60 in R&R Report for details)		Ownership %	Mining Method	Reserve Life[3] (years)	Saleable Product[6] (Mt)	Grade[6] (%Fe)
Serra do Sapo	Friable itabirite & haematite	100	OP	52	644	67.0
	Itabirite				1,071	67.0

STEELMAKING COAL OPERATIONS (See page 64 in R&R Report for details)		Ownership %	Mining Method	Reserve Life[3] (years)	Saleable Tonnes[7] (Mt)	Saleable Quality[7]
Capcoal (OC)*	Metallurgical – coking	79.4	OC	17	33.9	5.0 CSN
	Metallurgical – other				45.8	6,750 kcal/kg
	Thermal – export				11.1	5,970 kcal/kg
Capcoal (UG) – Aquila*	Metallurgical – coking	70.0	UG	7	29.6	9.0 CSN
Dawson	Metallurgical – coking	51.0	OC	14	67.9	6.5 CSN
	Thermal – export				29.4	6,000 kcal/kg
Grosvenor	Metallurgical – coking	88.0	UG	14	67.2	8.0 CSN
Moranbah North	Metallurgical – coking	88.0	UG	22	155.8	7.5 CSN

SAMANCOR MANGANESE[8] OPERATIONS (See page 70 in R&R Report for details)		Ownership %	Mining Method	Reserve Life[3] (years)	Tonnes (Mt)	Grade (%Mn)
GEMCO[9]	ROM	40.0	OP	4	31	42.9
	Sands				5.2	40.0
Mamatwan		29.6	OP	15	44	36.6
Wessels		29.6	UG	41	57	41.6

Operations = Mines in steady-state or projects in ramp-up phase.
Mining method: OP = Open pit, UG = Underground, OC = Opencast/cut.
Mt = Million tonnes.
*Capcoal comprises opencast operations at Lake Lindsay and Oak Park, with an underground longwall operation at Aquila.

(1) Estimated Ore Reserves are the sum of Proved and Probable Ore Reserves (Mineral Resources are reported as additional to Ore Reserves unless stated otherwise). Please refer to the detailed Ore Reserve estimate tables in the Anglo American Ore Reserves and Mineral Resources Report for the individual Proved and Probable Ore Reserve estimates. The Ore Reserve estimates are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012) as a minimum standard. Ore Reserve estimates for operations in South Africa are reported in accordance with the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (the SAMREC Code, 2016), unless stated otherwise. The figures reported represent 100% of the Ore Reserves. Anglo American ownership is stated separately. Rounding of figures may cause computational discrepancies.
(2) LOA = Life of Asset is the scheduled extraction period in years of Probable Diamond Reserves including some Inferred Diamond Resources, considered for Life of Asset planning.
(3) Reserve Life = The scheduled extraction period in years for the total Ore Reserves in the approved Life of Asset Plan.
(4) DBCi = De Beers Canada, DBCM = De Beers Consolidated Mines, Debswana = Debswana Diamond Company, Namdeb = Namdeb Holdings. Reported Diamond Reserves are based on a Bottom Cut-Off (BCO), which refers to the bottom screen size aperture and varies between 1.00 mm and 3.00 mm (nominal square mesh). Specific BCOs applied to derive estimates are included in the detailed Diamond Reserve tables in the Anglo American Ore Reserves and Mineral Resources Report.
(5) Details of the individual Anglo American Platinum Limited Managed and Non-managed operations appear in the Anglo American Ore Reserves and Mineral Resources Report. Ownership percentage for Non-managed operations is weighted by Contained Metal (4E Moz) contributions from each operation.
(6) Iron Ore Brazil Saleable Product tonnes are reported on a wet basis (average moisture content is 9.5 weight % of the wet mass) with grade stated on a dry basis.
(7) Total Saleable Tonnes represents the product tonnes quoted as metric tonnes on a product moisture basis. The coal quality for Coal Reserves is quoted as either kilocalories per kilogram (kcal/kg) or Crucible Swell Number (CSN). Kilocalories per kilogram represent Calorific Value (CV) on a Gross As Received (GAR) basis. CV is rounded to the nearest 10 kcal/kg and CSN to the nearest 0.5 index.
(8) The Ore Reserve estimates are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012) for Australian and South African operations.
(9) GEMCO Ore Reserve manganese grades are reported as expected product and should be read together with their respective mass yields, ROM: 59%, Sands: 18%.

Estimated Mineral Resources[1]
as at 31 December 2022

Detailed Measured, Indicated and Inferred estimates appear on the referenced pages in the Ore Reserves and Mineral Resources Report 2022.

				Total Measured and Indicated			Total Inferred[2]		
DIAMOND[3] OPERATION – DBCi (See page 20 in R&R Report for details)		Ownership %	Mining Method	Carats (Mct)	Tonnes (Mt)	Grade (cpht)	Carats (Mct)	Tonnes (Mt)	Grade (cpht)
Gahcho Kué	Kimberlite	43.4	OP	3.5	2.5	139.7	23.6	13.5	174.7
DIAMOND[3] OPERATIONS – DBCM (See page 23 in R&R Report for details)		Ownership %	Mining Method	Carats (Mct)	Tonnes (Mt)	Grade (cpht)	Carats (Mct)	Tonnes (Mt)	Grade (cpht)
Venetia (OP)	Kimberlite	62.9	OP	–	–	–	0.8	3.4	23.6
Venetia (UG)	Kimberlite		UG	–	–	–	53.6	68.9	77.7
DIAMOND[3] OPERATIONS – Debswana (See pages 26 & 27 in R&R Report for details)		Ownership %	Mining Method	Carats (Mct)	Tonnes (Mt)	Grade (cpht)	Carats (Mct)	Tonnes (Mt)	Grade (cpht)
Damtshaa	Kimberlite	42.5	OP	5.5	25.2	21.9	6.4	26.6	24.1
Jwaneng	Kimberlite	42.5	OP	54.6	68.0	80.4	66.2	80.3	82.4
	TMR & ORT		n/a	–	–	–	19.4	22.8	84.8
Letlhakane	TMR & ORT	42.5	n/a	0.7	0.0	6,108.3	13.2	49.4	26.7
Orapa	Kimberlite	42.5	OP	271.7	280.4	96.9	64.5	75.0	86.0
DIAMOND[3] OPERATIONS – Namdeb (See pages 30 & 32 in R&R Report for details)		Ownership %	Mining Method	Carats (kct)	Tonnes (kt)	Grade (cpht)	Carats (kct)	Tonnes (kt)	Grade (cpht)
Mining Area 1	Beaches	42.5	OC	278	39,094	0.71	3,149	193,698	1.63
Orange River	Fluvial placers	42.5	OC	90	23,158	0.39	189	60,147	0.31
		Ownership %	Mining Method	Carats (kct)	Area k (m^2)	Grade (cpm^2)	Carats (kct)	Area k (m^2)	Grade (cpm^2)
Atlantic 1	Marine placers	42.5	MM	13,716	199,280	0.07	60,541	856,267	0.07
Midwater	Marine	42.5	MM	1,018	6,353	0.16	710	6,149	0.12
COPPER OPERATIONS (See pages 38 & 39 in R&R Report for details)		Ownership %	Mining Method	Contained Copper (kt)	Tonnes (Mt)	Grade (%TCu)	Contained Copper (kt)	Tonnes (Mt)	Grade (%TCu)
Collahuasi	Oxide and mixed leach	44.0	OP	506	71.7	0.71	298	51.3	0.58
	Sulphide – flotation			8,517	931.7	0.91	26,286	2,972.6	0.88
	Low grade sulphide			1,692	360.4	0.47	8,392	1,821.8	0.46
El Soldado	Sulphide – flotation	50.1	OP	947	170.9	0.55	112	26.8	0.42
Los Bronces	Sulphide – flotation	50.1	OP	13,033	2,882.4	0.45	3,250	751.2	0.43
	Sulphide – dump leach			–	–	–	27	8.3	0.32
Quellaveco	Sulphide – flotation	60.0	OP	2,658	680.4	0.39	3,470	905.9	0.38
NICKEL OPERATIONS (See page 43 in R&R Report for details)		Ownership %	Mining Method	Contained Nickel (kt)	Tonnes (Mt)	Grade (%Ni)	Contained Nickel (kt)	Tonnes (Mt)	Grade (%Ni)
Barro Alto	Saprolite	100	OP	137	12.5	1.09	111	9.3	1.19
	Ferruginous laterite			87	6.9	1.26	48	4.2	1.15
Niquelândia	Saprolite	100	OP	32	2.5	1.25	–	–	–
	Ferruginous laterite			–	–	–	36	3.2	1.13

Operations = Mines in steady-state or projects in ramp-up phase.
Mining method: OP = Open pit, UG = Underground, OC = Opencast/cut, MM = Marine mining. TMR = Tailings Mineral Resource. ORT = Old Recovery Tailings.
Mct = Million carats. Mt = Million tonnes. kct = thousand carats. kt = thousand tonnes. k (m^2) = thousand square metres.
Diamond Grade is quoted as carats per hundred metric tonnes (cpht) or as carats per square metre (cpm^2).
Values reported as 0.0 represent estimates less than 0.05.
TCu = Total copper.

Estimated Mineral Resources continued

PGMs[4] OPERATIONS (See pages 51, 52 & 53 in R&R Report for details)		Ownership %	Mining Method	Total Measured and Indicated: Contained Metal (4E Moz)	Total Measured and Indicated: Tonnes (Mt)	Total Measured and Indicated: Grade (4E g/t)	Total Inferred[2]: Contained Metal (4E Moz)	Total Inferred[2]: Tonnes (Mt)	Total Inferred[2]: Grade (4E g/t)
Amandelbult complex	MR & UG2 Reefs	78.7	UG	54.3	285.8	5.91	22.9	113.9	6.26
Mogalakwena	Platreef (incl. stockpiles)	78.7	OP & UG	122.6	1,665.4	2.29	29.7	423.8	2.18
Mototolo complex	MR & UG2 Reefs	78.7	UG	28.5	207.6	4.26	26.7	197.7	4.20
Twickenham	MR & UG2 Reefs	78.7	UG	60.7	335.7	5.62	56.0	313.9	5.55
Unki	Main Sulphide Zone	78.7	UG	16.8	120.8	4.32	4.1	31.8	4.04
Non-managed	MR & UG2 Reefs	39.7	UG	37.0	246.5	4.67	27.7	211.5	4.07

KUMBA IRON ORE OPERATIONS (See page 57 in R&R Report for details)		Ownership %	Mining Method	Total Measured and Indicated: Tonnes (Mt)	Total Measured and Indicated: Grade (%Fe)	Total Inferred: Tonnes (Mt)	Total Inferred: Grade (%Fe)
Kolomela	Haematite	52.5	OP	114.2	64.0	18.6	62.6
Sishen	Haematite	52.5	OP	397.4	57.2	36.1	54.7

IRON ORE BRAZIL OPERATION (See page 60 in R&R Report for details)		Ownership %	Mining Method	Total Measured and Indicated: Tonnes[5] (Mt)	Total Measured and Indicated: Grade[5] (%Fe)	Total Inferred: Tonnes[5] (Mt)	Total Inferred: Grade[5] (%Fe)
Serra do Sapo	Friable itabirite & haematite	100	OP	268.1	33.0	41.9	36.1
	Itabirite			1,376.4	31.0	364.4	31.0

STEELMAKING COAL OPERATIONS (See page 65 in R&R Report for details)	Ownership %	Mining Method	Total Measured and Indicated: Tonnes[6] (Mt)	Total Measured and Indicated: Coal Quality[6] (kcal/kg)	Total Inferred: Tonnes[6] (Mt)	Total Inferred: Coal Quality[6] (kcal/kg)
Capcoal (OC)*	79.4	OC	140.5	6,900	137.0	6,840
Capcoal (UG) – Aquila*	70.0	UG	39.4	6,700	2.8	6,190
Dawson	51.0	OC	594.0	6,720	220.7	6,730
Grosvenor	88.0	UG	294.5	6,460	95.9	6,390
Moranbah North	88.0	UG	178.3	6,670	25.4	6,530

SAMANCOR MANGANESE[7] OPERATIONS (See page 70 in R&R Report for details)		Ownership %	Mining Method	Total Measured and Indicated: Tonnes (Mt)	Total Measured and Indicated: Grade (%Mn)	Total Inferred: Tonnes (Mt)	Total Inferred: Grade (%Mn)
GEMCO[8]	ROM	40.0	OP	105	43.4	26	44.2
	Sands			8.1	18.9	—	—
Mamatwan		29.6	OP	68	35.0	—	—
Wessels		29.6	UG	122	41.8	18	41.4

Operations = Mines in steady-state or projects in ramp-up phase.
Mining method: OP = Open pit, UG = Underground, OC = Opencast/cut.
Mt = Million tonnes. Moz = Million troy ounces. g/t = grams per tonne.
4E is the sum of platinum, palladium, rhodium and gold.
MR = Merensky Reef.
Non-managed = Kroondal, Marikana, Modikwa mines and Siphumelele 3 shaft.
*Capcoal comprises opencast operations at Lake Lindsay and Oak Park, with an underground longwall operation at Aquila.

(1) Estimated Mineral Resources are presented on an exclusive basis, i.e. Mineral Resources are reported as additional to Ore Reserves unless stated otherwise. Please refer to the detailed Mineral Resource estimate tables in the Anglo American Ore Reserves and Mineral Resources Report for the individual Measured, Indicated and Inferred Resource estimates. The Mineral Resource estimates are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012) as a minimum standard. The Mineral Resource estimates for operations in South Africa are reported in accordance with the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (the SAMREC Code, 2016), unless stated otherwise. The figures reported represent 100% of the Mineral Resources. Anglo American ownership is stated separately. Rounding of figures may cause computational discrepancies.

(2) Total Inferred is the sum of 'Inferred (in LOAP)', the Inferred Resources within the scheduled LOAP and 'Inferred (ex. LOAP)', the portion of Inferred Resources with reasonable prospects for eventual economic extraction not considered in the LOAP as relevant. Due to the uncertainty attached to Inferred Mineral Resources, it cannot be assumed that all or part of an Inferred Mineral Resource will necessarily be upgraded to an Indicated or Measured Mineral Resource after continued exploration.

(3) DBCi = De Beers Canada, DBCM = De Beers Consolidated Mines, Debswana = Debswana Diamond Company, Namdeb = Namdeb Holdings. Estimated Diamond Resources are presented on an exclusive basis, i.e. Diamond Resources are quoted as additional to Diamond Reserves. Reported Diamond Resources are based on a Bottom Cut-Off (BCO), which refers to the bottom screen size aperture and varies between 1.00 mm and 3.00 mm (nominal square mesh). Specific BCOs applied to derive estimates are included in the detailed Diamond Resource tables in the Anglo American Ore Reserves and Mineral Resources Report.

(4) Details of the individual Anglo American Platinum Limited Managed and Non-managed operations appear in the Anglo American Ore Reserves and Mineral Resources Report. Ownership percentage for Non-managed is weighted by Contained Metal (4E Moz) contributions from each operation. Merensky Reef, UG2 Reef and Main Sulphide Zone Mineral Resources are estimated over a 'resource cut' which takes cognisance of the mining method, potential economic viability and geotechnical aspects in the hangingwall or footwall of the reef.

(5) Iron Ore Brazil Mineral Resource tonnes and grade are reported on a dry basis.

(6) Coal Resources are quoted on a Mineable Tonnes *In Situ* (MTIS) basis in million tonnes, which are in addition to those Coal Resources that have been modified to produce the reported Coal Reserves. Dawson, Grosvenor and Moranbah North operations have been reported on a Gross Tonnes *In Situ* (GTIS) basis in million tonnes. Coal Resources are reported on an *in situ* moisture basis. The coal quality for Coal Resources is quoted on an *in situ* heat content as kilocalories per kilogram (kcal/kg), representing Calorific Value (CV) on a Gross As Received (GAR) basis. CV is rounded to the nearest 10 kcal/kg.

(7) The Mineral Resource estimates are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012) for Australian and South African operations. Manganese Mineral Resources are quoted on an inclusive basis and must not be added to the Ore Reserves.

(8) GEMCO ROM Mineral Resource tonnes are stated as *in situ*, manganese grades are given as per washed ore samples and should be read together with their respective mass recovery expressed as yield. GEMCO Sands Mineral Resource tonnes and manganese grades are as *in situ*.

Glossary of terms

Ore Reserves
An 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. 'Modifying Factors' are (realistically assumed) considerations used to convert Mineral Resources to Ore Reserves. These include, but are not restricted to, mining, processing, steelmaking, infrastructure, economic, marketing, legal, environmental, social and governmental factors. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.

A 'Proved Ore Reserve' is the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.

A 'Probable Ore Reserve' is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve. A Probable Ore Reserve has a lower level of confidence than a Proved Ore Reserve but is of sufficient quality to serve as the basis for a decision on the development of the deposit.

Mineral Resources
A 'Mineral Resource' is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Ore Reserve or under certain circumstances to a Probable Ore Reserve.

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Ore Reserve.

An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to an Ore Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Life of Asset Plan (LOAP)
Life of Asset Plan is the most recent annual plan summarising a forecast of the development, operation and maintenance of the asset based on realistically assumed geological, mining, processing, metallurgical, economic, infrastructure, marketing, legal, environmental, social, governmental, engineering, operational and all other Modifying Factors. This plan shall cover a detailed mine design and schedule for ore tonnes and grade, waste movements, treatment schedule, production of saleable product, capital, operating and reclamation costs, together with reasonable estimates of cash flows and other costs and expenses (including corporate costs), in sufficient detail to demonstrate at the time of reporting that extraction is reasonably justified.

Reserve Life
The scheduled extraction period in years for the total Ore Reserves in the approved LOAP.

Inferred (in LOAP)
Inferred Resources within the scheduled LOAP.

Inferred (ex. LOAP)
The portion of Inferred Resources with reasonable prospects for eventual economic extraction not considered in the LOAP.

Fatal-injury frequency rate (FIFR)[1]
FIFR is the number of employee or contractor fatal injuries due to all causes per 1,000,000 hours worked.

Lost time injury frequency rate (LTIFR)[1]
LTIFR is the number of lost time injuries (LTIs) for both employees and contractors per 1,000,000 hours worked. An LTI is a work-related injury resulting in the person being unable to attend work or perform the routine functions of his/her job, on the next calendar day after the day of the injury, whether a scheduled workday or not. Restricted work cases are therefore counted as LTIs.

Total recordable injury frequency rate (TRIFR)[1]
TRIFR is the number of fatal injuries, lost time injuries and medical treatment cases for both employees and contractors per 1,000,000 hours worked.

New cases of occupational disease (NCOD)[1]
NCOD is the sum of all recorded, irreversible occupational diseases. An occupational disease is a health condition or disorder (e.g., silicosis, coal-workers' pneumoconiosis, chronic obstructive air ways disease, occupational cancers, sensitisation to platinum or rhodium salts, work-related mental disorders, etc.) that is caused by the work environment or activities related to work.

Total energy consumed[1]
Total amount of energy consumed is the sum of total energy from electricity purchased, total energy from fossil fuels and total energy from renewable fuels and is measured in million gigajoules (GJ).

Total water withdrawals[1]
Total water withdrawals by source, reported in line with International Council on Metals and Mining (ICMM) guidance, includes: surface water; groundwater; seawater, and third-party water, and is measured in million m^3.

Fresh water withdrawals in water scarce areas[1]
Naturally occurring water that meets the criteria of the Minerals Council of Australia's Water Accounting Framework (WAF) Category 1, excluding precipitation and run-off, which reasonably cannot effectively be prevented from entry into our operational processes in million m^3.

Greenhouse gases (GHGs)[1]
The Intergovernmental Panel on Climate Change 2006 report (as updated in 2011) factors are applied as defaults for all carbon dioxide-equivalent (CO_2e) and energy calculations. Where emission factors are available for specific countries or sub-regions from government and regulatory authorities, these are applied. Australian operations apply conversion factors required by the government for regulatory reporting and operations in Brazil apply local factors for biomass and biofuel. Factors for CO_2e from electricity are based on local grid factors.

Based on a self-assessment, Anglo American believes it reports in accordance with the WRI/WBCSD GHG Protocol, as issued prior to the 2015 revision on Scope 2 emissions reporting. In line with the GHG Protocol's 'management control' boundary, 100% of the direct and indirect emissions for managed operations are accounted for while zero emissions for associates, joint ventures and other investments are included in the reporting scope.

Level 3, 4 and 5 environmental incidents[1]
Environmental incidents are unplanned or unwanted events resulting from our operations that adversely impact the environment or contravene local regulations/permit conditions. They are classified from minor (Level 1) to significant (Level 5) depending on the duration and extent of impact, as well as the sensitivity and/or biodiversity value of the receiving environment. Level 3-5 incidents are those which we consider to have prolonged impacts on the local environments, lasting in excess of one month and affecting areas greater than several hundred metres on site, or extending beyond the boundaries of our immediate operations.

Total amount spent on community social investment
Categories for community social investment (CSI) expenditure include charitable donations, community investment and community commercial initiatives. CSI contributions can take the form of cash donations, contributions in kind and employees' working hours spent on charity and volunteering projects during work hours. Not included is expenditure that is necessary for the development of an operation (e.g. resettlement of families) or receiving a licence. Training expenditure for individuals who will be employed by the Company following completion of training is not included. CSI is reported in US dollars and converted from the currency of the operations at the average foreign exchange rate applied by Anglo American for financial reporting purposes.

Charitable donations include charitable and philanthropic gifts and contributions that tend to be ad hoc and one-offs.

Community investment includes the funding of community projects/programmes which address social issues, the costs of providing public facilities to community members who are not employees or dependents, the marginal value of land or other assets transferred to community ownership, and income creation schemes or mentoring/volunteering initiatives that do not have a principally commercial justification.

Commercial initiatives include enterprise development and other community initiatives/partnerships that can also directly support the success of the Company (such as supplier development). There must, however, be a clear and primary element of public benefit.

We prohibit the making of donations for political purposes to any politician, political party or related organisation, an official of a political party or candidate for political office in any circumstances either directly or through third parties.

Jobs supported through livelihoods' initiatives
Anglo American supports jobs through various community livelihoods' initiatives. This includes – but is not limited to – local procurement, training, mentoring and capacity development, loan funding to small businesses, agriculture programmes and collaborative regional development initiatives. The number of jobs supported includes existing jobs through activities to support increased security of those jobs, as well as newly created jobs through a range of development programmes and projects. Jobs supported are measured as full time equivalent jobs.

Inclusive procurement measurement
Our Inclusive Procurement Policy provides a framework for supporting development outcomes through targeted procurement interventions. This policy is further strengthened by region specific regulations and processes where it relates to host community procurement. Inclusive procurement strategies take into account the regions and communities within which our operations are located.

The measurement of performance against our inclusive procurement strategy is informed by a combination of development outcomes and legal requirements. Inclusive procurement encompasses a combination of multiple factors, including procurement from local (or in country/region), host and designated entities.

- **Host communities:** includes suppliers who have their main place of business in the direct vicinity of the operation, as defined per region.
- **Designated groups:** include First Nation-owned companies (Canada region), Aboriginal owned supplier businesses (Australia) and BEE entities (South Africa).
- **Local companies:** businesses that are registered and based in the country of the operation – also referred to as in-country suppliers.

Our inclusive procurement initiatives are aimed at ensuring maximum impact on host communities.

(1) Data relates to subsidiaries and joint operations over which Anglo American has management control. See Anglo American plc Sustainability Report 2022 for the full list of entities within the reporting scope.

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 with the exception of the new accounting pronouncements disclosed in note 39.
- 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 310 to 312.

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

Group APM	Closest equivalent IFRS measure	Adjustments to reconcile to primary statements	Rationale for adjustments
Underlying earnings	Profit/(loss) for the financial year attributable to equity shareholders of the Company	– 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 remeasurements	– 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 trading activity	– 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 (note 22) 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 made over the lease term
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

Group APM	Closest equivalent IFRS measure	Adjustments to reconcile to primary statements	Rationale for adjustments
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 (excluding goodwill)	– 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 extension projects	– 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 2 to the Consolidated 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 2 to the Consolidated 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 2 to the Consolidated 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 2 to the Consolidated 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 5 to the Consolidated 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 3 to the Consolidated 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
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, see note 22, but excluding the impact of the debit valuation adjustment on these derivatives, explained in note 20). A reconciliation to the Consolidated balance sheet is provided within note 20 to the Consolidated 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 12 to the Consolidated 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 2 to the Consolidated financial statements. A reconciliation to 'Net assets', the closest equivalent IFRS measure to capital employed, is provided within note 9 to the Consolidated 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

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
								2022
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 82 of the Group financial review.

Sustaining attributable free cash flow
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 82 of the Group financial review.
Growth capital expenditure in 2022 and 2021 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. PGMs 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 2021 terms. This allows the user of the waterfall to understand the underlying real movement in sales volumes and cash costs on a consistent basis.

Production statistics

The figures below include the entire output of consolidated entities and the Group's attributable share of joint operations, associates and joint ventures where applicable, except for De Beers' joint operations which are quoted on a 100% basis.[1]

	2022	2021
De Beers[1]		
Carats recovered ('000 carats) 100% basis (unless otherwise stated)		
Jwaneng	13,445	12,893
Orapa[2]	10,697	9,433
Botswana	24,142	22,326
Debmarine Namibia	1,725	1,137
Namdeb (land operations)	412	330
Namibia	2,137	1,467
Venetia	5,515	5,306
South Africa	5,515	5,306
Gahcho Kué (51% basis)	2,815	3,177
Canada	2,815	3,177
Total carats recovered	34,609	32,276
Sales volumes		
Total sales volume (100%) (Mct)[3]	33.7	36.3
Consolidated sales volume (Mct)[3]	30.4	33.4
Number of Sights (sales cycles)[3]	10	10
Copper[4]		
Copper production	664,500	647,200
Copper sales	640,500	641,100
Copper Chile		
Los Bronces mine[5]		
Ore mined	46,756,500	43,784,900
Ore processed – Sulphide	45,943,600	50,697,500
Ore grade processed – Sulphide (% TCu)[6]	0.62	0.70
Production – Copper cathode	39,400	39,900
Production – Copper in concentrate	231,500	287,800
Total production	270,900	327,700
Collahuasi 100% basis (Anglo American share 44%)		
Ore mined	82,222,600	102,431,100
Ore processed – Sulphide	57,316,400	55,681,300
Ore grade processed – Sulphide (% TCu)[6]	1.11	1.25
Production – Copper in concentrate	570,700	630,000
Anglo American's 44% share of copper production for Collahuasi	251,100	277,200
El Soldado mine[5]		
Ore mined	6,779,300	6,178,500
Ore processed – Sulphide	7,548,500	7,451,300
Ore grade processed – Sulphide (% TCu)[6]	0.65	0.73
Production – Copper in concentrate	40,200	42,300
Chagres Smelter[5]		
Ore smelted[7]	100,600	108,000
Production	97,500	104,800
Total copper production[8]	562,200	647,200
Total payable copper production	540,200	621,100
Total sales volumes	563,000	641,100
Total payable sales volumes	540,600	612,500
Third party sales[9]	422,300	431,500
Copper Peru		
Quellaveco mine[10]		
Ore mined	27,431,000	1,127,100
Ore processed – Sulphide	11,719,400	—
Ore grade processed – Sulphide (% TCu)[6]	1.12	—
Total copper production	102,300	—
Total payable copper production	98,900	—
Total copper sales volumes	77,500	—
Total payable sales volumes	74,800	—

See page 318 for footnotes.

	2022	2021
Nickel (tonnes)[11]		
Barro Alto		
Ore mined	3,424,800	3,514,900
Ore processed	2,421,600	2,477,000
Ore grade processed – %Ni	1.49	1.55
Production	32,700	33,900
Codemin		
Ore mined	800	6,800
Ore processed	531,100	561,500
Ore grade processed – %Ni	1.44	1.55
Production	7,100	7,800
Total nickel production	39,800	41,700
Nickel sales volumes	39,000	42,100
Platinum Group Metals		
Produced PGMs ('000 oz)[12]	4,024.0	4,298.7
Own-mined	2,649.2	2,858.3
Mogalakwena	1,026.2	1,214.6
Amandelbult	712.5	773.2
Unki	232.1	204.6
Mototolo	289.9	244.4
Joint operations[13]	388.5	421.5
Purchase of concentrate	1,374.8	1,440.4
Joint operations[13]	388.5	421.5
Third parties	986.3	1,018.9
Refined production[12][14]		
Platinum ('000 oz)	1,782.9	2,399.9
Palladium ('000 oz)	1,198.5	1,627.5
Rhodium ('000 oz)	249.2	347.2
Other PGMs and Gold ('000 oz)	600.5	763.8
Nickel (tonnes)	21,300	22,300
Tolled material ('000 oz)[15]	622.6	673.7
4E Head grade (g/tonne milled)[16]	3.27	3.50
PGMs sales – own-mined and purchase of concentrate[12][17]	3,861.3	5,214.4
PGMs sales – third party trading[12][18]	1,849.9	770.6
Iron Ore		
Iron Ore production[19]	59,281,200	63,807,600
Iron Ore sales[19]	57,985,400	63,284,500
Kumba production[19]	37,699,500	40,862,200
Lump	24,670,900	27,552,500
Fines	13,028,600	13,309,700
Kumba production by mine (tonnes)		
Sishen	27,017,700	28,014,500
Kolomela	10,681,800	12,847,700
Kumba sales[19][20]		
Export iron ore[20]	36,670,600	40,185,100
Domestic iron ore	–	107,100
Minas-Rio production		
Pellet feed [19]	21,581,700	22,945,400
Minas-Rio sales		
Export – pellet feed (wet basis)[19]	21,314,800	22,992,300
Steelmaking Coal (tonnes)		
Steelmaking Coal production[21][22]	15,007,000	14,907,700
Hard coking coal[22]	12,088,100	11,320,500
PCI/SSCC	2,918,900	3,587,200
Export thermal coal	1,644,800	1,677,000
Steelmaking Coal sales by product (tonnes)[22]	14,683,400	14,136,800
Hard coking coal[22]	11,311,600	10,795,400
PCI/SSCC	3,371,800	3,341,400
Export thermal coal	1,680,900	2,108,200
Steelmaking Coal production by operation (tonnes)[21][22]	15,007,000	14,907,700
Moranbah	3,395,200	3,050,700
Grosvenor	3,036,500	71,600
Capcoal (including Aquila)[23]	3,445,900	5,992,900
Dawson	2,087,300	2,483,700
Jellinbah	3,042,100	3,118,100
Other	–	190,700

See page 318 for footnotes.

	2022	2021
Manganese (tonnes) unless stated otherwise		
Samancor production		
Manganese ore[24]	3,740,700	3,683,200
Sales volumes		
Manganese ore	3,596,200	3,745,800
Thermal Coal (tonnes)		
Thermal Coal production (tonnes)[21]		
Export – South Africa[25]	–	5,682,100
Export – Colombia[26]	–	3,578,900
Domestic – South Africa	–	5,562,100
Thermal Coal sales		
Export – South Africa[25]	–	5,335,300
Export – Colombia[26]	–	3,365,000
Domestic – South Africa	–	5,349,100
Third party sales[27]	–	6,396,000
Thermal Coal South Africa production by operation (tonnes)[21]		11,244,200
Goedehoop	–	3,024,500
Greenside	–	1,400,900
Zibulo	–	2,045,800
Khwezela	–	1,163,400
Mafube	–	729,000
Other[28]	–	2,880,600

(1) De Beers Group production is on a 100% basis, except for the Gahcho Kué joint venture which is on an attributable 51% basis.
(2) Orapa constitutes the Orapa Regime which includes Orapa, Letlhakane and Damtshaa.
(3) Consolidated sales volumes exclude De Beers Group's JV partners' 50% proportionate share of sales to entities outside De Beers Group from Diamond Trading Company Botswana and the Namibia Diamond Trading Company, which are included in total sales volume (100% basis).
(4) Excludes copper production from the Platinum Group Metals business unit. Units shown are tonnes unless stated otherwise.
(5) Anglo American ownership interest of Los Bronces, El Soldado and the Chagres Smelter is 50.1%. Production is stated at 100% as Anglo American consolidates these operations.
(6) TCu = total copper.
(7) Copper contained basis.
(8) Total copper production includes Anglo American's 44% interest in Collahuasi.
(9) Relates to sales of copper not produced by Anglo American operations.
(10) Anglo American ownership interest of Quellaveco is 60%. Production is stated at 100% as Anglo American consolidates this operation.
(11) Excludes nickel production from the Platinum Group Metals business unit.
(12) Ounces refer to troy ounces. PGMs consists of 5E+Au (platinum, palladium, rhodium, ruthenium and iridium plus gold).
(13) The joint operations are Modikwa and Kroondal. Platinum owns 50% of these operations, which is presented under 'Own-mined' production, and purchases the remaining 50% of production, which is presented under 'Purchase of concentrate'.
(14) Refined production excludes toll material.
(15) Tolled volume measured as the combined content of platinum, palladium, rhodium and gold, reflecting the tolling agreements in place.
(16) 4E: the grade measured as the combined content of: platinum, palladium, rhodium and gold, excludes tolled material. Minor metals are excluded due to variability.
(17) Sales from own mined and purchased concentrate, excludes refined metal purchased from third parties. PGMs sales volumes from production are generally ~65% own mined and ~35% purchases of concentrate though this may vary from quarter to quarter.
(18) Relates to sales of metal not produced by Anglo American operations.
(19) 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. Total iron ore is the sum of Kumba and Minas-Rio.
(20) Sales volumes differ to Kumba's standalone results due to sales to other Group companies.
(21) Anglo American's attributable share of production.
(22) Includes production relating to processing of third party product.
(23) Includes production from the Aquila longwall operation from February 2022. Prior to then, includes production from the Grasstree longwall operation.
(24) Saleable production.
(25) Thermal Coal – South Africa mining activity included in prior year until the demerger on 4 June 2021. Includes export primary production, secondary production sold into export markets and production sold domestically at export parity pricing.
(26) Anglo American's attributable share of Cerrejón production is 33.3%. Volumes included in prior year until 30 June 2021 following the sales agreement entered into on 31 December 2020. Please see note 32 for more information.
(27) H1 2021 only.
(28) Other includes Isibonelo and Rietvlei.

Quarterly production statistics

					Quarter ended		% Change (Quarter ended)
	31 December 2022	**30 September 2022**	**30 June 2022**	**31 March 2022**	31 December 2021	31 December 2022 v 30 September 2022	31 December 2022 v 31 December 2021
De Beers							
Carats recovered ('000 carats)							
100% basis[(1)]							
Diamonds	8,155	9,570	7,949	8,935	7,691	(15%)	6%
Copper (tonnes)[(2)]	244,300	146,800	133,900	139,500	160,700	66%	52%
Copper Chile	162,300	126,500	133,900	139,500	160,700	28%	1%
Copper Peru	82,000	20,300	—	—	—	304%	—%
Nickel (tonnes)[(3)]	10,200	10,000	10,300	9,300	10,600	2%	(4%)
PGMs M&C ('000 oz)[(4)]	990.4	1,046.1	1,031.5	956.0	1,103.4	(5%)	(10%)
PGMs refined ('000 oz)[(4)(5)]	877.2	994.8	1,240.6	718.5	1,391.3	(12%)	(37%)
Platinum ('000 oz)	391.2	457.2	600.4	334.1	653.5	(14%)	(40%)
Palladium ('000 oz)	278.5	317.1	374.8	228.1	423.2	(12%)	(34%)
Rhodium ('000 oz)	51.7	64.8	86.4	46.3	97.7	(20%)	(47%)
Other PGMs and gold ('000 oz)[(4)]	155.8	155.7	179.0	110.0	216.9	—%	(28%)
Nickel (tonnes)	4,800	5,700	6,200	4,600	5,700	(16%)	(16%)
Iron Ore (tonnes)[(6)]	15,682,400	16,060,000	14,373,900	13,164,900	15,050,800	(2%)	4%
Iron ore – Kumba	9,961,400	9,977,300	9,468,800	8,292,000	9,701,300	—%	3%
Iron ore – Minas-Rio	5,721,000	6,082,700	4,905,100	4,872,900	5,349,500	(6%)	7%
Steelmaking Coal (tonnes)[(7)]	4,649,800	5,510,200	2,620,600	2,226,400	4,372,100	(16%)	6%
Hard Coking Coal	3,647,300	4,562,200	2,125,600	1,753,000	2,922,400	(20%)	25%
PCI/SSCC	1,002,500	948,000	495,000	473,400	1,449,700	6%	(31%)
Export thermal Coal	427,500	424,000	365,900	427,400	341,800	1%	25%
Manganese (tonnes)							
Manganese ore[(8)]	984,300	973,300	979,600	803,500	834,600	1%	18%

(1) De Beers Group production is on a 100% basis, except for the Gahcho Kué joint venture which is on an attributable 51% basis.
(2) Contained metal basis. Reflects copper production from the Copper operations in Chile and Peru only (excludes copper production from the Platinum Group Metals business unit).
(3) Reflects nickel production from the Nickel operations in Brazil only (excludes 21.3 kt of full year 2022 nickel production from the Platinum Group Metals business unit).
(4) Ounces refer to troy ounces. PGMs consists of 5E+Au (platinum, palladium, rhodium, ruthenium and iridium plus gold).
(5) Refined production excludes toll material.
(6) Volumes are reported as wet metric tonnes. Product is shipped with c.1.6% moisture from Kumba and c.9% moisture from Minas-Rio. Total iron ore is the sum of Kumba and Minas-Rio.
(7) Anglo American's attributable share of production. Includes production relating to processing of third party product.
(8) Saleable production.

Non-financial data

	2022	2021	2020	2019	2018
Anglo American plc data					
Safety[1]					
Work-related fatalities[2][3]	**2**	2	2	4	5
Fatal-injury frequency rate (FIFR)[2][3]	**0.008**	0.008	0.010	0.017	0.024
Total recordable injury frequency rate (TRIFR)[2]	**2.19**	2.24	2.14	2.21	2.66
Lost-time injury frequency rate (LTIFR)[2]	**1.40**	1.52	1.34	1.36	1.63
Occupational health[1]					
New cases of occupational disease (NCOD)[2]	**5**	16	30	39	101
Environment[1]					
Total greenhouse gas (GHG) emissions – Scopes 1 and 2 (Mt CO_2e)[2]	**13.3**	14.5	15.4	16.9	15.2
Total energy consumed (million GJ)[2]	**83**	84	78	83	80
Total water withdrawals (million m^3)	**187**	162	166	147	158
People					
Number of employees ('000)[4]	**64**	64	65	63	63
Women in senior management[5]	**29%**	29%	27%	24%	21%
Historically Disadvantaged South Africans in management[6]	**71%**	73%	68%	65%	65%
Voluntary turnover (%)[7]	**3.6%**	3.5%	2.8%	2.9%	2.9%
Social					
Community Social Investment spend (total in US$ million)[8]	**175**	138	125	114	82
Community Social Investment spend (% of underlying EBIT)[8]	**2**	1	2	2	2
Total jobs supported off site[9]	**114,534**	104,860	n/a	n/a	n/a

	2022	2021	2020	2019	2018
Select Business Unit data					
Safety[1]					
Work-related fatalities – De Beers	**1**	–	–	–	1
Work-related fatalities – Copper Chile	**–**	–	–	1	–
Work-related fatalities – Copper Peru[10]	**–**	1	–	1	n/a
Work-related fatalities – Nickel	**–**	–	–	–	–
Work-related fatalities – PGMs	**–**	1	1	–	2
Work-related fatalities – Iron Ore – Kumba	**–**	–	–	–	–
Work-related fatalities – Iron Ore – IOB	**–**	–	–	–	–
Work-related fatalities – Coal – Steelmaking Coal	**1**	–	–	1	–
Work-related fatalities – Coal – Thermal Coal South Africa	**n/a**	–	1	1	2
Work-related fatalities – Crop Nutrients[10]	**–**	–	–	n/a	n/a
Work-related fatalities – Corporate and Other	**–**	–	–	–	–
TRIFR – De Beers	**2.19**	2.03	2.18	3.07	2.48
TRIFR – Copper Chile	**1.42**	1.55	1.58	1.15	1.03
TRIFR – Copper Peru[10]	**2.23**	2.93	2.20	0.91	n/a
TRIFR – Nickel	**3.67**	1.26	1.51	2.75	3.03
TRIFR – PGMs	**2.34**	2.60	2.40	2.50	3.00
TRIFR – Iron Ore – Kumba	**1.55**	0.80	1.74	2.06	1.80
TRIFR – Iron Ore – IOB	**1.60**	2.24	1.87	1.48	2.14
TRIFR – Coal – Steelmaking Coal	**5.63**	4.12	4.72	6.20	9.04
TRIFR – Coal – Thermal Coal South Africa	**n/a**	1.57	1.55	1.56	1.87
TRIFR – Crop Nutrients[10]	**1.90**	2.59	0.81	n/a	n/a
TRIFR – Corporate and Other	**0.37**	0.97	0.63	0.17	1.85

See next page for footnotes.

	2022	2021	2020	2019	2018
Environment[1]					
GHG emissions – Mt CO_2e – De Beers	**0.5**	0.4	0.4	0.5	0.6
GHG emissions – Mt CO_2e – Copper Chile	**0.4**	0.4	1.1	1.2	1.2
GHG emissions – Mt CO_2e – Copper Peru[10]	**0.2**	0.1	0.1	0.2	n/a
GHG emissions – Mt CO_2e – Nickel	**1.1**	1.3	1.2	1.2	1.2
GHG emissions – Mt CO_2e – PGMs	**4.1**	4.5	3.9	4.4	4.1
GHG emissions – Mt CO_2e – Iron Ore – Kumba	**1.0**	1.0	0.9	1.0	1.0
GHG emissions – Mt CO_2e – Iron Ore – IOB	**0.2**	0.3	0.2	0.2	0.2
GHG emissions – Mt CO_2e – Coal – Steelmaking Coal	**5.8**	6.4	8.2	6.9	6.4
GHG emissions – Mt CO_2e – Coal – Thermal Coal South Africa	**n/a**	0.8	0.8	0.9	1.0
GHG emissions – Mt CO_2e – Crop Nutrients[10]	**0.0**	0.0	0.0	n/a	n/a
GHG emissions – Mt CO_2e – Corporate and Other	**0.0**	0.0	0.0	0.0	0.0
Energy consumption – million GJ – De Beers	**4.2**	4.2	3.8	4.5	5.8
Energy consumption – million GJ – Copper Chile	**13.0**	12.8	11.3	12.3	13.4
Energy consumption – million GJ – Copper Peru[10]	**3.4**	1.6	0.6	2.0	n/a
Energy consumption – million GJ – Nickel	**20.3**	20.8	21.3	20.2	20.0
Energy consumption – million GJ – PGMs	**18.9**	20.8	18.1	20.1	20.0
Energy consumption – million GJ – Iron Ore – Kumba	**9.0**	8.7	8.1	8.8	8.9
Energy consumption – million GJ – Iron Ore – IOB	**5.1**	5.1	5.2	5.1	1.8
Energy consumption – million GJ – Coal – Steelmaking Coal	**9.2**	9.3	8.5	10.1	9.0
Energy consumption – million GJ – Coal – Thermal Coal South Africa	**n/a**	3.1	3.5	3.5	4.1
Energy consumption – million GJ – Crop Nutrients[10]	**0.1**	0.2	0.1	n/a	n/a
Energy consumption – million GJ – Corporate and Other	**0.1**	0.1	0.1	0.1	0.9
Total water withdrawals – million m^3 – De Beers	**7.2**	11.6	10.1	9.9	11.5
Total water withdrawals – million m^3 – Copper Chile	**34.9**	33.5	35.8	24.7	32.2
Total water withdrawals – million m^3 – Copper Peru[10]	**8.7**	0.7	1.5	n/a	n/a
Total water withdrawals – million m^3 – Nickel	**7.0**	7.0	8.0	6.3	8.0
Total water withdrawals – million m^3 – PGMs	**42.2**	42.6	43.9	47.4	43.9
Total water withdrawals – million m^3 – Iron Ore – Kumba	**11.4**	11.2	10.6	10.6	9.7
Total water withdrawals – million m^3 – Iron Ore – IOB	**41.4**	32.2	35.3	28.8	28.3
Total water withdrawals – million m^3 – Coal – Steelmaking Coal	**31.8**	20.9	21.0	17.9	23.1
Total water withdrawals – million m^3 – Coal – Thermal Coal South Africa	**n/a**	14.9	31.0	34.2	29.2
Total water withdrawals – million m^3 – Crop Nutrients[10]	**0.1**	0.1	0.2	n/a	n/a
Total water withdrawals – million m^3 – Corporate and Other	**1.9**	1.8	0.0	n/a	n/a
People[4]					
Number of employees – De Beers	**10,500**	10,000	10,700	9,000	10,000
Number of employees – Copper Chile	**4,400**	4,300	3,800	4,000	4,000
Number of employees – Copper Peru[10]	**1,000**	750	400	300	n/a
Number of employees – Nickel	**1,400**	1,400	1,400	1,000	1,000
Number of employees – PGMs	**32,100**	31,400	31,500	31,000	33,000
Number of employees – Iron Ore – Kumba	**6,700**	6,100	6,200	6,000	6,000
Number of employees – Iron Ore – IOB	**2,600**	2,600	2,500	3,000	2,000
Number of employees – Coal – Steelmaking Coal	**2,000**	1,900	2,000	2,000	2,000
Number of employees – Coal – Thermal Coal South Africa	**n/a**	n/a	4,600	5,000	5,000
Number of employees – Crop Nutrients[10]	**500**	600	300	n/a	n/a
Number of employees – Corporate and Other	**3,000**	4,700	6,900	2,000	1,000

(1) Data relates to subsidiaries and joint operations over which Anglo American has management control. Data excludes De Beers' joint operations in Namibia and Botswana. See page 98 of the Anglo American plc Sustainability Report 2022 for the full list of entities within the reporting scope. Divested businesses are included up until the point of divestment, with the exception of total Group GHG emissions, energy consumed and total water withdrawals where current and historical data has been adjusted to exclude Thermal Coal South Africa, which was divested in May 2021.

(2) See pages 308–309 for definitions and basis of calculation.

(3) The work-related fatal injuries and FIFR figures presented for 2021 have been restated to reflect the death of an employee in April 2022, following a fall-related injury in November 2021.

(4) Average number of employees for 2022–2020 excludes contractors and associates and joint ventures employees, and includes a share of employees within joint operations, based on shareholding. Data for 2019-2018 is presented on the same basis, with the exception of Debswana (De Beers), where employee numbers are included at 19.2%, reflecting Anglo American's economic interest.

(5) Female representation within the Group Management Committee and those reporting to the committee.

(6) Historically Disadvantaged South African employees within bands seven and above divided by the total number of South African employees in bands seven and above.

(7) The number of people who resigned as a percentage of the total work force, excluding contractors.

(8) CSI spend is the sum of donations for charitable purposes and community investment (which includes cash and in-kind donations and staff time) as well as investments in commercial initiatives with public benefit (such as enterprise development). Included within the CSI expenditure figure for 2022 is expenditure relating to Zimele of $11.6 million (2021: $8.6 million).

(9) The number of jobs supported includes existing jobs (in activities supported by the intervention) and newly created jobs through Anglo American's various community Livelihoods' programmes. Jobs supported are measured as full time equivalent jobs.

(10) Data for Quellaveco prior to 2019 is not presented as the project only reached a full year of development in 2019. Comparative data for Crop Nutrients prior to 2020 is not presented as the acquisition of Sirius Minerals Plc was completed in 2020.

Directors' report

This section includes certain disclosures which are required by law to be included in the Directors' report.

In accordance with the Companies Act 2006 (Companies Act), the following items have been reported in other sections of the Integrated Annual Report and are included in this Directors' report by reference:

- Details of the directors of the Company can be found on pages 124–126
- Directors' interests in shares at 31 December 2022 and any changes thereafter, can be found on page 191 of the directors' remuneration report
- Events occurring after the end of the year are set out in note 29 to the financial statements on page 265
- The Strategic Report on pages 2-120 gives a fair review of the business and an indication of likely future developments and fulfils the requirements set out in section 414C of the Companies Act
- Details of the Group's governance arrangements and its compliance with the UK Corporate Governance Code (the Code) can be found on pages 121–204
- Comprehensive details of the Group's approach to financial risk management are given in note 23 to the financial statements on pages 252-254
- The Group's disclosure of its greenhouse gas emissions can be found on page 48. The Group's Streamlined Energy and Carbon Reporting (SECR) disclosures can be found on page 120
- The Group's disclosures related to the recommendations of the Taskforce on Climate-Related Financial Disclosures (TCFD) can be found on page 114
- Details of employee engagement can be found on pages 56-63 and 143-144
- Details of stakeholder engagement can be found on pages 16-19 and 143-145.

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 80–83. Further details of our policy on financial risk management are set out in note 23 to the financial statements on pages 252–254. 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 note 21 and note 23 on pages 246 and 252-254 respectively, and net debt is set out in note 20 on page 245.

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 within the Group Viability Statement on pages 67 and 68. In the downside scenario 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.

Dividends

An interim dividend of 124 US cents per ordinary share was paid on 23 September 2022. The directors are recommending that a final dividend of 74 US cents per ordinary share be paid on 28 April 2023 to ordinary shareholders on the register at the close of business on 17 March 2023 subject to shareholder approval at the AGM to be held on 26 April 2023. This would bring the total dividend in respect of 2022 to US$1.98 per ordinary share. In accordance with the UK-adopted International Accounting Standards, the final dividend will be accounted for in the financial statements for the year ended 31 December 2023.

The Anglo American Employee Benefit Trust (EBT) holds shares to facilitate the operation of certain of the Group's share option and share incentive schemes (share plans). The EBT has waived the right to receive dividends on all unallocated shares not allocated to dividend bearing share awards.

Share capital

The Company's issued share capital as at 31 December 2022 is set out in note 24 on page 255.

Significant shareholdings

The Company has been notified of the following significant shareholdings, as at the date of this report:

Company	Number of shares	Percentage of voting rights
Public Investment Corporation	93,551,783	6.86
BlackRock Inc	84,968,927	6.05
Tarl Investment Holdings (RF) Proprietary Limited[1]	47,275,613	3.37
Epoch Two Investment Holdings (RF) Proprietary Limited[1]	42,166,686	3.01

[1] Epoch Two Investment Holdings (RF) Proprietary Limited (Epoch Two) and Tarl Investment Holdings (RF) Proprietary Limited (Tarl) are two of the independent companies that have purchased shares as part of Anglo American's 2006 share buyback programme. Epoch Two and Tarl have waived their right to vote all the shares they hold, or will hold, in Anglo American plc.

Sustainable development

The Sustainability Report 2022 will be published on the Group's website on 6 March 2023.

This report focuses on the safety, health, sustainable development and environmental performance of the Group's managed operations, its performance with regard to the Group's Code of Conduct, and the operational dimensions of its social programmes.

Audit information

The directors confirm that, so far as they are aware, there is no relevant audit information of which the auditor is unaware, that all directors have taken all reasonable steps to make themselves aware of any relevant audit information and to establish that the auditor is aware of that information.

Disclosure table pursuant to Listing Rule 9.8.4C

Listing Rule	Information to be included	Disclosure
9.8.4(1)	Interest capitalised by the Group	See note 4, page 223
9.8.4(2)	Unaudited financial information (LR 9.2.18)	None
9.8.4(4)	Long term incentive scheme only involving a director (LR 9.4.3)	None
9.8.4(5)	Directors' waivers of emoluments	None
9.8.4(6)	Directors' waivers of future emoluments	None
9.8.4(7)	Non pro rata allotments for cash (issuer)	None
9.8.4(8)	Non pro rata allotments for cash (major subsidiaries)	None
9.8.4(9)	Listed company is a subsidiary of another company	Not applicable
9.8.4(10)	Contracts of significance involving a director	None
9.8.4(11)	Contracts of significance involving a controlling shareholder	Not applicable
9.8.4(12)	Waivers of dividends	See 'Dividends' paragraph on page 324
9.8.4(13)	Waivers of future dividends	See 'Dividends' paragraph on page 324
9.8.4(14)	Agreement with a controlling shareholding LR 9.2.2AR(2)(a)	Not applicable

Employment and other policies

The Group's key operating businesses are empowered to manage within the context of the different legislative and social demands of the diverse countries in which those businesses operate, subject to the standards embodied in Anglo American's Code of Conduct. Within all the Group's businesses, the safe and effective performance of employees and the maintenance of positive employee relations are of fundamental importance. Managers are charged with ensuring that the following key principles are upheld:

- Adherence to national legal standards on employment and workplace rights at all times
- Adherence to the International Labour Organization's core labour rights, including: prohibition of child labour; prohibition of inhumane treatment of employees and any form of forced labour, physical punishment or other abuse; recognition of the right of our employees to freedom of association and the promotion of workplace equality; and the elimination of all forms of unfair discrimination
- Continual promotion of safe and healthy working practices
- Provision of opportunities for employees to enhance their work related skills and capabilities
- Adoption of fair and appropriate procedures for determining terms and conditions of employment.

It is the Group's policy that everybody should have full and fair consideration for all vacancies. Employment is considered on merit and with regard only to the ability of any applicant to carry out the role. We endeavour to retain the employment of, and arrange suitable retraining, for any employees in the workforce who become disabled during their employment. Where possible we will adjust a person's working environment to enable them to stay in our employment.

The Group promotes an inclusive and diverse environment where every colleague is valued and respected for who they are, and has the opportunity to fulfil their potential. The Group is focused on providing a workplace where everyone can thrive and has introduced a number of Groupwide policies to encourage this. The Group's inclusion and diversity policy reflects its commitment as a signatory to the United Nations Global Compact and is aligned both to the labour rights principles set out in the International Labour Organization core conventions and with the United Nations Sustainable Development Goals. The Group has also introduced policies related to bullying, harassment and victimisation and recognising and responding to domestic violence, which clearly states its zero tolerance to such behaviours, along with a Group-wide flexible working policy and family friendly and carer policy recognising changing societal needs.

Further, the Group is committed to treating employees at all levels with respect and consideration, to investing in their development and to ensuring that their careers are not constrained by discrimination or arbitrary barriers.

The Group's Code of Conduct is supported by a number of policies and procedures which provide specific guidance to employees on the behaviour required to reinforce the Group's Values and uphold the Group's commitments to prioritise safety, health and the environment; treat people with care and respect, conduct business with integrity and protect its physical assets and information. The Group's Code of Conduct can be accessed via the Group's website.

In addition to meeting legal requirements, suppliers to Anglo American must adhere to the requirements of the Responsible Sourcing Standard for Suppliers, which is available on the Group's website and referenced in contracts. The standard includes a dedicated pillar providing unambiguous guidance on our expectations of conducting business fairly and with integrity; including anti-bribery, anti-competitive, anti-collusive and transparent business behaviours expected by all supplier partners.

The Business Integrity Policy sets out the Group's anti-bribery and corruption commitment by clearly stating that the Group will neither give nor accept bribes, nor permit others to do so in its name. The Policy sets out the standards of conduct required across Anglo American, (including subsidiaries and managed joint operations), by those with which the Group does business and by those who work on the Group's behalf, in combating corrupt behaviour of all types. The Policy is supported by 11 Prevention of Corruption Procedures, which have been translated into the main languages that are used across the Group's operations.

A dedicated team, operating within a broader risk management and business assurance team oversees the implementation of the Business Integrity Policy. Working closely with other corporate functions, and senior managers in the business units, the team provides guidance and support on the implementation and monitoring of the Business Integrity Policy. The team also assists on bribery and corruption risk identification and management, and providing online and face-to-face training for relevant employees, including those in high-risk roles. The internal audit team regularly provide risk based assurance on the implementation of the anti-bribery and corruption controls framework.

The Group's whistleblowing facility, YourVoice, is available to employees and external stakeholders to confidentially and, if they choose, anonymously report concerns about behaviour which might be unethical, unlawful or unsafe, or contrary to the Group's Values and Code of Conduct.

Political donations

No political donations were made during 2022. Anglo American has an established policy of not making donations to, or incurring expenses for the benefit of, any political party in any part of the world, including any political party or political organisation as defined in the Political Parties, Elections and Referendums Act 2000.

Additional information for shareholders

Set out below is a summary of certain provisions of the Company's current Articles of Association (Articles) and applicable English law concerning companies (the Companies Act) required as a result of the implementation of the Takeover Directive in English law. This is a summary only and the relevant provisions of the Articles or the Companies Act should be consulted if further information is required.

Dividends and distributions

Subject to the provisions of the Companies Act, the Company may, by ordinary resolution, from time to time declare final dividends not exceeding the amount recommended by the Board. The Board may pay interim dividends whenever the financial position of the Company, in the opinion of the Board, justifies such payment.

The Board may withhold payment of all, or any part of any dividends or other monies payable in respect of the Company's shares, from a person with a 0.25% interest or more (as defined in the Articles) if such a person has been served with a notice after failing to provide the Company with information concerning interests in those shares required to be provided under the Companies Act.

Rights and obligations attaching to shares

The rights and obligations attaching to the shares are set out in the Articles.

The Articles may only be changed by a special resolution passed by the shareholders.

Voting

Subject to the Articles generally and to any special rights or restrictions as to voting attached by or in accordance with the Articles to any class of shares, on a show of hands every member who is present in person at a general meeting shall have one vote and, on a poll, every member who is present in person or by proxy shall have one vote for every share of which he/she is the holder. It is, and has been for some years, the Company's practice to hold a poll on every resolution at shareholder meetings.

Where shares are held by trustees/nominees in respect of the Group's employee share plans and the voting rights attached to such shares are not directly exercisable by the employees, it is the Company's practice that such rights are not exercised by the relevant trustee/nominee.

Under the Companies Act, members are entitled to appoint a proxy, who need not be a member of the Company, to exercise all or any of their rights to attend and to speak and vote on their behalf at a general meeting or class meeting.

A member may appoint more than one proxy in relation to a general meeting or class meeting provided that each proxy is appointed to exercise the rights attached to a different share or shares held by that member. A member that is a corporation may appoint one or more individuals to act on its behalf at a general meeting or class meeting as a corporate representative. Where a shareholder appoints more than one corporate representative in respect of its shareholding, but in respect of different shares, those corporate representatives can act independently of each other, and validly vote in different ways.

Restrictions on voting

No member shall, unless the directors otherwise determine, be entitled in respect of any share held by him/her to vote either personally or by proxy at a shareholders' meeting, or to exercise any other right conferred by membership in relation to shareholders' meetings, if any call or other sum presently payable by him/her to the Company in respect of that share remains unpaid. In addition, no member shall be entitled to vote if he/she has been served with a notice after failing to provide the Company with information concerning interests in those shares required to be provided under the Companies Act.

Issue of shares

Subject to the provisions of the Companies Act relating to authority and pre-emption rights and of any resolution of the Company in a UK general meeting, all unissued shares of the Company shall be at the disposal of the directors and they may allot, grant options over, or otherwise dispose of them to such persons at such times, and on such terms, as they think proper.

Shares in uncertificated form

Any share or class of shares of the Company may be issued or held (including any shares or class of shares held on the South African Branch Register or any other overseas branch register of the members of the Company) on such terms, or in such a way, that: title to it or them is not, or must not be, evidenced by a certificate; or it or they may or must be transferred wholly or partly without a certificate. The directors have power to take such steps as they think fit in relation to: the evidencing of and transfer of title to uncertificated shares (including in connection with the issue of such shares); any records relating to the holding of uncertificated shares; the conversion of certificated shares into uncertificated shares; or the conversion of uncertificated shares into certificated shares. The Company may by notice to the holder of a share require that share: if it is uncertificated, to be converted into certificated form; and if it is certificated, to be converted into uncertificated form, to enable it to be dealt with in accordance with the Articles.

If the Articles give the directors power to take action, or require other persons to take action, in order to sell, transfer or otherwise dispose of shares; and uncertificated shares are subject to that power, but the power is expressed in terms which assume the use of a certificate or other written instrument, the directors may take such action as is necessary or expedient to achieve the same results when exercising that power in relation to uncertificated shares. The directors may take such action as they consider appropriate to achieve the sale, transfer, disposal, forfeiture, re-allotment or surrender of an uncertificated share or otherwise to enforce a lien in respect of it. This may include converting such share to certificated form. Unless the directors resolve otherwise, shares which a member holds in uncertificated form must be treated as separate holdings from any shares which that member holds in certificated form. A class of shares must not be treated as two classes simply because some shares of that class are held in certificated form and others are held in uncertificated form.

Deadlines for exercising voting rights

Votes are exercisable at a general meeting of the Company in respect of which the business being voted upon is being heard. Votes may be exercised in person, by proxy, or in relation to corporate members, by corporate representative. The Articles provide a deadline for submission of proxy forms of not less than 48 hours before the time appointed for the holding of the meeting or adjourned meeting.

Variation of rights

Subject to statute, the Articles specify that rights attached to any class of shares may be varied with the written consent of the holders of not less than three-quarters in nominal value of the issued shares of that class, or with the sanction of an extraordinary resolution passed at a separate general meeting of the holders of those shares. At every such separate general meeting the quorum shall be two persons holding, or representing by proxy, at least one-third in nominal value of the issued shares of the class (calculated excluding any shares held as treasury shares). The rights conferred upon the holders of any shares shall not, unless otherwise expressly provided in the rights attaching to those shares, be deemed to be varied by the creation or issue of further shares ranking *pari passu* with them.

Transfer of shares

All transfers of shares that are in certificated form may be effected by transfer in writing in any usual or common form or in any other form acceptable to the directors and may be under hand only. The instrument of transfer shall be signed by, or on behalf of, the transferor and (except in the case of fully paid shares) by or on behalf of the transferee. The transferor shall remain the holder of the shares concerned until the name of the transferee is entered in the register of shareholders. All transfers of shares registered on the main register of members that are in uncertificated form may be effected by means of the CREST system. All transfers of uncertified shares registered on the branch register of members in South Africa may be effected via the Transfer Secretary.

The directors may decline to recognise any instrument of transfer relating to shares in certificated form unless it:

(a) is in respect of only one class of share

(b) is lodged at the transfer office (duly stamped if required) accompanied by the relevant share certificate(s) and such other evidence as the directors may reasonably require to show the right of the transferor to make the transfer (and, if the instrument of transfer is executed by some other person on his/her behalf, the authority of that person so to do).

The directors may decline to register any transfer of shares in certificated form unless: the instrument of transfer is in respect of only one class of share; the instrument of transfer is lodged (duly stamped if required) at the Transfer Office accompanied by the relevant share certificate(s) or such other evidence as the directors may reasonably require to show the right of the transferor to make the transfer or, if the instrument of transfer is executed by some other person on the transferor's behalf, the authority of that person to do so; and it is fully paid. The directors may also refuse to register an allotment or transfer of shares (whether fully paid or not) in favour of more than four persons jointly.

If the directors refuse to register an allotment or transfer, they shall send the refusal to the allottee or the transferee within two months after the date on which the letter of allotment or transfer was lodged with the Company.

A shareholder does not need to obtain the approval of the Company, or of other shareholders of shares in the Company, for a transfer of shares to take place.

Directors

Directors shall not be fewer than 5 nor more than 18 in number. A director is not required to hold any shares of the Company by way of qualification. The Company may by ordinary resolution increase or reduce the maximum or minimum number of directors.

Powers of directors

Subject to the Articles, the Companies Act and any directions given by special resolution, the business of the Company will be managed by the Board who may exercise all the powers of the Company.

The Board may exercise all the powers of the Company to borrow money and to mortgage or charge any of its undertaking, property and uncalled capital and to issue debentures and other securities, whether outright or as collateral security, for any debt, liability or obligation of the Company or of any third party.

The Company may by ordinary resolution declare dividends, but no dividend shall be payable in excess of the amount recommended by the directors.

Subject to the provisions of the Articles and to the rights attaching to any shares, any dividends or other monies payable on or in respect of a share may be paid in such currency as the directors may determine. The directors may deduct from any dividend payable to any member all sums of money (if any) presently payable by him/her to the Company on account of calls or otherwise in relation to shares of the Company. The directors may retain any dividends payable on shares on which the Company has a lien, and may apply the same in or towards satisfaction of the debts, liabilities or engagements in respect of which the lien exists.

Appointment and replacement of directors

The directors may from time to time appoint one or more directors. The Board may appoint any person to be a director (so long as the total number of directors does not exceed the limit prescribed in the Articles). Any such director shall hold office only until the next AGM and shall then be eligible for election.

The Articles provide that at each AGM all those directors who have been in office for three years or more since their election, or last re-election, shall retire from office. In addition, a director may at any AGM retire from office and stand for re-election. However, in accordance with the Code, all directors will be subject to annual re-election.

Stock Exchange Listings

The Company's ordinary shares are listed on the London Stock Exchange (the primary listing), the JSE Limited, the SIX Swiss Exchange, the Botswana Stock Exchange and the Namibian Stock Exchange.

Significant agreements: change of control

At 31 December 2022, Anglo American had committed bilateral and syndicated borrowing facilities totalling $5.7 billion with a number of relationship banks which contain change of control clauses. $9.4 billion of the Group's bond issues also contain change of control provisions. In aggregate, this financing is considered significant to the Group and in the event of a takeover (change of control) of the Company, these contracts may be cancelled, become immediately payable or be subject to acceleration.

In the ordinary course of its business the Group's subsidiaries enter into a number of other commercial agreements, some of which would alter or terminate upon a change of control of the Company. None of these are considered by the Group to be significant to the Group as a whole.

Purchases of own shares

At the AGM held on 19 April 2022, authority was given for the Company to purchase, in the market, up to 200.5 million ordinary shares of $54^{86}/_{91}$ US cents each. This authority will expire at the 2023 AGM and, in accordance with usual practice, a resolution to renew it for another year will be proposed.

On 29 July 2021, the Company announced its intention to return up to $1 billion to shareholders through an on-market irrevocable and non-discretionary share buyback programme (the 'Programme'). The Programme started in July 2021 and ended in February 2022. This additional return recognises the resilience of the Company's balance sheet, and the Board's confidence in funding the Company's portfolio of highly attractive near and medium term growth opportunities. The Programme returned to shareholders a total of $0.8 billion in 2021 and $0.2 billion in 2022, with the programme having concluded on 11 February 2022.

4,066,562 shares representing 0.30% of the share capital as at 31 December 2021 were repurchased and subsequently cancelled under the Programme during the financial period at an aggregate cost of $185,638,492.77. Final aggregated details of all shares repurchased and subsequently cancelled for the whole programme across 2021 and 2022 are set out below. Further details can be found on the Group's website at: **www.angloamerican.com/investors/shareholder-information/share-purchase-transactions**

Number of ordinary shares of $54^{86}/_{91}$ US cents repurchased	Aggregate consideration paid	Average price paid per share	% of pre-Programme share capital the repurchased shares represent
25,540,167	$999,999,921.58	$39.15	1.87%

Indemnities

To the extent permitted by law and the Articles, the Company has made qualifying third-party indemnity provisions for the benefit of its directors during the year, which remain in force at the date of this report. Copies of these indemnities are open for inspection at the Company's registered office.

By order of the Board

Richard Price
Group General Counsel and Company Secretary
22 February 2023

Shareholder information

Annual General Meeting (AGM)
Our AGM will be held at 11:00 on Wednesday, 26 April 2023, at The Queen Elizabeth II Centre, Broad Sanctuary, Westminster, London SW1P 3EE and will also be broadcast live for you to join electronically.

Further details on how to access the AGM electronically or attend in person, ask questions and vote, can be found in the Notice of Annual General Meeting 2023 which is also available on our website at www.angloamerican.com.

Investors holding shares through a nominee service should arrange with that nominee service for them to be appointed as a proxy in respect of their shareholding to attend and vote at the meeting electronically.

Shareholding enquiries
Enquiries relating to shareholdings should be made to the Company's UK Registrars, Equiniti, or the South African Transfer Secretaries, Computershare Investor Services (Pty) Limited, at the relevant address below:

UK Registrars
Equiniti
Aspect House
Spencer Road
Lancing
West Sussex BN99 6DA
England

Telephone:
In the UK: 0371 384 2026
From overseas: +44 (0) 371 384 2026

Transfer Secretaries in South Africa
Computershare Investor Services (Pty) Limited
Rosebank Towers, 15 Biermann Avenue
Rosebank, Johannesburg, 2196, South Africa
Private Bag X9000, Saxonwold, 2132, South Africa

Telephone: +27 (0) 11 370 5000
Fax: +27 (0) 11 688 5238

Enquiries on other matters should be addressed to the company secretary at the following address:

Registered and Head Office
Anglo American plc
17 Charterhouse Street
London EC1N 6RA
England

Telephone: +44 (0) 20 7968 8888
Fax: +44 (0) 20 7968 8500
Registered number: 03564138

www.angloamerican.com
CoSec.Admin@angloamerican.com
On the Investors section of the Group website a whole range of useful information for shareholders can be found, including:

- Investor calendar
- Share price and tools
- Dividend information
- AGM information
- FAQs.

Electronic communication
Shareholders may elect to receive, electronically, notification of the availability on the Group's website of future shareholder correspondence, e.g. Integrated Annual Reports and Notices of AGMs.

By registering for this service, UK shareholders can also vote online in respect of future AGMs and access information on their shareholding including, for example, dividend payment history, sales and purchases and indicative share prices. In order to register for these services, UK shareholders should contact the UK Registrars or log on to **www.shareview.co.uk** and follow the on-screen instructions. It will be necessary to have a shareholder reference number when registering, which is shown on share certificates, dividend tax vouchers and proxy cards.

Dividends
Dividends are declared and paid in US dollars to shareholders with registered addresses in all countries except the UK, eurozone countries and South Africa where they are paid in sterling, euros and South African rand respectively. Shareholders outside South Africa may elect to receive their dividends in US dollars.

Shareholders with bank accounts in the UK or South Africa can have their cash dividends credited directly to their own accounts. Shareholders should contact the relevant Registrar or Transfer Secretary to make use of this facility. South African branch register shareholders would need South African exchange control approval to mandate their dividends to an account outside South Africa.

The Company operates a dividend reinvestment plan (DRIP), which enables shareholders to reinvest their cash dividends into purchasing Anglo American shares. Details of the DRIP and how to join are available from Anglo American's UK Registrars and South African Transfer Secretaries and on the Group's website.

ShareGift
The Company supports ShareGift, the charity share donation scheme administered by The Orr Mackintosh Foundation (registered charity number 1052686). Through ShareGift, shareholders with very small numbers of shares which might be considered uneconomic to sell are able to donate them to charity. Donated shares are aggregated and sold by ShareGift, the proceeds being passed on to a wide range of charities. For those shareholders who wish to use ShareGift, transfer forms are available from the Registrars and further details of the scheme can be found on the website **www.sharegift.org**.

Share dealing service
Telephone, internet and postal share dealing services have been arranged through Equiniti, providing a simple way for UK residents to buy or sell Anglo American shares. For telephone transactions call 0345 603 7037 (or +44 (0) 345 603 7037 from overseas) during normal office hours and for internet dealing log on to www.shareview.co.uk/dealing. You will need your shareholder reference number, found on share certificates, dividend tax vouchers and proxy cards. For further details on the postal dealing service, which is available for certain European residents, call 0371 384 2248 (or +44 (0) 371 384 2248 from overseas).

Unsolicited mail
Under the Companies Act, the Company is obliged to make the share register available upon request on payment of the appropriate fee. Because of this, some shareholders may receive unsolicited mail. If you wish to limit the receipt of addressed marketing mail you can register with the Mailing Preference Service (MPS). The quickest way to register with the MPS is via the website: **www.mpsonline.org.uk**. Alternatively you can register by telephone on: 020 7291 3310, or by email to: mps@dma.org.uk, or by writing to MPS Freepost LON20771, London W1E 0ZT.

Other Anglo American publications

- Sustainability Report
- Ore Reserves and Mineral Resources Report
- Tax and Economic Contribution Report
- Transformation Report
- Climate Change Report
- Our Code of Conduct
- The Safety, Health and Environment (SHE) Way
- The Social Way 3.0
- Notice of 2023 AGM
- www.facebook.com/angloamerican
- www.twitter.com/angloamerican
- www.linkedin.com/company/anglo-american
- www.youtube.com/angloamerican
- www.flickr.com/angloamerican
- www.slideshare.com/angloamerican

Financial and other reports may be found at:
www.angloamerican.com/reporting

A printed copy of the Anglo American Integrated Annual Report can be ordered online at:
www.angloamerican.com/site-services/contact-us

Strategic partners

Anglo American works in partnership with a wide range of organisations; these important relationships form part of the Group's commitments to a wide range of key sustainability and other societal objectives. A selection of the organisations we work with can be found on our website: www.angloamerican.com/approach-and-policies.

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.

Nothing in this document should be interpreted to mean that future earnings per share of Anglo American will necessarily match or exceed its historical published earnings per share. Certain statistical and other information about Anglo American included in this document is sourced from publicly available third-party sources. As such it has not been independently verified and presents the views of those third parties, but may not necessarily correspond to the views held by Anglo American and Anglo American expressly disclaims any responsibility for, or liability in respect of, such information.

Designed and produced by
SALTERBAXTER
www.salterbaxter.com

This document is printed on Heaven 42 Matt 115gsm and Ultra Fine Offset 100gsm which have been independently certified according to the rules of the Forest Stewardship Council (FSC). Printed in the UK by Pureprint using its pureprint environmental printing technology, and vegetable inks were used throughout. Pureprint is a CarbonNeutral company.

Both manufacturing paper mill and the printer are registered to the Environmental Management System ISO 14001 and are Forest Stewardship Council (FSC) chain-of-custody certified.

FSC www.fsc.org MIX Paper from responsible sources FSC® C022913

Anglo American plc
17 Charterhouse Street
London
EC1N 6RA
United Kingdom

Tel +44 (0)20 7968 8888
Fax +44 (0)20 7968 8500
Registered number 3564138

www.angloamerican.com

Find us on Facebook
Follow us on Twitter