16 August 2022

Results for announcement to the market

Name of Company: BHP Group Limited (ABN 49 004 028 077)

Report for the year ended 30 June 2022

This statement includes the consolidated results of BHP for the year ended 30 June 2022 compared with the year ended 30 June 2021.

This page and the following 186 pages comprise the year end information given to the ASX under Listing Rule 4.3A. The 2022 BHP Group Annual Report will be released in September.

The results are prepared in accordance with IFRS and are presented in US dollars.

				US$ Million
Revenue from continuing operations	**up**	**14%**	**to**	**65,098**
Revenue from discontinued operations	up	64%	to	6,404
Total revenue	up	18%	to	71,502
Profit after taxation from continuing operations attributable to the members of the BHP Group	up	76%	to	20,245
Profit/(loss) after taxation from discontinued operations attributable to the members of the BHP Group	up	4836%	to	10,655
Profit after taxation attributable to the members of the BHP Group	**up**	**173%**	**to**	**30,900**

Net Tangible Asset Backing:

Net tangible assets[1] per fully paid share were US$9.36 as at 30 June 2022, compared with US$10.71 as at 30 June 2021.

[1] Net Tangible Assets includes right of use assets with a carrying value of US$2,361 million as at 30 June 2022.

Dividends per share:

Interim dividend for current period (record date 25 February 2022; payment date 28 March 2022)	US 150 cents fully franked
Interim dividend for previous corresponding period	US 101 cents fully franked
Final dividend for current period (record date 2 September 2022; payment date 22 September 2022)	US 175 cents fully franked
Final dividend for previous corresponding period	US 200 cents fully franked

Dividend Reinvestment Plan

Any eligible shareholder who wishes to participate in the dividend reinvestment plan, or to vary a participation election, should do so by 5 September 2022 or, in the case of shareholdings on the South African branch register of BHP Group Limited, in accordance with the instructions of your CSDP or broker. Full terms and conditions of the dividend reinvestment plan and details about how to participate can be found at: bhp.com

This statement was approved by the Board of Directors.

Stefanie Wilkinson
Group Company Secretary
BHP Group Limited

BHP

Appendix 4E

2022

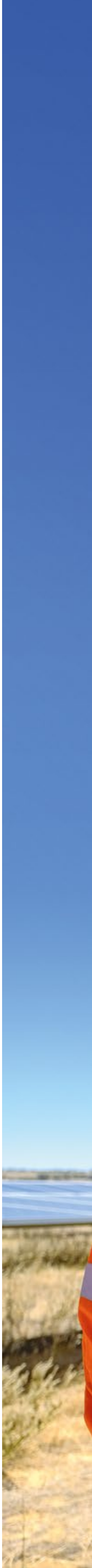
Bringing people and resources together to build a better world

Contents

Company details
refer to OFR 12.1

Forward-looking statements
refer to OFR 12.2

Cover image: Potash macrophoto – Getty Images.



BHP, bringing people and resources together to build a better world.

Our values

Sustainability
Putting health and safety first, being environmentally responsible and supporting our communities.

Integrity
Doing what is right and doing what we say we will do.

Respect
Embracing openness, trust, teamwork, diversity and relationships that are mutually beneficial.

Performance
Achieving superior business results by stretching our capabilities.

Simplicity
Focusing our efforts on the things that matter most.

Accountability
Defining and accepting responsibility and delivering on our commitments.

We are successful when:

- **Our people start each day with a sense of purpose and end the day with a sense of accomplishment.**
- **Our teams are inclusive and diverse.**
- **Our communities, customers and suppliers value their relationships with us and are better off for our presence.**
- **Our asset portfolio is world class and sustainably developed.**
- **Our operational discipline and financial strength enables our future growth.**
- **Our shareholders receive a superior return on their investment.**
- **Our commodities support continued economic growth and decarbonisation.**

Safe, reliable production

Fatality-free for the third consecutive year; high-potential injury frequency rate down 30%.

Record sales volumes at Western Australia Iron Ore; record material mined at Escondida and near-record concentrator throughout.

29% reduction in freshwater withdrawals compared to adjusted FY2017 baseline,[2] exceeding our 15% five-year target.

Indigenous peoples employee representation at end of FY2022:

8.3%
in Minerals Australia operations in Australia

8.7%
in Minerals Americas operations in Chile, and

7.2%
in Jansen Potash Project and operations in Canada

32.3%
female employee representation at end of FY2022, a 2.5 percentage point increase from the start of the year.

These strong results were due to safe and reliable operations, project delivery and capital discipline, which allowed us to capture the value of strong commodity prices.

Mike Henry, Chief Executive Officer


Ore leaving South Flank's Primary Crusher 2, one of two at South Flank that are the largest in BHP.

Jansen Stage 1 tracked to plan; production shafts completed in June quarter. Working to bring forward first potash production.

Completed unification of dual listed structure, Petroleum merger with Woodside and divestment of BHP Mitsui Coal and Cerrejón interests.

15%

reduction in operational greenhouse gas emissions from adjusted FY2017 baseline,[5] exceeding our five-year target and on track to be reduced by at least 30% by FY2030 (from FY2020 levels).

Record underlying earnings per share[1]

470.6 USc

2022	470.6 USc
2021	337.7 USc

Record shareholder cash dividends per share[3]

325 USc

2022	325 USc
2021	301 USc

Profit from operations

US$34.1 bn

2022	34.1 bn
2021	25.5 bn

Total economic contribution[4]

US$78.1 bn

2022	78.1 bn
2021	40.9 bn

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[1] For more information on Non-IFRS Financial Information, refer to OFR 11.

[2] For information on adjustment to the FY2017 baseline, refer to OFR 7.16.

[3] This excludes the 386 US cents in specie dividend from distributing Woodside shares received as consideration for the sale of BHP Petroleum.

[4] Total economic contribution includes payments to suppliers, wages and benefits for employees and contractors, dividends, taxes and royalties and voluntary social investment on a Total operations basis.

[5] For information on adjustment to the FY2017 baseline, refer to OFR 7.8.

1 Our business

BHP, bringing people and resources together to build a better world

We will responsibly manage the most resilient long-term portfolio of assets, in highly attractive commodities, and will grow value through being excellent at operations, discovering and developing resources, acquiring the right assets and options, and capital allocation.

Through our differentiated approach to social value, we will be a trusted partner who creates value for all stakeholders.

Global

Total economic contribution[1]
US$78.1 bn

Taxes and royalties paid[2]
US$17.3 bn

Payments to suppliers[2]
US$18.8 bn

Number of employees and contractors[3]
79,471

Rest of the world

Total economic contribution[1]
US$12.9 bn

Taxes and royalties paid[2]
US$1.3 bn

Payments to suppliers[2]
US$2.6 bn

Number of employees and contractors[3]
5,431

Chile

Total economic contribution[1]
US$7.7 bn

Taxes and royalties paid[2]
US$2.6 bn

Payments to suppliers[2]
US$4.3 bn

Number of employees and contractors[3]
24,620

Key

BHP principal office locations

○

BHP mining locations

- ● Iron ore
- ● Copper
- ● Coal
- ● Nickel
- ● Potash
- ◉ Non-operated joint venture

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[1] Total economic contribution includes payments to suppliers, wages and benefits for employees and contractors, dividends, taxes and royalties and voluntary social investment on a Total operations basis.

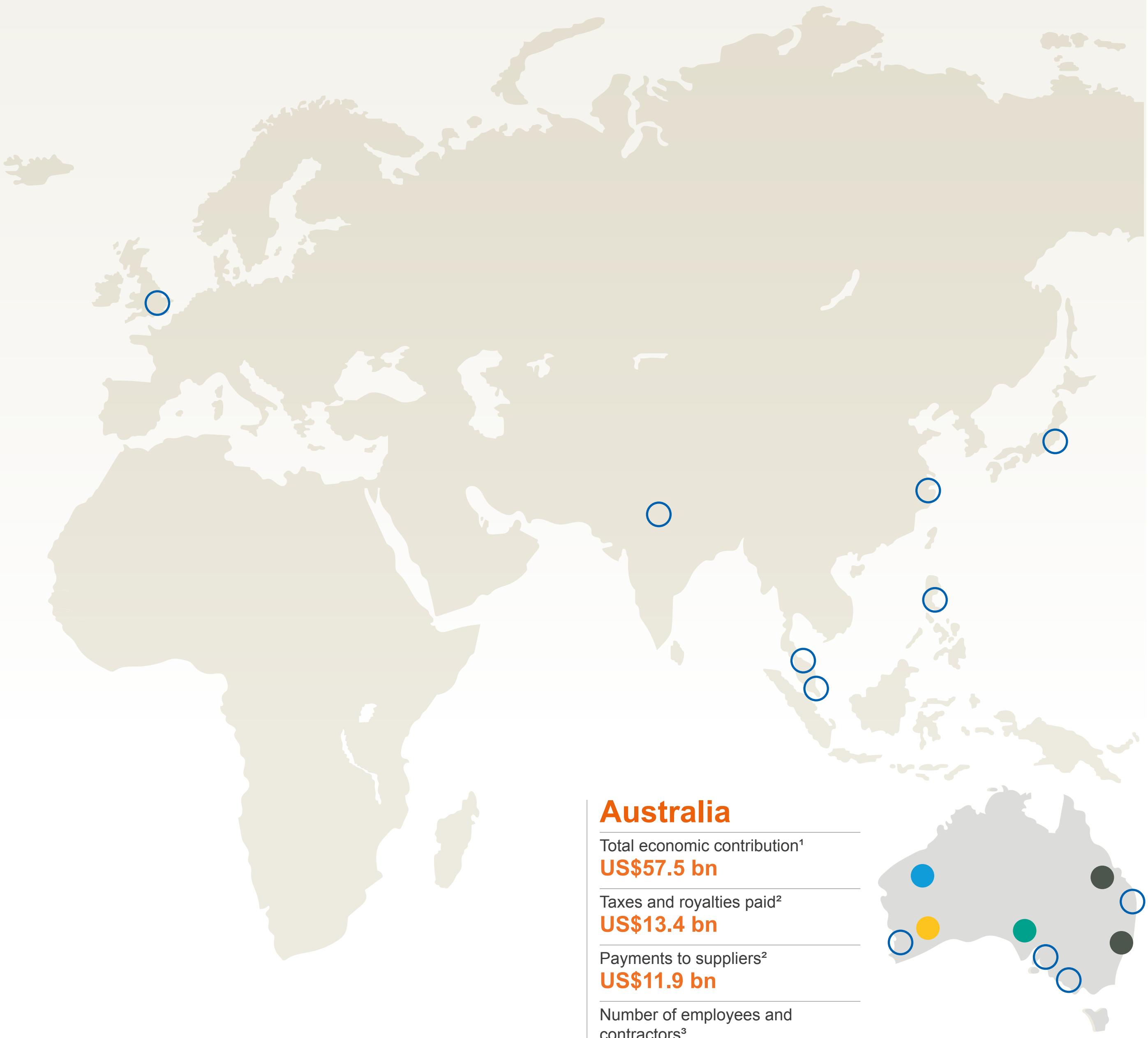
[2] Presented on a Total operations basis.

[3] Employee data is based on a 'point-in-time' snapshot of employees as at 30 June 2022 including employees on extended absence, without adjustment for BHP ownership percentage. Contractor data is collected from internal surveys and the organisation systems and averages for a 10-month period, July 2021 and April 2022.

[4] Excludes BMC and Cerrejón production. The divestment of BHP's 33.33 per cent interest in Cerrejón to Glencore and of BHP's 80 per cent interest in BMC to Stanmore Resources Limited were completed on 11 January 2022 and 3 May 2022 respectively.

Our commodities

Iron ore	**Copper**	**Coal**	**Nickel**	**Potash**
FY2022 production **253.2 Mt**	FY2022 production **1,574 kt**	FY2022 production[4] **42.8 Mt**	FY2022 production **76.8 kt**	Jansen Stage 1 is our **US$5.7 bn** potash project
Revenue **US$30.8 bn**	Revenue **US$16.8 bn**	Revenue **US$15.5 bn**	Revenue **US$1.9 bn**	
Underlying EBITDA **US$21.7 bn**	Underlying EBITDA **US$8.6 bn**	Underlying EBITDA **US$9.5 bn**	Underlying EBITDA **US$420 m**	



Australia

Total economic contribution[1]
US$57.5 bn

Taxes and royalties paid[2]
US$13.4 bn

Payments to suppliers[2]
US$11.9 bn

Number of employees and contractors[3]
49,420

2 Delivering value

2.1 Our business model

By prioritising both financial and social value, we deliver long-term value and resilience for our shareholders and all our stakeholders.

What we need

Our people

We employ around 80,000 people across the globe. Our aim is for them to be engaged and supported in a way that sees them work in safer and more productive ways.

We are on track to meet our aspirational goal of a gender-balanced workforce by FY2025 and have raised the proportion of Indigenous employees in Australia, Chile and at our Jansen Potash Project in Canada.

More inclusive and diverse teams are delivering safer and better business performance at BHP.

For more information refer to OFR 6.

Strong, mutually beneficial relationships

We seek to build long-term mutually beneficial relationships with our stakeholders and partners based on respect, transparency and trust.

- **Suppliers:** More than 8,000 suppliers in 47 countries provide us with goods and services.
- **Partners:** We seek to be the partner of choice for customers, business partners and community stakeholders.

For more information refer to OFR 2.2.

World-class assets

We have a portfolio of large, high-quality, low-cost assets. We are investing in technology to improve productivity and drive sustainable growth across our operations.

For more information refer to OFR 5.

Exceptional capability

Operational excellence and capital discipline are key to generating long-term value.

Industry-leading knowledge and operating capability

For more information refer to OFR 2.2.

Effective risk management

For more information refer to OFR 9.

Disciplined use of capital

For more information refer to OFR 2.2.

Responsible natural resource management

We seek to efficiently and responsibly manage water and power and to be long-term stewards of more than 8 million hectares of land and sea.

For more information refer to OFR 7.

Value outcomes

Land rehabilitated[1]

23,812 hectares

FY2021 27,377 hectares

Investment in community initiatives

US$186.4 m

FY2021 $174.8 m

Total freshwater withdrawals[2]

107.4 Gl

↓ 29% from adjusted FY2017 baseline

Tax, royalty and other payments to governments[3]

US$17.3 bn

FY2021 US$11.1 bn

Payments to suppliers[3]

US$18.8 bn

FY2021 US$16.5 bn

Salary, wages and incentives for our employees[4]

US$4.5 bn

FY2021 US$4.4 bn

Operational electricity sourced from renewables[5]

46%

FY2021 1%

Shareholder dividends[6]

US$36.0 bn

FY2021 US$15.2 bn

Operational greenhouse gas emissions[7]

11.0 MtCO$_2$-e

↓ 25% from FY2021

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[1] Data does not include land managed for rehabilitation or conservation as part of social investment.
[2] For information on adjustment to the FY2017 baseline, refer to OFR 7.16.
[3] Presented on a Total operations basis. For more information refer to BHP Economic Contribution Report 2022 to be released in September 2022.
[4] Calculated on an accruals and presented on a Total operations basis. For more information refer to BHP Economic Contribution Report 2022 to be released in September 2022.
[5] Operational electricity comprises approximately one quarter of our total operational energy consumption.
[6] This includes US$19.6 billion in specie dividend from distributing Woodside shares received as consideration for the sale of BHP Petroleum.
[7] Adjusted for Discontinued operations (Petroleum) and the divestment of BMC.

What we do

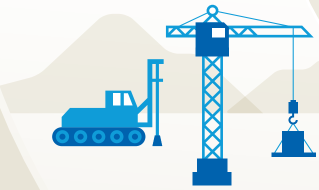
Our strategy

We will responsibly manage the most resilient long-term portfolio of assets, in highly attractive commodities, and will grow value through being excellent at operations, discovering and developing resources, acquiring the right assets and options, and capital allocation.

Through our differentiated approach to social value, we will be a trusted partner who creates value for all stakeholders.

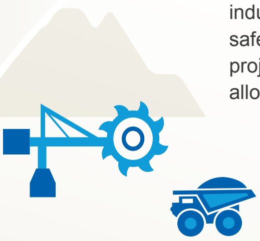
Exploration and acquisition

We seek to add high-quality Tier 1 copper and nickel interests through our exploration activities and early-stage entry and acquisition options.



Development and mining

We strive to achieve the industry's best performance in safety, operational excellence, project management and allocation of capital.



Process and logistics

We process and refine ore, safely manage waste and efficiently and sustainably transport our products to customers.

Sales, marketing and procurement

We maximise value through our centralised marketing and procurement organisations, commercial expertise, understanding of markets and customer and supplier relationships.

Closure and rehabilitation

We consider closure and rehabilitation throughout the asset life cycle to help minimise our impact and optimise post-closure value for all.

2.2 How we create and grow value

We produce some of the essential resources needed to support global megatrends, such as decarbonisation, and we strive to produce them sustainably, efficiently and ethically.

We seek to create value with the communities where we operate and for our shareholders:

- We are committed to continuous improvement and we strive to operate more reliably and productively than our competitors. Being the best operator will help us safely generate better return on capital employed and outcompete others for new opportunities.
- We have delivered strong and consistent results and returns through our portfolio and operating discipline. We achieved net operating cashflow on a total operations basis of US$32.2 billion in FY2022, above US$15 billion for the sixth consecutive year.
- We believe our focus on social value will lead to us being the partner of choice with communities, governments, suppliers and customers. We seek respectful, mutually beneficial relationships with the communities where we operate and the suppliers, customers and governments we interact with. Our experience has been that engaging with those around us creates optionality, stronger relationships and access to more diverse thinking. It helps us be more creative and to find different ways to problem solve. It also means we are better able to see things coming towards us and can act pre-emptively. Aligning strongly with partners can prevent issues or delays with projects and, if issues do arise, means we are better able to collectively work on solutions.
- We assess and rank decarbonisation projects across our operated assets through our Capital Allocation Framework (CAF). During FY2022, we integrated our 1.5°C Paris-aligned scenario into our strategy and capital allocation process, helping to ensure our capital expenditure plans are not misaligned with the Paris Agreement's aim to pursue efforts to limit global warming to 1.5°C.
- We recruit and retain the best people and empower them to run our operations safely and productively. We promote an inclusive and diverse environment where safety and wellbeing are the highest priorities, invest in development programs to build capability and improve performance and offer competitive remuneration. We invest in technology to manage risk, streamline processes and improve productivity.
- The combination of our people, strategy and operational systems will help us to outperform our competitors and attract a lower cost of capital, while our CAF helps us make better use of this capital.

We bring together essential resources, a strong balance sheet and a differentiated operating capability underpinned by our technical Centres of Excellence and the BHP Operating System (BOS).

This combination of operational excellence, a strong portfolio of large, long-life, quality assets and focus on social value will assist us to grow value more consistently for all stakeholders and underpin continued attractive returns and long-term value for our shareholders.

Our people

Health and safety

Our highest priority is the safety of our workforce and the communities where we operate. We achieved a third consecutive year without a fatality and have seen a sustained improvement in the high-potential injury frequency rate which fell by 30 per cent in FY2022 from FY2021.

We are committed to protecting the health and wellbeing of our workforce. Over the past five years, we have achieved a 68 per cent reduction in the total number of workers exposed to our most material occupational exposures.

For more information refer to OFR 7.4 and 7.6.

Our focus on safety and health underpins our strong operational performance and this includes eliminating sexual harassment, racism and bullying. We are committed to eliminating incidents of sexual harassment in our workplaces and accommodation villages, and have strengthened our approach to prevention, reporting and response. Our focus on gender balance is an important factor in addressing this unacceptable behaviour.

For more information refer to OFR 7.5.

Inclusion and diversity

We continue to build a more inclusive and diverse workforce that further enhances our performance and better reflects the communities where we operate:

- We remain on track to achieve our aspirational goal for a gender-balanced employee workforce globally by FY2025.

For more information refer to OFR 6.

- We made progress during FY2022 against targets for increased Indigenous employment in our Minerals Australia operations, Minerals Americas operations in Chile and our Jansen Potash Project in Canada.

For more information refer to OFR 6.

Our portfolio

We are reshaping our portfolio to focus on higher-quality iron ore and metallurgical coal preferred by our steelmaking customers, copper for electrification and renewable energy, nickel for electric vehicles and potash to make food production and land use more efficient and sustainable.

For more information
refer to OFR 3.

Iron ore

We are the lowest-cost major iron ore producer globally.[1] Western Australia Iron Ore (WAIO) is one of the lowest emissions intensity iron ore operations[2] and is increasing its grade as the new South Flank mine ramps up. WAIO achieved record sales volumes in FY2022, allowing us to capitalise on the opportunity presented by higher iron ore prices.

For more information
refer to OFR 5.1.

Copper

We hold the world's largest copper endowment.[3] We are using technical innovation such as new floatation technology to help lower energy costs and unlock value and are looking to secure more copper resources through exploration, acquisition and early-stage entry. Escondida in Chile is the world's largest copper mine. Escondida had record material mined and near-record concentrator throughput in FY2022, while Olympic Dam in South Australia performed strongly in the June 2022 quarter after planned major smelter maintenance.

For more information
refer to OFR 5.1 and 5.2.

Metallurgical coal

Our metallurgical coal operations in Queensland focus on higher-quality product and have one of the lowest production emissions intensities of benchmarked mines.[2] We believe that a wholesale shift away from blast furnace steelmaking, which uses metallurgical coal, is still decades in the future and that metallurgical coal will remain an essential input into the steelmaking process, which is critical to support decarbonisation infrastructure. We recently completed the sale of our interest in BHP Mitsui Coal (BMC), further focusing our coal portfolio on higher-quality coals for steelmaking with greater potential upside for quality premiums as steelmakers seek to improve blast furnace utilisation and reduce emissions intensity.

For more information
refer to OFR 5.1.

Nickel

We hold the second-largest nickel sulphide endowment globally[4] and our nickel operations in Western Australia have one of the lowest production emissions intensities of benchmarked mines.[2] We achieved our first saleable production of nickel sulphate crystals for the lithium-ion battery industry in the December 2021 quarter. We are growing value by supplying 87 per cent of BHP's battery-suitable nickel to battery material suppliers in FY2022. We are seeking more nickel resources through exploration, acquisition and early-stage entry.

For more information
refer to OFR 5.1.

Potash

We are developing one of the world's largest potash mines in Canada. The proposed mine has been designed based on a sustainable approach with a relatively low emissions footprint and low water intensity compared to existing potash mines. The Jansen Potash Project is expected to increase BHP's product diversification, customer base and operating footprint, opening up a new future growth front. The US$5.7 billion Jansen Stage 1 is tracking to plan and opportunities to bring forward Jansen S1 continue to be assessed.

For more information
refer to OFR 5.2.

[1] Based on published C1 unit costs of major iron ore producers. There may be differences in the manner that third parties calculate or report unit costs data compared to BHP, which means that third-party data may not be comparable to our data.

[2] For more information refer to OFR 7.8.

[3] Based on ownership interest. Peers include: Anglo American, Antofagasta, Codelco, First Quantum Minerals, Freeport, Glencore, Rio Tinto, Southern Copper, and Teck. Source peers: Wood Mackenzie Ltd, Q1 2022.

[4] Based on ownership interest. Source peers: MinEx Consulting.

Social value

Social value is BHP's positive contribution to society – our people, partners, the economy, the environment and local communities. It is about creating enduring, mutual benefit for BHP, our shareholders and the broader community.

Doing this well is essential to better business outcomes and long-term shareholder value, and will create a competitive advantage.

How social value can create competitive advantage

We recognise that decisions we make have the potential to positively or negatively impact those around us, and the environment.

Our aim with social value is to be deliberate and proactive in taking into account social, environmental and financial impact in the choices we make.

Embedding social value into everything we do will open up opportunities, increase resilience and help us manage risk. It will influence our access to resources, partners, markets, the best talent, and capital.

Our commitment to social value

We have been committed to sustainability and social value for many years and are making progress in responsibly providing more of the resources the world needs:

- We have set GHG emissions reduction targets and goals (that are described in OFR 7.8) and our Climate Transition Action Plan 2021 (CTAP) received majority approval from shareholders in the 'Say on Climate' advisory vote at our 2021 Annual General Meetings.
- We are working to create nature-positive[4] outcomes through the new goal we have set to have at least 30 per cent of the land and water we steward under conservation, restoration or regenerative practices by 2030.

For more information refer to 2030 social value scorecard below and OFR 7.15.

- We are working to transition our operations to renewable electricity.

For more information, refer to OFR 5.1 and 7.8.

- We are working with suppliers to drive innovation by participating in initiatives such as Komatsu's GHG Alliance, which aims to develop commercially viable zero-GHG emissions haul trucks.

For more information refer to OFR 7.8.

- Our spend with Indigenous businesses increased by 75 per cent to US$149.9 million in FY2022 and the number of Indigenous vendors engaged rose by 53 per cent to 148. WAIO announced its intention to more than double its spend with Indigenous vendors to more than US$300 million by the end of FY2024.

For more information refer to OFR 7.13.

2030 social value scorecard[1]

How we will report from FY2023

Planet • People • Prosperity

<table>
<tr><th>Pillars</th><th>Decarbonisation</th><th>Healthy environment</th><th>Indigenous partnerships</th></tr>
<tr><td>2030 goals</td><td>At least 30% reduction in operational GHG emissions, support 40% emissions intensity reduction of BHP-chartered shipping of our products, and support development of technologies and pathways capable of 30% emissions intensity reduction in integrated steelmaking.[2,3]</td><td>Create nature-positive[4] outcomes by having at least 30% of the land and water we steward under conservation, restoration or regenerative practices. In doing so we focus on areas of highest ecosystem value both within and outside our own operational footprint, in partnership with Indigenous peoples and local communities.</td><td>Respectful relationships that hear and act upon the distinct perspectives, aspirations and rights of Indigenous peoples and support the delivery of mutually beneficial and jointly defined outcomes.</td></tr>
<tr><td>Key metrics</td><td>% reduction in operational emissions from FY2020[3]
% reduction in emissions intensity of BHP-chartered shipping of our products[3]
<i>Available in FY2023</i>
$ committed in steelmaking partnerships and ventures to date (US$)</td><td>% area under nature-positive management practices[5]
# assets with natural capital account[6]
<i>Available from FY2023</i></td><td>% Indigenous workforce participation, by region
$ Indigenous procurement (US$)
<i>Available in 2024</i>
<table>
<tr><th></th><th>Progress on plan[8]</th><th>Relationship health[9]</th></tr>
<tr><td>Australia</td><td>0</td><td>0</td></tr>
<tr><td>Canada</td><td>0</td><td>0</td></tr>
<tr><td>Chile</td><td>0</td><td>0</td></tr>
</table></td></tr>
<tr><td>Short-term milestones</td><td>FY2023: 95% of study phase projects are presented for tollgates or meet milestones as scheduled in BHP's operational decarbonisation plan
FY2024: Operationalise five low/zero GHG emission vessels
FY2024: Complete at least one pilot or industrial scale steelmaking-related plant trial</td><td>FY2023: Publish context-based water targets
FY2023: Complete important biodiversity and ecosystems (IBE) baseline mapping for all land and water areas[7]
FY2024: Establish 'nature-positive' asset plans to deliver the Group-level 2030 goal</td><td>FY2023: Release revised Global Indigenous Peoples Strategy
FY2023: Increase formal Indigenous voice mechanisms in decision-making
FY2024: Co-create plans which define priorities and are designed to deliver mutually beneficial outcomes</td></tr>
</table>

BHP commits to social investment of at least 1% pre-tax profit[15]

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1 In setting BHP's 2030 goals, we had regard to existing public sustainability frameworks, including the UN Sustainable Development Goals, the Paris Agreement, Convention on Biological Diversity, The Global Business Collaboration for Better Workplace Mental Health, and the UN Declaration of the Rights of Indigenous Peoples. Our pillars map to the UN Sustainable Development Goals as follows: Decarbonisation – Goal 13; Healthy environment – Goals 6, 14, 15; Indigenous partnerships – Goals 8, 10, 17; Safe, inclusive and future-ready workforce – Goals 3, 5, 10; Thriving, empowered communities – Goals 3, 4, 6, 7, 8, 9, 10, 11, 16 and Responsible supply chains – Goals 10, 12, 16, 17.

2 With widespread adoption expected post-2030.

3 These positions are expressed using terms that are defined in the Glossary to this Report, including the terms 'target', 'goal', 'net zero' and 'carbon neutral'. The baseline year(s) of our targets will be adjusted for any material acquisitions and divestments, and to reflect progressive refinement of emissions reporting methodologies. The targets' boundaries may in some cases differ from required reporting boundaries. The use of carbon offsets will be governed by BHP's approach to carbon offsetting described at bhp.com/climate. The Scopes 1 and 2 operational emissions target is for FY2030. The Scope 3 goals are for CY2030. For further information on our GHG targets and goals, refer to 'BHP's climate change targets and goals' in OFR 7.8.

4 Nature positive is defined by the WBCSD/TNFD as 'A high-level goal and concept describing a future state of nature (e.g. biodiversity, ecosystem services and natural capital) which is greater than the current state.' It includes land and water management practices that halt and reverse nature loss – that is, supporting healthy, functioning ecosystems.

5 Land under stewardship which has a formal management plan including nature-positive practices. Data reflects the period up to 30 June 2021.

6 Natural capital accounts are a way to measure the amount, condition and value of environmental assets in a given area. It helps describe changes in ecosystems and how these impact wellbeing and economies.

- We completed our most recent five-year sustainability targets in FY2022. Highlights included three years fatality-free, a reduction in the total number of workers exposed to our most material occupational exposures by 68 per cent, a 15 per cent decrease in operational GHG emissions from our adjusted FY2017 baseline, social investment of US$681.4 million over five years and a 29 per cent reduction in freshwater withdrawal volumes from our adjusted FY2017 baseline.

For more information refer to OFR 7.3 and 7.8.

- Our Chilean operations Escondida and Spence, and Olympic Dam in Australia were awarded the Copper Mark during FY2022 recognising responsible production practices.

For more information on our social value performance refer to OFR 7.

Supporting local economic development

We aim to source and promote locally available goods and services as an important part of our external expenditure to help local communities thrive. Our operated assets develop local procurement plans designed to identify opportunities for local suppliers, including small businesses.

In FY2022, BHP made US$18.8 billion in payments to suppliers globally, including US$17.6 billion in payments to more than 8,000 suppliers in the regions where we operate. Of the latter amount, US$2.7 billion, or 15.2 per cent, was paid to local suppliers in the communities where we operate. Our expenditure with local suppliers was primarily in Australia (59 per cent) and Chile (30 per cent). Of our total supplier spend, 94.4 per cent was in the regions where we operate.

2030 social value scorecard

In June 2022, we launched our social value scorecard with 2030 goals, metrics and milestones (below). We believe it will enhance our opportunity to run our business in a way that delivers long-term, sustainable value to BHP, our shareholders and the broader community.

This scorecard provides clarity to our teams on our ambitions and allows us to measure progress, transparently report and hold ourselves to account.

Our metrics will evolve over time and some are future metrics that will be developed in the coming years. They show where we are headed with measuring our performance.

At its core, this scorecard represents an emphasis on partnerships, listening and co-design, recognising that it is not for us alone to decide what is of value to communities or the environment, and that addressing challenges like climate change require collaboration.

We will disclose our performance against this scorecard every year as part of our Annual Report, starting in FY2023.

Safe, inclusive and future-ready workforce	Thriving, empowered communities	Responsible supply chains
A thriving workforce that is safe, healthy, gender balanced at every level, culturally diverse[10] and inclusive and skilled for the future.	Partner with communities and stakeholders to co-create and implement plans that deliver jointly defined economic, social and environmental outcomes.	Together with our partners, we create sustainable, ethical and transparent supply chains.
# reduction in life-altering injury or illness[11] *Available in FY2023* **%** engagement and Perception Survey wellbeing score **%** female workforce representation *Diversity index available in FY2024*	**%** co-created plans *Delivery metric to be added in FY2024* **#** community feedback on co-creation and implementation process *Available in FY2024* **$** total economic contribution (US$)	**#** customer Net Promoter Score (NPS)[14] **#** supplier Net Promoter Score (NPS)[14]
FY2023: Achieve 100% adherence to sexual harassment program[12] **FY2024:** >90% implementation of plan for controls identified and approved through the Fatality Elimination Program and 100% adherence to the psychosocial risk[13] management program **FY2024:** Female workforce representation exceeds 37%	**FY2023:** Release Equitable Transition principles – refer to OFR 7.1 **FY2023/2024:** Embed co-creation approach including metrics and measurement **FY2025:** Implement co-created plans that are designed to deliver jointly defined outcomes	**FY2024:** Implement LME Responsible Sourcing requirements **FY2024:** Complete ICMM Performance Expectations for all operating assets **FY2024:** Determine ethical supplier improvement plans with partners, where required

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[7] All land and water areas across Minerals Americas and Minerals Australia.

[8] Progress to plan will be partner-measured using a traffic light score on Indigenous partnership satisfaction in relation to the milestones agreed in partnership.

[9] Relationship health will be partner-measured using a traffic light score.

[10] Cultural diversity in our workforce will be measured based on our substantive progress towards reflecting the cultural diversity of the community.

[11] Reduction in life-altering injury or illness: includes life-altering or long-term permanent disabling injuries and illnesses as defined by the BHP Risk Management Framework.

[12] The core components of the sexual harassment program include: culture, leadership and training; security measures at accommodation villages; recruitment processes; contractor and third-party engagement; emergency response; trauma-informed (wellbeing) care; accessible, confidential reporting and person-centric investigations; and appropriate disciplinary action.

[13] Psychosocial risks or hazards are factors in the design or management of work or the social conditions that increase the risk of work-related stress and can lead to psychological or physical harm. Examples of psychosocial hazards include exposure to unreasonable behaviours, including bullying, racism and sexual harassment, fatigue, poor supervisor support, poor communication or change management or high job demands.

[14] Net Promoter Scores show respective feedback from our customers and suppliers, and measures the willingness of our customers/suppliers to recommend BHP to others. It is used as a proxy for gauging overall satisfaction.

[15] Social investment to be assessed as a total over the entire period to FY2030, rather than a specific annual commitment. This investment is in addition to our direct operational decision-making and financial contributions.

Exceptional performance

Operational excellence

We seek to continuously improve performance by empowering our people through BOS principles, practices and tools. BOS is, at its heart, a people program. It is designed to provide a way of working that creates a culture at BHP where we make continuous improvement central to everyone's role.

We continued to deploy BOS throughout our business in FY2022 and expect full deployment by the end of FY2024. BOS has delivered over US$2 billion in estimated, recurring and one-time cost and revenue improvements since we developed it in CY2018. Based on the success we are seeing, we believe it will deliver further gains in the future.

Embracing technology and innovation

The power of data, innovation and technology, together with the BOS, have helped accelerate continuous improvement across our value chain, from the geoscience required in exploration through to the marketing of our products.

We have used technology to:

- maintain safe, predictable and productive operations
- drive productivity improvements, with an emphasis on automation and real-time data-driven insights and decision-making
- help drive inclusion and diversity by providing greater opportunities for roles that were traditionally labour intensive
- unlock the next stage of value growth at BHP, from realising greater margins at our existing operations to finding new assets
- improve sustainability outcomes through innovation

The use of technology such as in autonomous trucks, production innovation such as primary sulphide leaching at our copper assets (which has helped us to extract more copper from ore) and digital transformation across all parts of our business has helped to improve safety, increase productivity, reduce costs, build capability and accelerate value creation.

Examples of our application of technology and innovation in FY2022 include:

- We continued to automate our global trucking fleets. At South Flank we began to automate our fleet of 41 Komatsu haul trucks in the June 2022 quarter, with the program expected to be completed within 18 months. We continued deployment at Goonyella Riverside (expected to be completed by the end of December 2022) and completed the rollout at Daunia. We also commenced autonomous drilling at Spence. We expect to commence the rollout of automated trucks at Spence in FY2023.
- We began testing two automated shiploaders at the Port Hedland export facility in Western Australia. In what we believe is a world first, 3D laser scan technology has been used in the A$50 million project. We intend to fully automate eight shiploaders by FY2024. The project is expected to enable an increase in production of more than 1 million tonnes of iron ore each year through greater precision, reduced spillage, faster load times and equipment optimisation.
- Our in-house Grade Adjustment Model has been introduced at multiple WAIO sites and is expected to enable a US$22.8 million annual revenue uplift at WAIO. The model uses machine learning to target a reduction in iron ore grade variability across the supply chain. It uses data sources that capture movements of ore to map the iron grade coming from the mine to the iron ore grade shipped at port.
- Through our Maintenance and Engineering Centre of Excellence, we continued the rollout of our Total Equipment Strategies (TES), which were initially applied to our mobile fleets and have been extended to our fixed plant. These strategies use mathematical analysis of breakdowns, maintenance patterns and original equipment manufacturer recommendations to recalibrate our maintenance programs to increase availability and reliability, and reduce maintenance costs and inventory values. For example, at our Newman iron ore operation in Western Australia, the mobile TES project for CAT 6060 excavators helped to extend the average equipment life by 40 per cent and delivered an availability uplift of 2 per cent. The outcome is 3.5 years of extra life which has helped to achieve capital productivity by deferral of US$120 million of capital expenditure over five years.

Financial excellence

We use the Capital Allocation Framework (CAF) to assess the most effective and efficient way to deploy capital. This prioritises maintaining safe and reliable operations, meeting our social value and GHG emissions reductions targets, goals and strategies, keeping our balance sheet strong and delivering strong growth and returns for our shareholders. We then look at what would be the most valuable risk-adjusted use for any excess capital. We evaluate the range of investment opportunities and aim to optimise the portfolio based on our assessment of risk, returns and future optionality. We then develop a long-term capital plan and guidance for the Group.

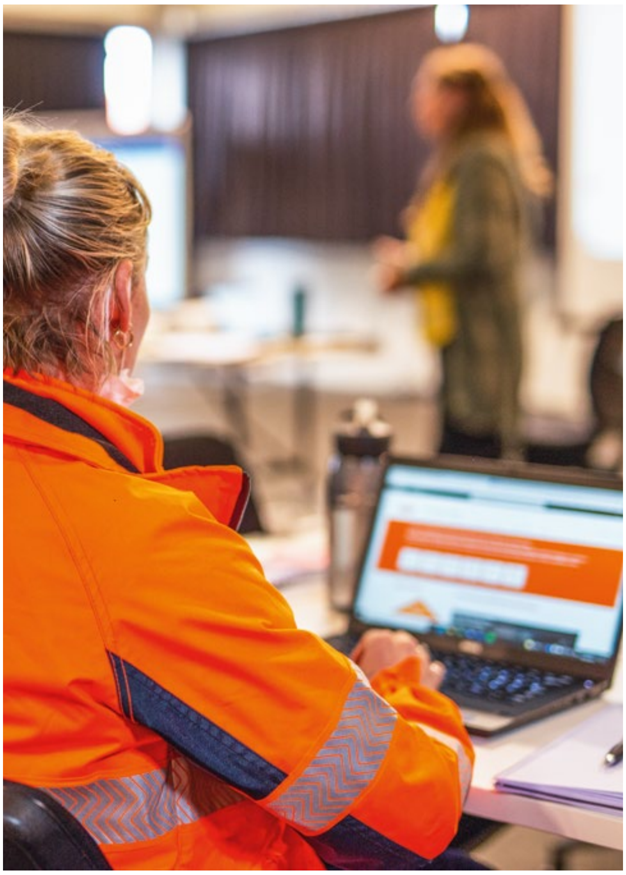
Since the CAF's introduction in FY2016, we have balanced reinvestment in the business with cash returns to shareholders. We want shareholders to see the short-term benefit of these cash returns and trust us to plan for the future by investing where it matters.

What is the BHP Operating System?

The BHP Operating System (BOS) is a way of working that seeks to make improvement part of what we do every day through the application of BOS tools and practices. It is anchored in three principles that will help us deliver exceptional safety and productivity performance and an inclusive and empowered culture:

- **Serve our customers** – deliver what internal and external customers need, at the right time and at the appropriate levels of quality and cost.
- **Pursue operating perfection** – pursue 100 per cent safety for our people, 100 per cent value for our customers, 0 per cent waste.
- **Empower our people** – support our people with the right conditions and leadership to excel. They know their work and how to improve it.

Through BOS principles and practices we are delivering more to our employees and contractors, suppliers, shareholders, customers and the communities whose resources we develop.



3 Positioning for the future

Reshaping our corporate structure and portfolio

In FY2022, we took steps to create a simpler, more agile and efficient BHP, better able to capitalise on the megatrends shaping our world.

A simpler corporate structure

For the past two decades we operated with a dual listed company (DLC) structure with two parent companies – BHP Group Limited in Australia with its shares listed on the Australian Securities Exchange and BHP Group Plc (now known as BHP Group (UK) Ltd) in the United Kingdom with its shares listed on the London Stock Exchange.

Following shareholder approval in January 2022, we unified our corporate structure to one parent company and one share price – under BHP Group Limited. We believe unification gives us a corporate structure that is simpler, more agile and more efficient.

Merging Petroleum with Woodside

During FY2022, we merged our Petroleum business with Woodside Energy Group Ltd (Woodside) to create a global top 10 independent energy company by production. Woodside acquired BHP's Petroleum business in exchange for Woodside shares that were distributed to BHP shareholders through an in specie dividend.

Based on Woodside's share price of US$21.39 (A$29.76) at 31 May 2022, the closing date of the transaction, the implied value of BHP's Petroleum business was US$19.6 billion (A$27.2 billion).

BHP shareholders gained exposure to assets in Woodside through the transaction and greater choice about how to weight their exposure to the different investment and sector propositions. The transaction increased BHP's portfolio weighting towards future facing commodities that support economic growth and have potential upside through the energy transition.

Consolidating our coal portfolio

In January 2022, we divested our 33.3 per cent interest in Cerrejón, a non-operated energy coal joint venture in Colombia, to Glencore, for a total cash consideration of approximately US$294 million.

In May 2022, we divested our 80 per cent interest in BHP Mitsui Coal Pty Ltd (BMC), a metallurgical coal joint venture in Queensland operated by BMC, to Stanmore Resources Limited, for a total cash consideration of up to US$1.35 billion in paid and deferred amounts, plus a final completion adjustment amount.

In June 2022, we announced that, following a two-year review, we would retain New South Wales Energy Coal (NSWEC). We will be seeking approvals to continue mining at NSWEC beyond its current mining consent that expires in 2026 and intend to proceed with a managed process to cease mining at the asset by the end of FY2030.

These portfolio changes are consistent with our strategy to focus on producing higher-quality metallurgical coal.

Investing in a new commodity – potash

Potash enables more efficient and sustainable farming which we believe will be increasingly important in feeding a growing population, and potentially opens a new long-term growth front for BHP.

In August 2021, we approved US$5.7 billion in capital expenditure for Jansen Stage 1 in Saskatchewan, Canada, with first potash production expected in CY2027. We are working to bring forward Jansen Stage 1 first production and are assessing options to accelerate Jansen Stage 2.

The US$2.97 billion Jansen project to finish the excavation and lining of the production and service shafts, and to continue the installation of essential surface infrastructure and utilities, was completed in June 2022. For FY2023, approximately US$740 million in capital expenditure is planned for work at Jansen Stage 1, which will continue to focus on civil and mechanical construction on the surface and underground, as well as equipment procurement and port construction.

Unlocking growth potential at our assets

The large endowments we have under our control are becoming increasingly valuable as the resources industry finds high-quality, Tier 1 (large, low-cost and long-life) resources harder to access, deeper, of lower grade, or in countries with more challenging operating conditions.

Copper

We hold the largest copper endowment in the world at among the highest average grade.[1]

- This includes 27 billion tonnes of ore at an average grade of 0.52 per cent at Escondida, where we are targeting an annual average of 1.2 million tonnes (Mt) of copper production over the medium term, a 20 per cent increase on Escondida's FY2022 production of 1 Mt.
- On the basis that tailings storage facility anomalies are resolved, production at Spence is expected to reach and average approximately 270 kilotonnes per annum (ktpa) of production for four years (including cathodes) following the completion of Spence Growth Option (SGO) plant modifications. This will be supported by capital expenditure of approximately US$100 million, which is planned for the SGO plant modifications and these are currently planned to be completed in CY2023, with further studies ongoing for additional capacity uplift.
- At Olympic Dam, we have improved operating stability over time. Smelter operations have been strong following our planned major smelter maintenance, completed in January 2022. The next major rebuild is not expected for six years.

Nickel

We hold the second-largest nickel sulphide endowment globally[2] and own the majority of tenements of known resource in the Agnew-Wiluna basin in Western Australia.

- Our nickel sulphate plant at Nickel West delivered first crystals in October 2021, allowing us to add further value to our nickel production. We intend to capitalise on the expected ongoing global demand for nickel for the electric vehicle industry, as the method we use to produce nickel sulphate results in a product we believe is ideal for battery production.
- We continue to explore ways to increase the scale of Nickel West.

Iron Ore

We are one of the world's largest iron ore producers and expect to increase production over the medium-term.

- We have secured an increase to our WAIO iron ore environmental licence to expand port operations up to 330 million tonnes per annum (Mtpa) subject to the outcomes of a standard appeals process.
- The ramp up of WAIO's US$3.6 billion South Flank mine is ahead of schedule and we have revised our medium-term production guidance to more than 300 Mtpa. We are assessing expansion alternatives to take us toward 330 Mtpa of production.

[1] Based on ownership interest. Peers include: Anglo American, Antofagasta, Codelco, First Quantum Minerals, Freeport, Glencore, Rio Tinto, Southern Copper, and Teck. Source peers: Wood Mackenzie Ltd, Q1 2022.

[2] Based on ownership interest. Source peers: MinEx Consulting.

Growth through exploration, focused on copper and nickel

Our exploration program is focused on copper and nickel. We look to identify and gain access to new search spaces to test targets capable of delivering high-quality, Tier 1 deposits, and maintain research and technology activities aligned with our exploration strategy.

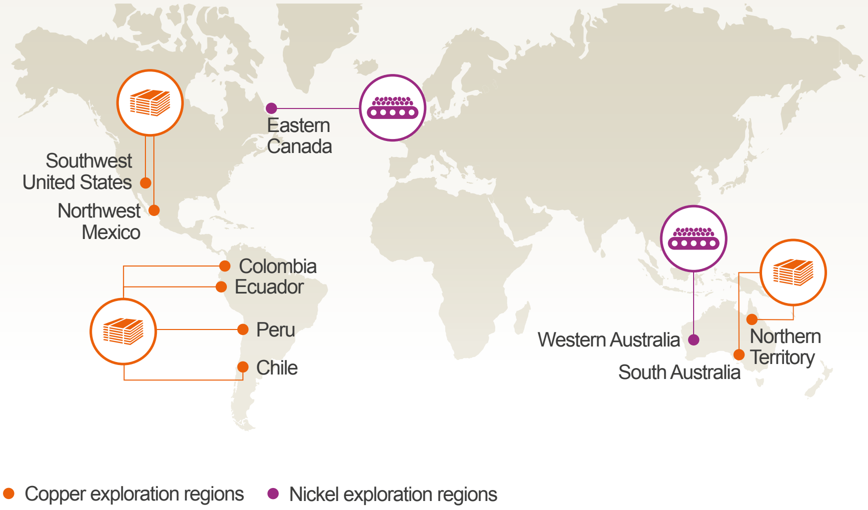
Despite the slowdown and restrictions on movement due to the COVID-19 pandemic, in FY2022 our field teams pursued copper opportunities in Chile, Colombia, Peru, Ecuador, the United States and Australia. This involved early-stage reconnaissance work through target definition and drill testing.

Elsewhere for copper, we continued to seek, secure and test concessions in regions such as Ecuador, South Australia, Chile, Mexico, and Peru.

We have also increased the number of high-quality nickel projects within the exploration pipeline. We are actively exploring nickel targets in Western Australia, while in Canada, we continued our partnership with Midland Exploration Inc in Canada through our 5 per cent interest and collaboration on a target generation program. BHP made a US$40 million investment in Kabanga Nickel in Tanzania in FY2022, which offers an opportunity to expand the immediate search space to add to the known resource.

Our business partnerships continued to deliver encouraging results. In Ecuador, we maintained a 13.6 per cent ownership in SolGold plc, the majority owner and operator of the Alpala porphyry copper-gold project. In Mexico, we continued our financial agreement with Riverside Resources, a US company with significant operating experience in Mexico, securing additional areas that are scheduled to be drill tested during FY2023. In Australia, we initiated work with Encounter Resources to explore for sediment-hosted copper deposits in the Northern Territory. We also entered into a Letter of Intent with Mundoro to cooperatively explore for copper resources in the highly prospective belt in Serbia and Bulgaria. Several drill-ready targets are scheduled to be tested during FY2023.

BHP exploration regions



Exploration expenditure

Our resource assessment exploration expenditure increased by 30 per cent in FY2022 to US$179 million, while our greenfield expenditure increased by 43 per cent to US$77 million. Expenditure on resources assessment and greenfield exploration over the last three financial years is set out below.

Year ended 30 June	2022 US$M	2021 US$M	2020 US$M
Greenfield exploration	**77**	54	44
Resources assessment	**179**	138	132
Total metals exploration and assessment	**256**	192	176

Exploration expense

Exploration expense represents that portion of exploration expenditure that is not capitalised in accordance with our accounting policies, as set out in Financial Statements note 11 'Property, plant and equipment'.

Exploration expense for each segment over the last three financial years is set out below.

Year ended 30 June	2022 US$M	2021 US$M	2020 US$M
Exploration expense			
Copper	**85**	53	54
Iron Ore	**54**	55	47
Coal	**6**	7	9
Group and unallocated items[1]	**54**	19	13
Total Group	**199**	134	123

[1] Group and unallocated items includes functions, other unallocated operations, including Potash, Nickel West and legacy assets (previously disclosed as closed mines in the Petroleum reportable segment), and consolidation adjustments.

4 Financial review

4.1 Group overview

We prepare our Consolidated Financial Statements in accordance with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board. We publish our Consolidated Financial Statements in US dollars. All Consolidated Income Statement, Consolidated Balance Sheet and Consolidated Cash Flow Statement information below has been derived from audited Financial Statements.

For more information refer to Financial Statements.

We use various non-IFRS financial information to reflect our underlying performance. Non-IFRS financial information is not defined or specified under the requirements of IFRS however, is derived from the Group's Consolidated Financial Statements prepared in accordance with IFRS. Non-IFRS Financial Information is consistent with how management reviews financial performance of the Group with the Board and the investment community. OFR 11 'Non-IFRS financial information' includes our non-IFRS financial information and OFR 11.1 'Definition and calculation of non-IFRS financial information' outlines why we believe non-IFRS financial information is useful and the relevant calculation methodology. We believe non-IFRS financial information provides useful information, however it should not be considered as an indication of, or as a substitute for, statutory measures as an indicator of actual operating performance (such as profit or net operating cash flow) or any other measure of financial performance or position presented in accordance with IFRS, or as a measure of a company's profitability, liquidity or financial position.

4.2 Key performance indicators

Our key performance indicators (KPIs) enable us to measure our sustainable development and financial performance. These KPIs are used to assess performance of our people throughout the Group.

For information on our approach to performance and reward refer to Remuneration Report.

For information on our overall approach to executive remuneration, including remuneration policies and remuneration outcomes refer to Remuneration Report.

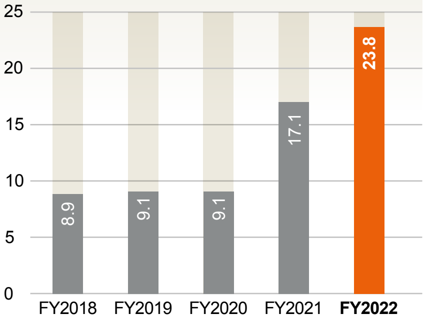
Following BHP's sale of the Onshore US assets in FY2019 and subsequently the merger of our Petroleum business with Woodside in FY2022, the contribution of these assets to the Group's results are presented as Discontinued operations. To enable more meaningful comparisons with prior year disclosures and in some cases to comply with applicable statutory requirements, the data in OFR 4.2, except for Underlying EBITDA, has been presented to include Petroleum assets. Footnotes to tables and infographics indicate whether data presented in OFR 4.2 is inclusive or exclusive of Petroleum assets. Details of the contribution of the Petroleum assets to the Group's results are disclosed in Financial Statements note 27 'Discontinued operations'.

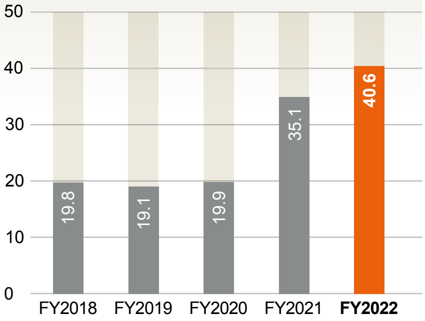
Summary of financial measures

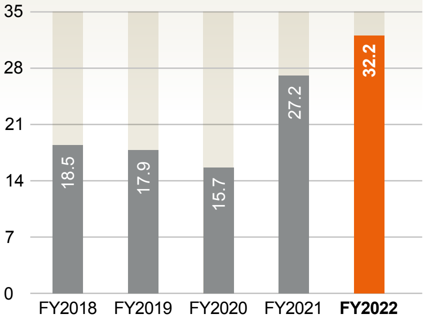
Year ended 30 June US$M	2022	2021
Consolidated Income Statement (Financial Statements 1.1)		
Revenue[1]	**65,098**	56,921
Profit/(loss) after taxation from Continuing operations[1]	**22,400**	13,676
Profit/(loss) after taxation from Continuing and Discontinued operations attributable to BHP shareholders	**30,900**	11,304
Dividends per ordinary share – paid during the period (US cents)	**350.0**	156.0
Dividends per ordinary share – determined in respect of the period (US cents)	**325.0**	301.0
In specie dividend on merger of Petroleum with Woodside (US cents)	**386.4**	–
Basic earnings/(loss) per ordinary share (US cents)	**610.6**	223.5
Consolidated Balance Sheet (Financial Statements 1.3)		
Total assets	**95,166**	108,927
Net assets	**48,766**	55,605
Consolidated Cash Flow Statement (Financial Statements 1.4)		
Net operating cash flows	**32,174**	27,234
Capital and exploration expenditure[2]	**7,545**	7,120
Other financial information (OFR 11)		
Net debt	**333**	4,121
Underlying attributable profit	**23,815**	17,077
Underlying attributable profit – Continuing operations[1]	**21,319**	16,985
Underlying EBITDA[1]	**40,634**	35,073
Underlying basic earnings per share (US cents)	**470.6**	337.7
Underlying basic earnings per share – Continuing operations (US cents)[1]	**421.2**	335.9
Underlying return on capital employed (per cent)	**48.7**	32.5

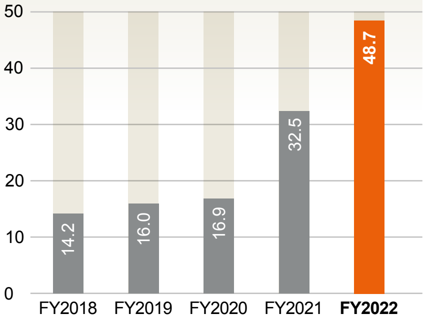
1 Comparative periods have been adjusted for the effects of applying IFRS 5 'Non-current Assets Held for Sale and Discontinued Operations' and discloses them on the same basis as the current period figures. Refer to Financial Statements note 27 'Discontinued operations' for further information.

2 Includes US$1,434 million related to Discontinued operations (FY2021: US$1,316 million).


Underlying attributable profit[1,3]
US$ billion


Underlying EBITDA[2,3]
US$ billion


Net operating cash flows[1]
US$ billion


Underlying return on capital employed[1,3]
Per cent

1 Includes data for Continuing and Discontinued operations for the financial years being reported.

2 Excludes data from Discontinued operations for the financial years being reported.

3 For more information on non-IFRS financial information refer to OFR 11.

Reconciling our financial results to our key performance indicators

	Profit	US$M
Measure	**Profit after taxation from Continuing and Discontinued operations**	**33,055**
Made up of	Profit after taxation	
Adjusted for	Exceptional items before taxation	**620**
	Tax effect of exceptional items	**454**
	Exceptional items after tax attributable to non-controlling interests	**–**
	Exceptional items attributable to BHP shareholders – Continuing operations	**1,074**
	Exceptional items attributable to BHP shareholders – Discontinued operations	**(8,159)**
	Profit after taxation from Continuing and Discontinued operations attributable to non-controlling interests	**(2,155)**
To reach our KPIs	**Underlying attributable profit**	**23,815**
Why do we use it?	Underlying attributable profit allows the comparability of underlying financial performance by excluding the impacts of exceptional items.	

	Earnings	US$M
Measure	**Profit after taxation from Continuing and Discontinued operations**	**33,055**
Made up of	Profit after taxation	
Adjusted for	Exceptional items before taxation	**620**
	Tax effect of exceptional items	**454**
	Depreciation and amortisation excluding exceptional items	**5,683**
	Impairments of property, plant and equipment, financial assets and intangibles excluding exceptional items	**515**
	Net finance costs excluding exceptional items from Continuing operations	**679**
	Taxation expense excluding exceptional items	**10,283**
	Profit after taxation from Discontinued operations (including exceptional items)	**(10,655)**
To reach our KPIs	**Underlying EBITDA**	**40,634**
Why do we use it?	Underlying EBITDA is used to help assess current operational profitability excluding the impacts of sunk costs (i.e., depreciation from initial investment). It is a measure that management uses internally to assess the performance of the Group's segments and make decisions on the allocation of resources.	

	Cash	US$M
Measure	**Net operating cash flows from Continuing operations**	**29,285**
Made up of	Cash generated by the Group's consolidated operations, after dividends received, interest, proceeds and settlements of cash management-related instruments, taxation and royalty-related taxation. It excludes cash flows relating to investing and financing activities	
Adjusted for	Net operating cash flows from Discontinued operations	**2,889**
To reach our KPIs	**Net operating cash flows**	**32,174**
Why do we use it?	Net operating cash flows provide insights into how we are managing costs and increasing productivity across BHP.	

	Returns		US$M
Measure	**Profit after taxation from Continuing and Discontinued operations**		**33,055**
Made up of	Profit after taxation		
Adjusted for	Exceptional items after taxation		**(7,085)**
	Net finance costs excluding exceptional items from Discontinued operations		**159**
	Net finance costs excluding exceptional items from Continuing operations		**679**
	Income tax expense on net finance costs		**(287)**
	Profit after taxation excluding net finance costs and exceptional items		**26,521**
	Net assets at the beginning of period	**55,605**	
	Net debt at the beginning of period	**4,121**	
	Capital employed at the beginning of period		**59,726**
	Net assets at the end of period	**48,766**	
	Net debt at the end of period	**333**	
	Capital employed at the end of period		**49,099**
	Average capital employed		**54,413**
To reach our KPIs	**Underlying return on capital employed**		**48.7%**
Why do we use it?	Underlying return on capital employed is an indicator of the Group's capital efficiency. It is provided on an underlying basis to allow comparability of underlying financial performance by excluding the impacts of exceptional items.		

4.3 Financial results

The following table provides more information on the revenue and expenses of the Group in FY2022.

Year ended 30 June	2022 US$M	2021 US$M Restated	2020 US$M Restated
Continuing operations			
Revenue[1]	**65,098**	56,921	38,924
Other income	**1,398**	380	720
Expenses excluding net finance costs	**(32,371)**	(30,871)	(25,453)
Loss from equity accounted investments, related impairments and expenses	**(19)**	(915)	(508)
Profit from operations	**34,106**	25,515	13,683
Net finance costs	**(969)**	(1,223)	(858)
Total taxation expense	**(10,737)**	(10,616)	(4,197)
Profit after taxation from Continuing operations	**22,400**	13,676	8,628
Discontinued operations			
Profit/(loss) after taxation from Discontinued operations	**10,655**	(225)	108
Profit after taxation from Continuing and Discontinued operations	**33,055**	13,451	8,736
Attributable to non-controlling interests	**2,155**	2,147	780
Attributable to BHP shareholders	**30,900**	11,304	7,956

[1] Includes the sale of third-party products.

Profit after taxation attributable to BHP shareholders increased from US$11.3 billion in FY2021 to US$30.9 billion in FY2022. Attributable profit of US$30.9 billion includes an exceptional gain of US$7.1 billion (after tax), compared to an attributable profit of US$11.3 billion including an exceptional loss of US$5.8 billion (after tax) in the prior period. The FY2022 exceptional gain includes a US$1.1 billion exceptional loss related to Continuing operations comprising of Samarco dam failure impacts, corporate structure unification costs and US deferred tax asset impairments partially offset by the net gain on disposal of BMC. The net gain on merger of our Petroleum business with Woodside is included as an exceptional item related to Discontinued operations included within Profit/(loss) after taxation from Discontinued operations.

For more information on Exceptional items refer to Financial Statements note 3 ‘Exceptional items’ and Financial Statements note 27 ‘Discontinued operations’.

Revenue of US$65.1 billion increased by US$8.2 billion, or 14 per cent from FY2021. This increase was mainly due to higher average realised prices for metallurgical coal, thermal coal, copper and nickel, partially offset by lower average realised prices for iron ore.

Lower volumes were experienced across the Group’s portfolio due to COVID-19 impacts, the planned major smelter maintenance campaign at Olympic Dam and lower feed grade at Escondida and Spence. Volume decline was partially offset by higher concentrate sales at Spence reflecting the continued ramp up of the Spence Growth Option.

For information on our average realised prices and production of our commodities refer to OFR 10.

Total expenses excluding net finance costs of US$32.4 billion increased by US$1.5 billion, or 5 per cent from FY2021. This included higher raw materials and consumables of US$1.1 billion due to South Flank operational ramp up and higher input prices mainly due to higher diesel and acid prices, higher royalties of US$0.9 billion mainly driven by prices for metallurgical coal and thermal coal and US$0.7 billion third-party purchases mainly due to higher nickel prices. Higher depreciation and amortisation expense of US$0.6 billion reflected the commissioning of South Flank, Spence Growth Option, and the completion of the major smelter maintenance at Olympic Dam. The increase also included US$0.4 billion of costs related to corporate structure unification. This was partly offset by lower impairments of US$2.0 billion mainly due to Potash and NSWEC asset impairment charges in the prior period.

Loss from equity accounted investments, related impairments and expenses of US$19 million decreased by US$0.9 billion from FY2021. The decrease was primarily related to a lower increase in the Samarco Dam failure provision compared to FY2021 and US$0.5 billion impairment of Cerrejón in FY2021.

For more information on the total impact of the Samarco dam failure provision and impairment charges connected with equity accounted investments, refer to Financial Statements note 3 ‘Exceptional items’ and Financial Statements note 13 ‘Impairment of non-current assets’ respectively.

Net finance costs of US$1.0 billion decreased by US$0.3 billion, or 21 per cent from FY2021. This was mainly due to premiums of US$395 million paid as part of the multi-currency hybrid debt repurchase programs completed during FY2021.

For more information on net finance costs refer to Financial Statements note 22 ‘Net finance costs’.

Total taxation expense of US$10.7 billion increased by US$0.1 billion from FY2021. The increase is primarily due to higher profits from higher prices offset by FY2021 reduction of US tax credits related to Chilean taxes and tax losses assessed as not recoverable not repeating.

For more information on income tax expense refer to Financial Statements note 6 ‘Income tax expense’.

Principal factors that affect Underlying EBITDA

The following table and commentary describes the impact of the principal factors[1] that affected Underlying EBITDA for FY2022 compared with FY2021.

	US$M	
Underlying EBITDA for year ended 30 June 2021 (Restated)	**35,073**	
Net price impact:		
Change in sales prices	**6,594**	Higher average realised prices for metallurgical coal, thermal coal, copper and nickel, partially offset by lower average realised prices for iron ore.
Price-linked costs	**(1,047)**	Increased royalties reflecting higher realised prices for metallurgical coal and thermal coal and higher third-party concentrate purchase costs reflecting higher nickel prices, partially offset by lower royalties for iron ore.
	5,547	
Change in volumes	**(1,212)**	Lower volumes across our operations associated with the impacts of COVID-19 (US$952 million), lower volumes at Olympic Dam as a result of the planned major smelter maintenance campaign, lower copper concentrator feed grade at Escondida, lower BMA volumes due to significant wet weather impacts, and lower volumes at Nickel West due to an unplanned smelter outage in the June 2022 quarter. This was partially offset by higher concentrate sales at Spence reflecting the continued ramp up of the Spence Growth Option and favourable weather compared to the prior year at WAIO.
Change in controllable cash costs	**(540)**	Higher costs across our operations due to the impacts of COVID-19 (US$277 million) reported as an exceptional item last year, higher costs at WAIO due to South Flank operational ramp-up expenditure and higher rail maintenance costs. Higher costs at Escondida due to an increase in material mined and workforce bonus payments for a new collective bargaining agreement. Higher costs at Spence due to a ramp-up of concentrate volumes, and a prior year one-off gain due to the cancellation of power contracts at Escondida and Spence. This was partially offset by favourable inventory movements at Olympic Dam, Nickel West, Escondida and Spence, and lower costs at BMA due to cost efficiency initiatives.
Change in other costs:		
Exchange rates	**1,180**	Impact of movements in the Australian dollar and Chilean peso against the US dollar.
Inflation	**(867)**	Impact of inflation on the Group’s cost base.
Fuel, energy, and consumable price movements	**(660)**	Predominantly higher diesel and acid prices.
Non-cash	**(3)**	
	(350)	
Asset sales	**2**	
Ceased and sold operations	**1,668**	Reflects the contribution of BMC prior to divestment and a decrease in costs related to the closure and rehabilitation provision for closed mines of US$297 million compared with the prior year.
Other items	**446**	Other includes higher recovery of freight costs caused by movements in the freight index on consecutive voyage charter (CVC) voyages and higher average realised sales prices received by Antamina, partially offset by the write-off of iron ore dormant stockpiles.
Underlying EBITDA for year ended 30 June 2022	**40,634**	

[1] For information on the method of calculation of the principal factors that affect Underlying EBITDA, refer to OFR 11.2.

Discontinued operations

On 22 November 2021, the Group and Woodside signed a binding Share Sale Agreement (SSA) for the merger of the assets with Woodside. Woodside has subsequently acquired the entire share capital of BHP Petroleum International Pty Ltd (BHP Petroleum) in exchange for new Woodside ordinary shares.

While the merger had an economic effective date of 1 July 2021, the Group continued to control the Petroleum assets and carry on business in the normal course for 11 months until 1 June 2022 (Completion Date). As such, the Group recognises its share of revenue, expenses, net finance costs and associated income tax expense related to the discontinued operation until the Completion Date.

All income and expense items relating to the Petroleum Discontinued Operation have been removed from the individual line items in the Consolidated Income Statement. The post-tax loss of the Petroleum Discontinued Operation is presented as a single amount in the line item titled 'Profit/(loss) after taxation from Discontinued operations'.

Petroleum's contribution to BHP's 2022 financial results comprised a US$2.5 billion profit after taxation.

As consideration for the sale of BHP Petroleum, the Group received 914,768,948 newly issued Woodside ordinary shares at Completion Date. On the Completion Date, the Group paid a fully franked in specie dividend in the form of Woodside shares to eligible BHP shareholders. Eligible BHP shareholders received one Woodside share for every 5.5340 BHP shares they held on the Group's register at the record date of 26 May 2022. As part of completion and in order to reflect the economic effective date, the Group made a net cash payment of US$0.7 billion to Woodside in addition to US$0.4 billion in cash that was left in the BHP Petroleum bank accounts to fund ongoing operations. The total cash transfer of US$1.1 billion reflects the net cash flows generated by BHP Petroleum between 1 July 2021 and Completion Date adjusted for dividends Woodside would have paid on the newly issued Woodside ordinary shares, had the merger completed on 1 July 2021. The net cash completion payment to Woodside is subject to a customary post-completion review, which may result in an adjustment to the amount paid. The merger generated a net gain after tax of US$8.2 billion that has been included in the line item titled 'Profit/(loss) after taxation from Discontinued operations' and treated as an exceptional item.

For further information refer to Financial Statements note 27 'Discontinued operations'.

Cash flow

The following table provides a summary of the Consolidated Cash Flow Statement contained in Financial Statements 1.4, excluding the impact of foreign currency exchange rate changes on cash and cash equivalents.

Year ended 30 June	**2022 US$M**	2021 US$M Restated	2020 US$M Restated
Net operating cash flows from Continuing operations	**29,285**	25,883	14,685
Net operating cash flows from Discontinued operations	**2,889**	1,351	1,021
Net operating cash flows	**32,174**	27,234	15,706
Net investing cash flows from Continuing operations	**(4,973)**	(6,325)	(6,583)
Net investing cash flows from Discontinued operations	**(904)**	(1,520)	(1,033)
Net cash completion payment on merger of Petroleum with Woodside	**(683)**	–	–
Cash and cash equivalents disposed on merger of Petroleum with Woodside	**(399)**	–	–
Net investing cash flows	**(6,959)**	(7,845)	(7,616)
Net financing cash flows from Continuing operations	**(22,734)**	(17,884)	(9,713)
Net financing cash flows from Discontinued operations	**(33)**	(38)	(39)
Net financing cash flows	**(22,767)**	(17,922)	(9,752)
Net increase/(decrease) in cash and cash equivalents	**2,448**	1,467	(1,662)
Net increase/(decrease) in cash and cash equivalents from Continuing operations	**1,578**	1,674	(1,611)
Net increase/(decrease) in cash and cash equivalents from Discontinued operations	**1,952**	(207)	(51)
Net cash completion payment on merger of Petroleum with Woodside	**(683)**	–	–
Cash and cash equivalents disposed on merger of Petroleum with Woodside	**(399)**	–	–

Net operating cash inflows from Continuing operations of US$29.3 billion increased by US$3.4 billion. This reflects higher net commodity prices, favourable foreign exchange and strong underlying operational performance partially offset by COVID-19 impacts.

Net investing cash outflows from Continuing operations of US$5.0 billion decreased by US$1.4 billion. This is primarily due to net proceeds received of US$1.3 billion, including adjustment for working capital, related to the sale of BHP's 80 per cent interest in BMC to Stanmore Resources Limited completed in the current period.

For more information and a breakdown of capital and exploration expenditure on a commodity basis refer to OFR 10.

Net financing cash outflows from Continuing operations of US$22.7 billion increased by US$4.9 billion. This increase reflects higher dividends paid to BHP shareholders of US$10.0 billion offset by lower net repayments of interest bearing liabilities of US$5.6 billion mainly due to bond maturity payments and early repayment of hybrid bonds executed in the FY2021 year.

For more information, refer to Financial Statements note 20 'Net debt'.

Net cash flows from Discontinued operations relate to the Group's Petroleum business that was merged with Woodside on 1 June 2022.

For further information, refer to Financial Statements note 27 'Discontinued operations'.

Underlying return on capital employed (ROCE) of 48.7 per cent increased by 16.2 percentage points (FY2021: 32.5 per cent) reflecting the significant increase in profit after taxation excluding net finance costs and exceptional items of US$6.4 billion. The increase is also due to the disposal of the Group's Petroleum business and BMC reducing average capital employed.

For more information on Assets under Construction refer to Financial Statements note 11 'Property, plant and equipment'.

4.4 Debt and sources of liquidity

Our policies on debt and liquidity management have the following objectives:

- a strong balance sheet through the cycle
- diversification of funding sources
- maintain borrowings and excess cash predominantly in US dollars

Interest bearing liabilities, net debt and gearing

At the end of FY2022, Interest bearing liabilities were US$16.4 billion (FY2021: US$21.0 billion) and Cash and cash equivalents were US$17.2 billion (FY2021: US$15.2 billion). This resulted in Net debt[1] of US$0.3 billion, which represented a decrease of US$3.8 billion compared with the net debt position at 30 June 2021. This was primarily due to significant operating cash flows generated from strong coal and copper prices and reliable operating performance which more than offset the

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[1] We use non-IFRS financial information to reflect our underlying financial performance. For a discussion on the non-IFRS financial information we use refer to OFR 11. For the definition and method of calculation of non-IFRS financial information refer to OFR 11.1. For the composition of net debt refer to Financial Statements note 20 'Net debt'.

payment of record dividends. Gearing, which is the ratio of Net debt to Net debt plus Net assets, was 0.7 per cent at 30 June 2022, compared with 6.9 per cent at 30 June 2021.

During FY2022, gross debt decreased by US$4.6 billion to US$16.4 billion as at 30 June 2022. This decrease includes a US$0.5 billion repayment of 3.25 per cent USD senior notes that matured on 21 November 2021 and US$0.7 billion repayment of 2.875 per cent USD senior notes that matured on 24 February 2022. The reduction also includes US$2.3 billion of favourable foreign exchange and interest rate adjustments, along with US$0.5 billion of coal and Petroleum leases disposed following the coal divestments and merger of Petroleum business with Woodside.

At the subsidiary level, Escondida refinanced US$0.9 billion of long-term debt and borrowed US$0.3 billion in long-term debt.

Funding sources

No new Group-level debt was issued in FY2022 and debt that matured during the year was not refinanced.

Our Group-level borrowing facilities are not subject to financial covenants. Certain specific financing facilities in relation to specific assets are the subject of financial covenants that vary from facility to facility, as is considered normal for such facilities.

In addition to the Group's uncommitted debt issuance programs, we hold the following committed standby facility:

	Facility available 2022 US$M	**Drawn 2022 US$M**	**Undrawn 2022 US$M**	Facility available 2021 US$M	Drawn 2021 US$M	Undrawn 2021 US$M
Revolving credit facility[1]	**5,500**	**–**	**5,500**	5,500	–	5,500
Total financing facility	**5,500**	**–**	**5,500**	5,500	–	5,500

1 During the year we completed a one-year extension of the facility which is now due to mature on 10 October 2026. The committed US$5.5 billion revolving credit facility operates as a back-stop to the Group's uncommitted commercial paper program. The combined amount drawn under the facility or as commercial paper will not exceed US$5.5 billion. As at 30 June 2022, US$ nil commercial paper was drawn (FY2021: US$ nil), therefore US$5.5 billion of committed facility was available to use (FY2021: US$5.5 billion). A commitment fee is payable on the undrawn balance and interest is payable on any drawn balance comprising a reference rate plus a margin. The agreed margins are typical for a credit facility extended to a company with the Group's credit rating.

For more information on the maturity profile of our debt obligations and details of our standby and support agreements refer to Financial Statements note 23 'Financial risk management'.

Information in relation to our material off-balance sheet arrangements, principally contingent liabilities, commitments for capital expenditure and commitments under leases at 30 June 2022 is provided in Financial Statements note 11 'Property, plant and equipment', Financial Statements note 21 'Leases' and Financial Statements note 32 'Contingent liabilities', respectively.

In our opinion, working capital is sufficient for our present requirements. Our Moody's credit rating has remained at A2/P-1 outlook stable (long-term/short-term) throughout FY2022 and Moody's affirmed its credit rating on 2 June 2022. Our Standard & Poor's credit rating changed from A/A-1 outlook stable (long-term/short-term) to A/A-1 CreditWatch negative (long-term/short-term) on 23 August 2021, following the announcement of the proposed merger of our Petroleum business with Woodside. Upon completion of the merger, on 1 June 2022 Standard & Poor's lowered the Group's long-term credit rating by one notch, removed the credit rating from CreditWatch, and confirmed a credit rating of A-/A-1 outlook stable (long-term/short-term). Credit ratings are forward-looking opinions on credit risk. Moody's and Standard & Poor's credit ratings express the opinion of each agency on the ability and willingness of BHP to meet its financial obligations in full and on time. A credit rating is not a recommendation to buy, sell or hold securities and may be subject to suspension, reduction or withdrawal at any time by an assigning rating agency. Any credit rating should be evaluated independently of any other information.

The following table expands on the net debt, to provide more information on the cash and non-cash movements in FY2022.

Year ended 30 June	**2022 US$M**		2021 US$M	
Net debt at the beginning of the financial year		**(4,121)**		(12,044)
Net operating cash flows	**32,174**		27,234	
Net investing cash flows	**(6,959)**		(7,845)	
Free cash flow – Total operations		**25,215**		19,389
Carrying value of interest bearing liability net repayments	**2,227**		7,433	
Net settlements of interest bearing liabilities and debt related instruments	**(2,474)**		(7,424)	
Dividends paid	**(17,851)**		(7,901)	
Dividends paid to non-controlling interests	**(2,540)**		(2,127)	
Other financing activities[1]	**(149)**		(234)	
Other cash movements		**(20,787)**		(10,253)
Fair value adjustment on debt (including debt related instruments)[2]	**5**		58	
Foreign exchange impacts on cash (including cash management related instruments)	**27**		(1)	
Lease additions	**(736)**		(1,079)	
Divestment and demerger of subsidiaries and operations	**492**		–	
Others	**(428)**		(191)	
Non-cash movements		**(640)**		(1,213)
Net debt at the end of the financial year		**(333)**		(4,121)

1 Other financing activities mainly comprises purchases of shares by Employee Share Option Plan trusts of US$149 million (FY2021: US$234 million).

2 The Group hedges against the volatility in both exchange and interest rates on debt, and also exchange on cash, with associated movements in derivatives reported in Other financial assets/liabilities as effective hedged derivatives (cross currency and interest rate swaps), in accordance with accounting standards. For more information, refer to Financial Statements note 23 'Financial risk management'.

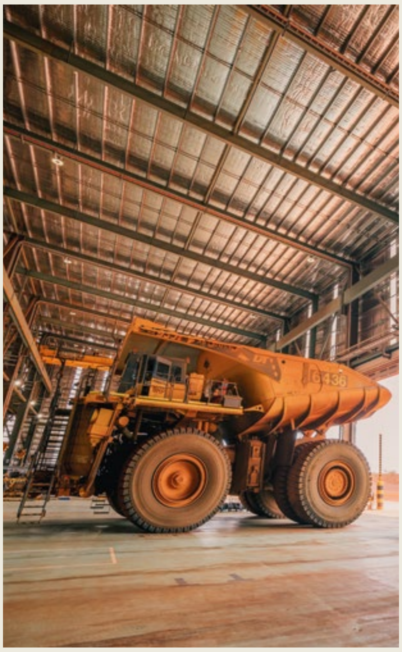
Dividends

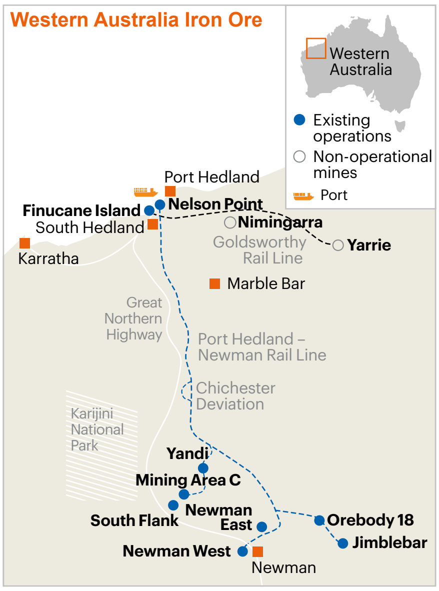
Our dividend policy provides for a minimum 50 per cent payout of Underlying attributable profit (Continuing operations) at every reporting period. The minimum dividend payment for the second half of FY2022 was US$1.15 per share. The Board determined to pay an additional amount of US$0.60 per share, taking the final dividend to US$1.75 per share (US$8.9 billion). In total, cash dividends of US$16.4 billion (US$3.25 per share) have been determined for FY2022. These returns are covered by total free cash flow of US$25.2 billion in FY2022. In addition, an in specie dividend of US$19.6 billion (US$3.86 per share) was determined in FY2022, distributing the Woodside shares received as consideration for the sale of BHP Petroleum.

The total dividends determined in FY2022, both cash and in specie, was US$36.0 billion (US$7.11 per share).

5.1 Minerals Australia

Minerals Australia includes operated assets in Western Australia, Queensland, New South Wales and South Australia, focused on iron ore, metallurgical coal, copper, nickel and energy coal. The commodities produced by our Minerals Australia assets are transported by rail and port and exported to our global customers.





Iron ore

Western Australia Iron Ore

Overview

Western Australia Iron Ore (WAIO) is an integrated system of four processing hubs and five open-cut operational mines in the Pilbara region of northern Western Australia, connected by more than 1,000 kilometres of rail infrastructure and port facilities.

WAIO's Pilbara reserve base is relatively concentrated, allowing development through integrated mining hubs connected to the mines and satellite orebodies by conveyors or spur lines. This approach seeks to maximise the value of installed infrastructure by using the same processing plant and rail infrastructure for several orebodies.

Ore is crushed, beneficiated (where necessary) and blended at the processing hubs – Mt Newman operations (which has our beneficiation plant), Yandi, Mining Area C and Jimblebar – to create lump and fines products that are transported along the Port Hedland–Mt Newman rail line to the Finucane Island and Nelson Point port facilities at Port Hedland.

There are four main WAIO joint ventures (JVs): Mt Newman, Yandi, Mt Goldsworthy (which includes the new South Flank mining area) and Jimblebar. BHP's interest in each is 85 per cent, with Mitsui and ITOCHU owning the remaining 15 per cent. The joint ventures are unincorporated, except Jimblebar.

BHP, Mitsui, ITOCHU and POSCO are also participants in the POSMAC JV. BHP's interest in POSMAC is 65 per cent. The ore from the POSMAC JV is sold to the main joint ventures.

All ore is transported on the Mt Newman JV and Mt Goldsworthy JV rail lines. The Nelson Point port facility is owned by the Mt Newman JV and the Finucane Island facility is owned by the Mt Goldsworthy JV. On 7 September 2021, BHP received regulatory approval to increase its export capacity at WAIO's Port Hedland operations up to 330 million tonnes per annum (Mtpa) (100 per cent basis) subject to the outcomes of a standard appeals process. We are assessing 330 Mtpa expansion alternatives.

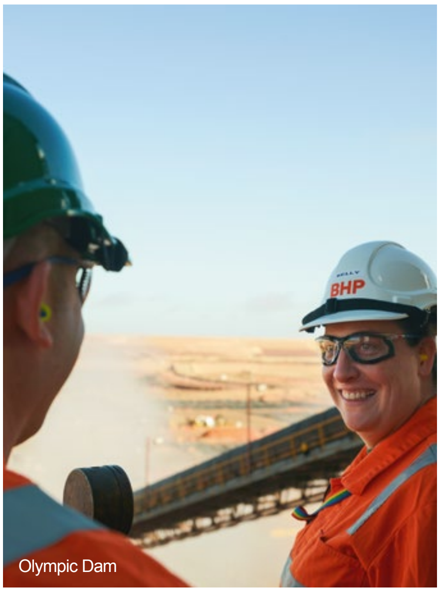
Our near-term focus remains on sustainable production of 290 Mtpa of iron ore in the short term. Successful tie-in of capital projects, including the port debottlenecking project, is expected to enable growth in excess of 300 Mtpa in the medium term.

Key developments in FY2022

WAIO's production of 249 million tonnes (Mt) or 283 Mt on a 100 per cent basis was in line with the prior period, primarily reflecting continued strong supply chain performance and favourable weather compared to the prior period, offset by the impacts of temporary labour constraints relating to COVID-19 and planned major maintenance including the Jimblebar train load out and car dumper one. Our preventative maintenance programs continue to underpin the strength of the WAIO supply chain, delivering increased car dumper, reclaimer and ship loader availability year-on-year and enabling record sales volumes of 284 Mt (100 per cent basis).

South Flank ramp up to full production capacity of 80 Mtpa (100 per cent basis) is ahead of schedule with an average rate of 67 Mtpa achieved in the June 2022 quarter contributing to record production from the Mining Area C hub and record lump sales in FY2022. Yandi continues its end-of-life ramp-down as South Flank continues to ramp up. Yandi is expected to provide supply chain flexibility with a lower level of production to continue for a few years.

Testing of two new automated shiploaders has commenced at our Port Hedland operations. This project is utilising 3D laser technology, which is expected to support the full automation of WAIO's eight shiploaders by CY2023. Together with planned autonomous haulage rollouts at both South Flank and Newman West, these initiatives are expected to deliver significant safety, production and cost improvements as well as new job and development opportunities for our people.



Copper

Olympic Dam

Overview

Located in South Australia, Olympic Dam (BHP ownership: 100 per cent) is one of the world's most significant deposits of copper, gold, silver and uranium. It comprises underground and surface operations, and is a fully integrated processing facility from ore to metal.

Ore mined underground is hauled by an automated train system to crushing, storage and ore hoisting facilities or trucked directly to the surface.

Olympic Dam has a fully integrated metallurgical complex with a grinding and concentrating circuit, a hydrometallurgical plant incorporating solvent extraction circuits for copper and uranium, a copper smelter, a copper refinery, including an electro-refinery and an electrowinning-refinery, and a recovery circuit for precious metals.

Key developments in FY2022

Olympic Dam copper production decreased by 33 per cent to 138 kilotonnes (kt) primarily as a result of a major smelter maintenance campaign (SCM21) completed in January 2022 which was delayed due to COVID-19 impacts on the availability of the workforce. Near-record production in the June 2022 quarter followed the successful ramp up of the smelter to full capacity in April 2022. Average copper grade of 2.14 per cent was achieved in FY2022 as the majority of material mined is from the Southern Mine Area, investment in which over the past few years enabled strong underground mine performance and a stable ore blend to be delivered to the processing plant. The maintenance campaign included the rebuild of the flash furnace and its ancillary equipment, and refurbishment of the acid plant, which has resulted in significant plant improvements. Short-term focus is on delivering operational stability and improved production performance, through debottlenecking existing facilities.

In February 2022, to support future secure and sustainable water sources for regional South Australia, Olympic Dam entered a Memorandum of Understanding with the South Australian Government, SA Water and OZ Minerals to progress a business case to examine the building of a desalination plant and pipeline. Olympic Dam has also entered into a renewable energy supply arrangement to enable the asset to draw energy supplies from a solar-wind hybrid plant to reduce the Scope 2 greenhouse gas emissions from its electricity consumption by 2025. In FY2022, Olympic Dam became the first Australian copper mine to be awarded the Copper Mark, an international accreditation that recognises responsible production practice.

The Oak Dam exploration program is continuing next stage resource definition drilling with six drill rigs now active on site, an increase from two drill rigs previously, after commencing the program in May 2021. This program is focused on resource definition and potential development pathways.

Coal

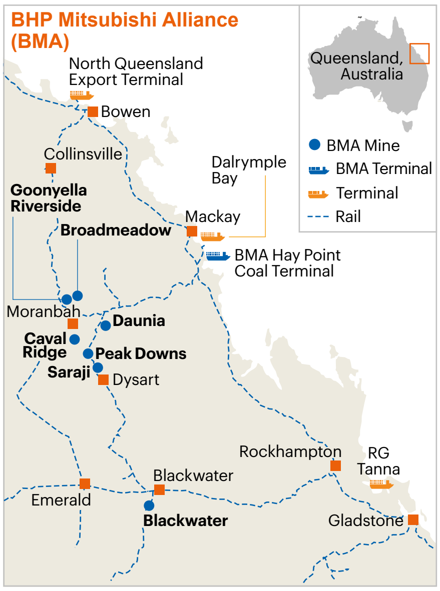
BHP Mitsubishi Alliance

Overview

BHP Mitsubishi Alliance (BMA) (BHP ownership: 50 per cent) operates seven metallurgical coal mines – Goonyella Riverside, Broadmeadow, Daunia, Peak Downs, Saraji, Blackwater and Caval Ridge in the Bowen Basin, Queensland. With the exception of the Broadmeadow underground longwall operation, BMA's mines are open cut. A small proportion of BMA's production is sold as energy coal. BMA has access to infrastructure, including a modern, multi-user rail network and owns and operates its own coal-loading terminal at Hay Point, near Mackay. BMA has contracted capacity at two other multi-user port facilities – the Port of Gladstone (RG Tanna Coal Terminal) and Dalrymple Bay Coal Terminal (DBCT). Following BHP's divestment of BHP Mitsui Coal Pty Ltd (BMC), BMA no longer has contracted access to BMC's port allocations at DBCT and North Queensland Export Terminal (NQXT).

Key developments in FY2022

BMA production decreased by 9 per cent to 29 Mt or 58 Mt on a 100 per cent basis.



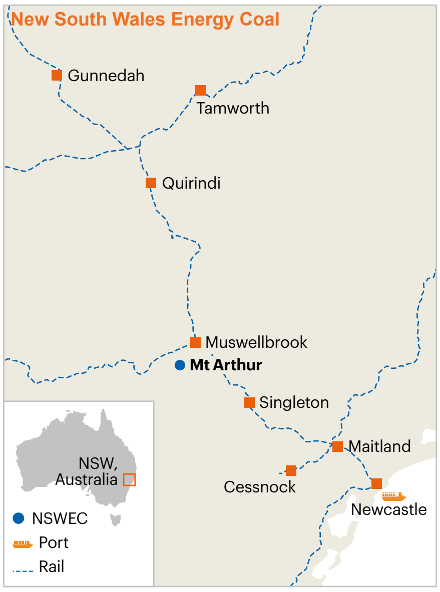
Significant wet weather impacts across most BMA operations and labour constraints, including COVID-19 related absences, which impacted stripping and mine productivity, more than offset record production at the Broadmeadow mine.

Following the automation of Daunia's truck fleet in November 2021, the automation of Goonyella's pre-strip truck fleet was completed in March 2022 with the Goonyella coal truck fleet expected to be fully autonomous by the end of December 2022.

During the year, BMA commenced a project for the fabrication and installation of a new berth superstructure and shiploader at Hay Point Coal Terminal, with a focus on improving the facility's operational resilience to withstand significant weather events and increasing its throughput capacity.

In response to regular wet weather events, BMA is continuing to implement a range of wet weather mitigation measures which are aimed at improving the ability to operate in adverse weather conditions. These measures include using drone mapping and rain on grid modelling to manage surface water flows to less impactful areas, improved road preparation and the use of nitrogen filled tyres to enable operation in lightning conditions.

Following the announcement of the change to the Queensland royalty regime from 1 July 2022, we will assess the impact on BMA economic reserves and mine lives, as well as the impact on production, jobs and the communities of Central Queensland. This further cost pressure is expected to discourage investment, operational growth, job creation and local business spending across the state.



New South Wales Energy Coal

Overview

New South Wales Energy Coal (NSWEC) (BHP ownership: 100 per cent) comprises the Mt Arthur Coal open-cut energy coal mine in the Hunter Valley. It has access to infrastructure in the Hunter Region, including a multi-user rail network and coal loading terminal access at the Port of Newcastle through Newcastle Coal Infrastructure Group (BHP ownership 28 per cent) and Port Waratah Coal Services.

Key developments in FY2022

NSWEC production decreased by 4 per cent to 14 Mt primarily reflecting lower volumes due to an increased proportion of washed coal to capitalise on higher margins for higher quality coals, COVID-19 related labour constraints which impacted stripping performance and mine productivity and wet weather. Higher-quality coals made up almost 90 per cent of sales compared to approximately 60 per cent of sales in the prior year, generating a price premium of nearly 150 per cent between high-quality and lower-quality coals in FY2022.

On 16 June 2022, we announced that we will retain NSWEC in our portfolio, seek the relevant approvals to continue mining beyond its current mining consent that expires in CY2026 and proceed with a managed process to cease mining at the asset by the end of FY2030. A review was announced in August 2020 and a trade sale process for NSWEC was conducted, however the process did not result in a viable offer. Our assessment of the resource economics, geotechnical profile and future investment requirements led us to determine that continued mining in the near term and moving to closure in FY2030 provides the optimal financial outcome when compared to alternate options. Continuation of mining to the end of FY2030 is expected to afford eight years to work with our people, state and federal governments and local communities in the Hunter Valley region on an equitable transition approach that supports long-term community sustainability.

BHP Mitsui Coal divestment

On 3 May 2022, we completed the divestment of our 80 per cent interest in BMC, a metallurgical coal joint venture in Queensland operated by BMC, to Stanmore Resources Limited. Stanmore Resources paid US$1.1 billion cash consideration at completion plus a preliminary completion adjustment of approximately US$200 million for working capital. The sum of US$100 million cash remains payable to BHP on 3 November 2022, with potential for an additional amount of up to US$150 million in a price-linked earnout payable to BHP in CY2024. The total cash consideration for the transaction is up to US$1.35 billion plus the final completion adjustment amount.

Nickel

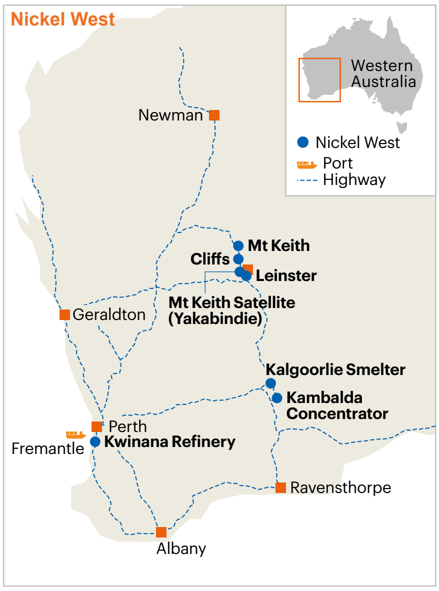
Nickel West

Overview

Nickel West (BHP ownership: 100 per cent) is a fully integrated nickel business located in Western Australia, with three streams of concentrate. It comprises open-cut and underground mines, concentrators, a smelter and refinery. Nickel West owns the majority of tenements of known resource in the Agnew-Wiluna basin in Western Australia.

Disseminated sulphide ore is mined at the Mt Keith open-pit operation and Mt Keith Satellite mine (Yakabindie) and crushed and processed onsite to produce nickel concentrate. Nickel sulphide ore is mined at the Cliffs and Leinster underground mines and processed through a concentrator and dryer at Leinster. A concentrator plant in Kambalda processes ore and concentrate purchased from third parties.

The three streams feed the Kalgoorlie nickel smelter, which uses a flash furnace to produce nickel matte. The Kwinana nickel refinery then turns this into nickel powder, briquettes and nickel sulphate.



Key developments in FY2022

Nickel West production decreased by 14 per cent to 77 kt primarily due to the significant impacts of COVID-19 related labour absences and workforce shortages, and unplanned downtime at the oxygen plant leading to a 15-day smelter outage in the June 2022 quarter.

The nickel sulphate plant at the Kwinana nickel refinery has been commissioned, with first saleable production achieved in the December 2021 quarter. The plant is expected to produce approximately 100 kilotonnes per annum (ktpa) of nickel sulphate for the lithium-ion battery industry.

Leinster B11, BHP's first block cave, continues development whilst producing. Ore is being hoisted to the Leinster concentrator and the undercut and drawbell development essential to this mining method are expected to be complete in CY2023.

Nickel West expanded its commitment to sourcing renewable energy through the execution of power purchase agreements for 100 per cent output of the 75MW Flat Rocks Wind Farm and for 50 per cent of the 100MW Merredin Solar Farm. The combined output from these two renewable farms is expected to generate the equivalent of greater than 100 per cent of the current power requirements of Nickel West's Kalgoorlie nickel smelter, Kambalda nickel concentrator and Kwinana nickel refinery from CY2024.

TransAlta has begun construction at the Northern Goldfields Solar Project, a large-scale, off-grid mining solar and battery energy storage systems, to help power Nickel West's Mt Keith and Leinster operations. The solar project due to be commissioned in early 2023, is expected to reduce Scope 2 emissions by 12 per cent at these operations.

5.2 Minerals Americas

The Minerals Americas asset group includes projects, operated assets and non-operated joint ventures in Canada, Chile, Peru, the United States and Brazil.

Our operated copper assets in the Americas, Escondida and Pampa Norte, are open-cut mines that produce copper concentrate and copper cathodes. The non-operated assets in the Minerals Americas portfolio are open-cut mines that produce copper (Antamina) and iron ore (Samarco). We have a 45 per cent interest in the Resolution copper project in the United States and a 100 per cent interest in the Jansen Potash Project in Canada. The commodities produced by our Minerals Americas assets are transported to port by pipeline, rail or road and exported to customers around the world.

Escondida and Pampa Norte

Copper

Escondida

Overview

Escondida (BHP ownership: 57.5 per cent) is a leading producer of copper concentrate, with by-products including gold and silver, and cathodes located in the Atacama Desert in northern Chile.

Escondida's two pits feed three concentrator plants, as well as two leaching operations (oxide and sulphide).

Key developments in FY2022

Escondida copper production decreased by 6 per cent to 1,004 kt primarily due to higher than expected concentrator feed grade decline of 4 per cent, public road blockades affecting access to site for both workers and supplies, and the impact of a reduced operational workforce from COVID-19. Despite these challenges, Escondida achieved record material mined for the 2022 financial year and near-record concentrator throughput of 367 ktpd.

Pampa Norte

Overview

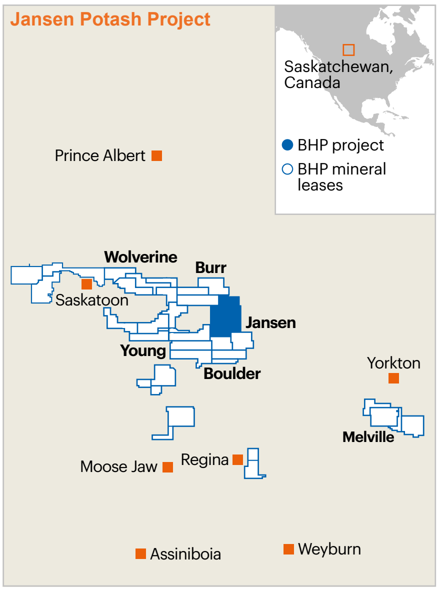
Pampa Norte (BHP ownership: 100 per cent) consists of two assets in the Atacama Desert in northern Chile – Spence and Cerro Colorado.

Spence produces copper cathodes and copper concentrate, with by-products including gold, silver and molybdenum.

Cerro Colorado produces copper cathodes. Its current environmental licence expires at the end of CY2023.

Key developments in FY2022

Pampa Norte copper production increased by 29 per cent to 281 kt reflecting the ramp up of the Spence Growth Option, partially offset by the impact of lower cathode production as a result of a 14 per cent decline in Pampa Norte stacking feed grade. The molybdenum plant at Spence produced and sold its first batch of molybdenum concentrate during Q4 FY2022. During May 2022, the new copper concentrator in Spence was inaugurated. The concentrator will operate on desalinated seawater and is powered from renewable sources, and allow the operation to be extended by 50 years.



Jansen Potash Project

Potash

Jansen Potash Project

Overview

The Jansen Potash Project (BHP ownership: 100 per cent) is located about 140 kilometres east of Saskatoon, Canada.

Jansen's large resource provides the opportunity to develop the project in stages, with Jansen Stage 1 (Jansen S1) expected to produce approximately 4.35 Mt of potash per annum on completion in CY2027 and sequenced brownfield expansions of up to 12 Mtpa (approximately 4 Mtpa per stage).

BHP holds mineral leases covering around 9,600 square kilometres in the Saskatchewan potash basin.

Key developments in FY2022

Excavation and lining of the production service shafts was completed in June 2022.

On 17 August 2021, BHP approved US$5.7 billion (C$7.5 billion) in capital expenditure for Jansen S1. Jansen S1 includes the design, engineering and construction of an underground potash mine and surface infrastructure, including a processing facility, a product storage building and rail infrastructure. Jansen S1 product is intended to be shipped to export markets through Westshore, in Delta, British Columbia. The project includes funding for the required port and rail infrastructure. First ore is targeted in CY2027, with construction expected to take approximately six years, followed by a ramp-up period of two years.

Opportunities to bring forward Jansen S1 continue to be assessed. In addition to Jansen S1, study of Jansen Stage 2 (Jansen S2) has commenced.

Non-operated minerals joint ventures

Copper

Antamina

Overview

Antamina (BHP ownership: 33.75 per cent) is a large, low-cost copper and zinc mine in north central Peru with by-products, including molybdenum and silver. Antamina is operated independently by Compañía Minera Antamina S.A.

Key developments in FY2022

Antamina copper production increased by 4 per cent to 150 kt (BHP share), reflecting higher copper head grades. Zinc production decreased by 15 per cent to 123 kt (BHP share) reflecting lower zinc head grades.

In April 2022, Antamina submitted to Peruvian authorities a modification of the Environmental Impact Assessment to sustain mine life from 2028 to 2036 entirely within Antamina's current operational area.

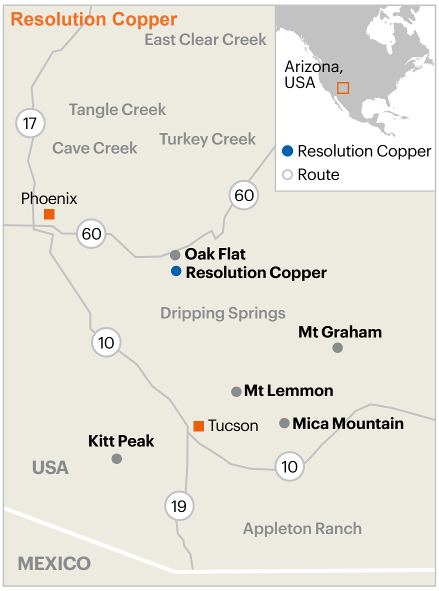
Resolution Copper

Overview

Resolution Copper (BHP ownership: 45 per cent), located in the US state of Arizona, is operated by Rio Tinto (55 per cent ownership interest). Resolution Copper is one of the largest undeveloped copper projects in the world and has the potential to become one of the largest copper producers in North America. The Resolution Copper deposit lies more than 1,600 metres beneath the surface.

Key developments in FY2022

During FY2022, Resolution continued the engineering and permitting phase of the project. The project is subject to a federal permitting process led by the US Forest Service. The US Forest Service published a Final Environmental Impact Statement in January 2021, which was rescinded in March 2022 for the stated purpose of conducting additional analysis and consultation with Native American tribes. The project team has been cooperating with the US Forest Service as it completes this additional review. During this time, Resolution has sought to deepen its engagement and relationships with local communities and Native American tribes.



Iron ore

Samarco

Overview

Samarco (BHP ownership: 50 per cent) comprises a mine and three concentrators located in the Brazilian state of Minas Gerais, and four pellet plants and a port located in Anchieta in the state of Espírito Santo. Three 400-kilometre pipelines connect the mine site to the pelletising facilities. Samarco is operated independently by Samarco Mineração S.A. Samarco's main product is iron ore pellets. Pellets are independently marketed by Samarco and sold to customers around the world.

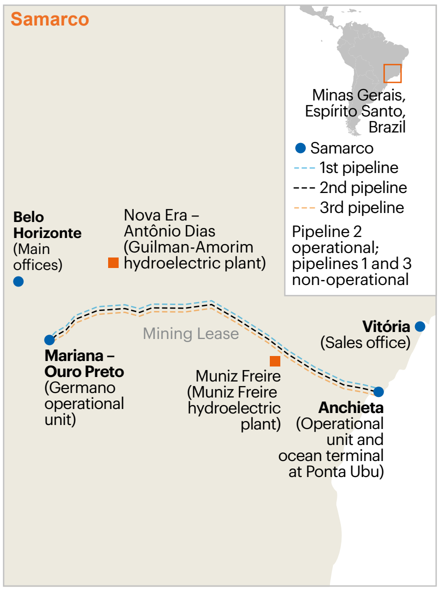
Key developments in FY2022

Samarco produced 4 million tonnes of pellets and ore fines in FY2022 (BHP Share), operating at 26 per cent of its total 26 Mtpa production capacity following the resumption of operations in December 2020. Studies to increase production to 100 per cent by FY2029 are progressing.

The progressive decharacterisation of Samarco's upstream tailings dam structures is on track and planned to be completed by FY2029. These structures have been certified by independent third parties as stable, are following local stability and monitoring requirements, and have not received tailings since 2015.

Broader studies to unlock solutions for Samarco to operate without tailings dams beyond FY2030 are continuing.

For more information on the Fundão dam failure and the response refer to OFR 8.



5.3 Commercial

BHP's Commercial function seeks to maximise commercial and social value while minimising costs across the end-to-end supply chain.

The function is organised around the following core activities in our value chain, supported by credit and market risk management and strategy and planning activities.

Sales and Marketing

Sales and Marketing connects BHP's resources to market through commercial expertise, sales and operations planning, customer insights and proactive risk management. It presents a single face to markets across multiple assets, with a view to realising maximum value for our products and supporting sustainability initiatives in our downstream supply chain.

Maritime and Supply Chain Excellence

Maritime and Supply Chain Excellence manages BHP's enterprise-wide maritime transportation strategy and the chartering of ocean freight to meet BHP's inbound and outbound transportation needs. It focuses on supply chain excellence and sourcing cost-efficient marine freight in addition to partnering within the maritime ecosystem to reduce the GHG emissions intensity of BHP-chartered shipping of our products. It also seeks to manage supply chain risk by vetting the safety performance of the ships loading BHP cargo.

Procurement

Our global Procurement team connects asset teams and suppliers to procure the goods and services used by our projects, operated assets and functions globally. Procurement partners with our suppliers to optimise equipment performance, reduce operating costs, optimise working capital and generate social value. Through innovation we work with suppliers to reduce the GHG emissions intensity of inbound goods and services and the operational GHG emissions of our operated assets. Procurement manages supply chain risk, fosters supplier innovation and develops sustainable relationships with global suppliers and local businesses in the communities where we operate.

Warehousing, Inventory, Logistics and Property

Warehousing, Inventory, Logistics and Property designs and operates our inbound supply chain networks for the delivery and warehousing of spare parts, operating supplies and consumables, and designs and operates our office workspaces globally.

Market Analysis and Economics

Our Market Analysis and Economics team develops BHP's proprietary view on the outlook for commodity demand and prices, as well as our input costs, the world economy, climate change and financial markets. The team works with our Procurement, Maritime and Supply Chain Excellence, and Sales and Marketing sub-functions to help optimise end-to-end commercial value, and with the Portfolio Strategy and Development and External Affairs functions to identify and respond to long-run strategic changes in our operating environment.

Global Business Services

Global Business Services unites shared services and repeatable process activity across the Group into a single operation. Commencing operation in FY2022 with the BHP Operating System and with process transformation capabilities at its core, it has the mandate to aggregate, operate and improve end-to-end processes on behalf of assets and functions to drive operational excellence.

6 People and culture

Our employees and contractors, around 80,000 globally, are the foundation of our business.

We aim to attract, recruit, empower and retain the best people.

To enable our people to perform at their best, safety is our highest priority and we invest in technology and innovative and effective ways to manage risk, streamline processes and improve productivity. We offer competitive remuneration and invest in development programs to build capability and improve performance.

Developing our capabilities and an enabled culture

To drive continuous improvement, we respect people's differences and encourage self-accountability, a hunger to learn and a commercial mindset.

One of the ways we seek to achieve this is by applying the BHP Operating System (BOS) practices to help build leader capability. BOS is a way of leading and working that focuses on the safety of our people, value for our customers, setting clear goals and measuring progress and a mindset of zero waste. In FY2022, we continued to train our leaders through BOS learning academies to improve operational capability and culture, with more than 3,000 people leaders participating.

Three times a year we ask our employees and contractors about their experiences working with BHP via a short Engagement and Perception Survey. After each survey, our team leaders assess what is working well, what they can learn from others and take action to address improvement areas. Despite significant absences and workplace disruptions caused by COVID-19, we maintained a high response rate of 82 per cent of employees in March 2022 (81 per cent in February 2021) and achieved a strong engagement score of 82 per cent favourable (84 per cent in February 2021). In particular, 80 per cent of our employees and 88 per cent of our contractors (from 7,932 responses) would recommend BHP as a great place to work, which places us in the top third of global organisations as benchmarked by Qualtrics.

In FY2022, we transformed our approach to developing frontline leadership with the launch of BHP Leadership Programs for supervisors, superintendents and managers. Through a combination of assessment, workshops, experiences and coaching, the suite of programs is designed to identify and develop leaders and prepare them to take on greater responsibility. We anticipate more than 1,000 leaders each year will develop their ability through these programs to lead inclusively, ethically and through complexity as they play their critical role to deliver continuous improvement.

Our Operations Services business unit provides maintenance and production services across our Minerals Australia assets. It employs people on a permanent basis and supports skills building through a structured coaching and in-field training program designed to enable our workforce to deliver consistent equipment operation and maintenance that balances safety, maximum productivity and equipment reliability. Operations Services had more than 3,500 employees as at 30 June 2022 and is expected to continue to grow.

To help bolster Australia's skills base and create new career pathways into the mining sector, the BHP FutureFit Academy located in Perth, Western Australia and Mackay, Queensland, provides a pathway to join Minerals Australia through an accredited maintenance and production traineeship or a trade apprenticeship. Once trained and qualified, employees move to one of our Australian operations. The FutureFit Academy training includes the skills required for an increasingly technological and digitised world and focuses on our safety, respectful behaviour, culture, and productive ways of working. This helps FutureFit graduates to be 'BHP site ready' when they graduate. In FY2022, the FutureFit Academy trained more than 417 apprentices and trainees, with 175 graduating. In FY2023, the FutureFit Academy is expanding the program to include Western Australia Iron Ore (WAIO) and Nickel West. New curricula will be offered, including belt splicing, electrical and auto electrical. The belt splicing program will commence at Newman in August 2022. For more information on BHP's FutureFit Academy see our case study at bhp.com/people.

In Minerals Americas, the focus has been on implementing an integrated approach to capability building through defining frameworks and programs for workforce upskilling and reskilling as we transition into autonomous operations at our operated assets. Early career programs (for graduates and trainees in roles such as operators, maintainers, supervisors and engineers) are also a key area to build a sustainable base of diverse talent with the required capabilities. We will also continue building partnerships with training and learning institutions to develop those identified capabilities for the future.

The talent market is dynamic and increasingly competitive. We continue to work on our attraction and retention strategies through strategic workforce planning, talent acquisition, inclusion and diversity, internal talent management, employee mobility and our total value proposition.

We believe we are strongly and competitively placed in the market and regularly review our positioning and total reward strategies, with culture being our competitive edge. We have deployed new proactive recruitment methods, including recruitment marketing and talent pooling, strategies for securing critical skills and made improvements to our recruitment processes to increase speed while maintaining our focus on the suitability of candidates.

Inclusion and diversity

We believe that an inclusive and diverse workforce promotes safety, productivity and wellbeing, and underpins our ability to attract and retain employees. Our systems, processes and practices are designed to support fair treatment for our people.

Our Inclusion and Diversity Position Statement confirms our vision, commitment and contributions to inclusion and diversity. We have further work to do to achieve this goal.

Our strategy is to focus on attracting and retaining a workforce that is truly representative of society. We intend to do this by addressing the barriers and impacts of bias and racism experienced by people within underrepresented groups by listening to their experience combined with insights from our engagement surveys and the recently deployed self-identification survey, 'Tell Us About You'. So far, around 10,000 people have confidentially shared with us information about themselves (a 22 per cent response rate), which is a good starting point and we expect to see participation grow over time. Our intention is to contrast this data with national/regional census data over time to measure how diverse we are against the general population.

To help mitigate gender pay disparities, we have taken steps to reduce potential bias in remuneration at the time of recruitment and we conduct an annual gender pay review, the results of which are reported to the BHP Remuneration Committee.

Respect is one of our values under *Our Charter* and is fundamental to building stronger teams and being an inclusive and diverse workplace. For some people, this has not been their experience of working at BHP and we are determined to address this.

For information on our approach to addressing workplace sexual harassment refer to OFR 7.5.

Our ambition to achieve a more diverse and inclusive workplace is focused on four areas:

- embedding flexibility into the way we work
- encouraging and working with our supply chain partners to support our commitment to inclusion and diversity
- uncovering and taking steps to mitigate potential bias in our systems, policies and processes and in behaviours through the Respectful Behaviour campaign
- ensuring our workplaces are safe for and attractive to a diverse range of people

Gender balance[1]

In CY2016, we announced our aspiration to achieve gender balance within our employee workforce globally by the end of FY2025, which we define as a minimum 40 per cent women and 40 per cent men in line with the definitions used by entities such as the International Labour Organisation and HESTA.

We increased the representation of women working at BHP in FY2022 by 2.5 percentage points, with almost 8,000 more female employees at the end of the year than in 2016. At 30 June 2022, women represented 32.3 per cent of our employee workforce, up from 17.6 per cent when we set our aspirational goal. We are confident of achieving gender balance by the end of FY2025.

The percentage of employees newly hired to work for BHP in FY2022 was 52.7 per cent male and 47.3 per cent female. This is a marked increase on our baseline for our aspirational goal, which was 10.4 per cent female hired in FY2015.

We also improved our representation of women in leadership by 2.7 percentage points compared to FY2021, with 27.9 per cent female people leaders at the end of FY2022.

To further accelerate female representation in FY2022, we:

- continued market mapping to proactively target people or groups of people not actively looking to work for BHP or our industry
- implemented a ‘Tell Us About You’ survey, our first self-identification survey to measure the rich diversity of our workforce
- integrated inclusive leadership capabilities at all levels of our leadership learning curriculum
- embedded the Ways of Working Framework to guide employees and leaders to ‘Work where you get great outcomes’
- launched Phase 3 of the Respectful Behaviour campaign to reinforce our zero tolerance of sexual harassment, racism and bullying including global ‘Stop for Safety’ sessions for all employees and contractors

The table below shows the gender composition of our employees, senior leaders and the Board over the last three financial years[1,2]

	2022	2021	2020
Female employees	**12,674**	11,868	9,961
Male employees	**26,536**	27,953	27,557
Female people leaders	**1,695**	1,439	1,157
Male people leaders	**4,380**	4,276	4,002
Female Executive Leadership Team members	**5**	5	4
Male Executive Leadership Team members	**5**	5	6
Female Board members	**4**	4	3
Male Board members	**8**	8	9

[1] Based on a ‘point-in-time’ snapshot of employees as at 30 June 2022, as used in internal management reporting for the purposes of monitoring progress against our goals. In FY2021 and FY2022 this includes employees on extended absence, 660 at 30 June 2021 and 948 in 2022, who were previously not included in the active headcount.

[2] For FY2022, this does not include employees who left BHP via the merger of BHP Petroleum and Woodside (approximately 1,000 employees) or the sale of BHP Mitsui Coal to Stanmore Resources (approximately 500 employees).

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[1] Based on a ‘point-in-time’ snapshot of employees as at 30 June 2022, including employees on extended absence, as used in internal management reporting for the purposes of monitoring progress against our goals. This does not include contractors. People leaders as defined as employees with one or more direct report.

Indigenous employment

Indigenous peoples are critical partners of BHP's operations around the world. We recognise, as part of our Global Indigenous Peoples Strategy, that we can contribute to the economic empowerment of Indigenous peoples through providing opportunities for employment, training, procurement and by supporting Indigenous enterprises.

We have set targets to increase Indigenous employment in our Minerals Australia operations, Minerals Americas operations in Chile and our Jansen Potash Project and operations in Canada.

In our Minerals Australia operations, we have achieved the Australian Indigenous employment target of 8 per cent ahead of schedule (8.3 per cent of employees at 30 June 2022) through significant effort with targeted Indigenous recruitment campaigns, a tailored application process focused on the cultural needs of applicants and BHP's commitment to the regional communities where we operate. A key focus in Australia now is the retention and development of our Indigenous workforce. New targets have been set and engagement strategies are being developed as part of BHP's next Minerals Australia Reconciliation Action Plan.

From FY2023 the targets for Indigenous employee representation are 9.7 per cent by the end of FY2027 in our Minerals Australia operations, 10 per cent by the end of FY2025 in our Minerals Americas operations in Chile and 20 per cent by the end of FY2026 in our Jansen Potash Project and operations in Canada.

For information on our 2030 goals related to Indigenous partnerships refer to OFR 7.13.

Indigenous employee representation[1]

Location	Period	Target (%)	30 June 2022 (%)
Minerals America operations employees in Chile	By the end of FY2026	**10.0**	**8.7**
Minerals Australia operations employees in Australia[2]	By the end of FY2025	**8.0**	**8.3**
Jansen Potash Project and operation employees in Canada[3]	By the end of FY2027	**20.0**	**7.2**

[1] Point in time data at 30 June 2022.

[2] Indigenous employee representation overall in Australia as at 30 June 2022 was 7.4 per cent including Minerals Australia operations, 8.3 per cent Indigenous, and non-operational locations, 2.5 per cent Indigenous.

[3] Indigenous workforce representation at Potash Jansen Project and operations of 20.7 per cent includes employees, 7.2 per cent Indigenous, and contractors, 23.8 per cent Indigenous.

LGBT+ inclusion

Our LGBT+ ally employee inclusion group, Jasper, established in 2017, is a natural extension of our inclusion and diversity aspirations and reflects our value of Respect under *Our Charter*.

Its membership base grew to around 2,000 in FY2022, with eight regional chapters globally.

In FY2022, we continued to close gaps for LGBT+ inclusion, such as releasing guidelines and implementing support for transgender and gender diverse recruitment, and updated our parental leave policy to be more inclusive by making language more gender neutral and ensuring it applies to birth, long-term guardianship and adoption aligned to changes in Australia.

Flexible working

Our flexible working has evolved throughout the COVID-19 pandemic and we have embedded a hybrid working model for employees in non-operational roles, allowing office and home-based working arrangements, while requiring 30 to 50 per cent of work to be based in the office, depending on the nature of work.

We understand many site-based employees are in roles that cannot be performed remotely. We continue to seek to provide flexible working through lifestyle-friendly rosters with some sites within WAIO moving away from two weeks on (seven days, seven nights)/one week off rosters to eight days on (dayshift)/six days off then seven days on (nightshift)/seven days off rosters.

Part-time and job-share arrangements have increased including at senior levels.

Employee relations

Our four key focus areas for employee relations are:

- creating relations with our workforce based on a culture of trust and cooperation
- negotiating where there are requirements to collectively bargain (and recognising the rights of our workforce to collectively bargain)
- closing out agreements with our workforce in South America and Australia, with no lost time due to industrial action, to the extent possible
- ensuring we comply with legal obligations and regional labour regulations

In Australia, we are monitoring potential industrial relations legislative reform after the Government indicated an intention to introduce draft legislation during CY2022 that could have a material impact on our cost of labour and industrial landscape and negatively impact productivity.

Minerals Australia participated in five collective bargaining processes during FY2022:

- BHP Iron Ore Pty Ltd commenced bargaining in January 2022 for the BHPIO Locomotive Drivers Agreement 2022, which is ongoing.
- OS MCAP Pty Ltd recommenced bargaining in December 2022 for the Operations Services Production Agreement 2018, which is ongoing.
- OS ACPM Pty Ltd recommenced bargaining in December 2022 for the Operations Services Maintenance Agreement 2018, which is ongoing.
- BHP Coal Pty Ltd commenced bargaining in February 2021 for the BMA Enterprise Agreement 2021, which is ongoing.
- BM Alliance Coal Operations Pty Ltd commenced bargaining in June 2022 for the BMACO Broadmeadow Mine Agreement 2022, which is ongoing.

Minerals Americas participated in two collective bargaining processes during FY2022:

- Escondida: O&M union N°1 of 2,333 employees signed in August 2021 for 36 months.
- Cerro Colorado: O&M union N°1 of 705 employees signed in September 2021 for 36 months.

Negotiations to renew the collective agreements with BHP Chile's Specialists & Supervisors Union (150 employees) and Escondida's Intermel Union (140 employees) are expected to be completed in FY2023.

There were no legal industrial actions or strikes at Minerals Americas operated assets, Minerals Australia operated assets or our Jansen Potash Project and operations in Canada in FY2022.

Impacts and challenges from COVID-19 related to our people

The rising numbers of COVID-19 cases and measures taken by governments within Australia and Chile to control its spread in FY2022 resulted in continued changes to working patterns for our employees and contractors and unplanned absences. As a result of the COVID-19 restrictions, we implemented controls across our business to reduce the number of workers required onsite and manage planned and unplanned absences, such as temporary remote working arrangements, increased health and safety requirements, asset-based vaccination campaigns, self-testing and office-testing campaigns and hybrid working. In Australia we also introduced vaccination against COVID-19 as a site access requirement after consultation with employees and unions. In Canada, all employees are required to remain fully vaccinated against COVID-19 to perform work at site including a third booster shot.

With state border closures restricting the mobilisation of employees and contractors to our operating sites in Australia at times during FY2022, changes to rosters and hours of work were made to ensure operational requirements for essential work were met. There has also been a further extension of flexible work options for employees and contractors in Australia in response to government-imposed lockdowns preventing them from attending their normal place of work. Flexible work options, including staggered start times, working from home and adapted working hours were in place across many of our office settings.

For information on the impact of COVID-19 on our workforce refer to OFR 7.6.

More information on people is available at bhp.com/people.

7 Sustainability

Our commitment to social value reflects our purpose and BHP's role in supplying products essential for the transition of society towards a more sustainable future, a role that we seek to perform in a responsible way.

7.1 Our sustainability approach

Our management of sustainability helps generate social value. We also know our stakeholders and partners are increasingly focused on our sustainability performance and use it as a key determinant in assessing BHP and our industry. We strive to continuously improve and exceed these expectations.

A commitment to sustainability sometimes requires us to make difficult choices and we seek to gain and maintain the support of all our stakeholders and partners as we manage complex issues. We respect the right of every stakeholder and partner to challenge the choices we make and recognise that by listening to their views and concerns BHP becomes a better company.

We define our approach to sustainability through *Our Charter* and it is governed through the *Our Requirements* standards. These standards describe our mandatory minimum performance requirements and provide the foundation to develop and implement management systems at our operated assets.

Our approach to sustainability is overseen by BHP's Board. The Board's Sustainability Committee advises and assists the Board in its oversight of the Group's health, safety, environmental and community (HSEC) matters.

For more information about the Sustainability Committee and its work refer to the Corporate Governance Statement to be released in September 2022.

Sustainability targets and goals

We set clear direction through our social value framework and we embed and measure sustainability performance through our public sustainability targets and goals. We completed our most recent five-year sustainability targets in FY2022.

For more information on our performance against these targets refer to OFR 7.3.

This year we developed new 2030 goals under the pillars of People, Planet and Prosperity in line with the World Economic Forum and the United Nations (UN) Development Program, following extensive internal and external engagement (refer to OFR 2.2). The 2030 goals comprise overarching long-term goals across six key focus areas and are underpinned by short-term metrics and milestones. We are working to embed them through asset plans and capital allocation.

The key changes compared to the previous five-year sustainability targets include a new time horizon of seven years to align with BHP's 2030 climate change targets and goals and reference timelines set out in global frameworks and agreements, such as the UN Sustainable Development Goals, the Paris Agreement, the Convention of Biological Diversity and the Global Goal for Nature. The goals provide opportunities for BHP to engage and work in partnership with others, build capability and co-design approaches to deliver positive outcomes and shared prosperity for people and our planet. They are reinforced by our continued commitment to pursue zero significant health, safety, environment, community or supply chain events and to making a social investment of at least 1 per cent pre-tax profit.[1]

[1] To date, our voluntary social investment has been calculated as 1 per cent of the average of the previous three years' pre-tax profit. For FY2023-FY2030, our social investment will be assessed as a total over the seven-year goals period to FY2030, rather than calculated as an average of the previous three years' pre-tax profit.

Equitable change and transitions

We recognise that changes in our business, ranging from the opening to the closing of a mine, can have significant, and sometimes disproportionate, effects on communities where we operate. We also recognise that these same communities are navigating broader shifts in the global economy, such as the energy transition and digital disruption, and that the scope and nature of these transitions will continue to evolve.

We are committed to working with communities we are a part of in periods of change and transition to achieve long-term mutual value.

Our approach will be grounded in our existing strategies, policies and frameworks in relation to our people, the environment, communities and other stakeholders and partners. The interconnection of these policies and frameworks' aims to ensure change and transitions are equitable and deliberately considered across the life cycle of our business and for the communities where we operate.

Our approach to equitable change and transitions will:

- Recognise our responsibility to our workforce – where a major change in our business is expected to affect our workforce, we will engage in meaningful dialogue and support those impacted.
- Create opportunity for meaningful engagement and co-designed processes – we will seek to develop relationships with stakeholders and partners, including government, local businesses, community members, suppliers, Indigenous peoples and workers, that support understanding of the issues and co-creation of solutions. We will communicate transparently on the types of changes the business needs to make and enable active participation of those most impacted.
- Recognise the impacts associated with gender, land connectedness and social and economic vulnerability – we will not assume all people are affected similarly. We will seek to understand how impacts may be differently experienced, including for Indigenous peoples, and recognise that plans and solutions must take into account the particular strengths of each community and tackle the unique impacts they experience.
- Recognise that the economic, social and environmental dimensions of sustainable development are interrelated – we will aim to avoid or mitigate adverse environmental impacts of change and transitions, while pursuing opportunities to build climate resilience and environmentally sustainable communities.

Given change and transitions will involve multiple actors, we will seek to be a catalyst to bring people together and use our relationships to advocate for equitable change and transitions in line with the above principles.

1 These include our Indigenous Peoples Framework, Social Value Framework, Inclusion and Diversity Statement, Climate Change Strategy, approach to the environment, Closure Strategy, Human Rights Policy Statement, and approach to community engagement.

Our sustainability approach – TCFD index[1]

Disclosure requirement	Reference in this Report
Governance	
Disclose the organisation's governance around climate-related risks and opportunities.	
a) Describe the board's oversight of climate-related risks and opportunities.	OFR 7.8
b) Describe management's role in assessing and managing climate-related risks and opportunities.	OFR 7.8
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.	
a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	OFR 7.8
b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.	OFR 7.8; 9; 9.1 Financial Statements 1.5; 1.6
c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	OFR 7.8; 9; 9.1 Financial Statements 1.5; 1.6
Risk management	
Disclose how the organisation identifies, assesses, and manages climate-related risks.	
a) Describe the organisation's processes for identifying and assessing climate-related risks.	OFR 7.8; 9
b) Describe the organisation's processes for managing climate-related risks.	OFR 7.8; 9
c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	OFR 7.8; 9
Metrics and targets	
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	
a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	OFR 7.8 Remuneration Report 3.2
b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	OFR 7.8
c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	OFR 7.3; 7.8
Cross-industry metrics	
– GHG emissions: absolute Scope 1, Scope 2, and Scope 3; emissions intensity.	OFR 7.8
– Transition risks: amount and extent of assets or business activities vulnerable to transition risks.	OFR 7.8
– Physical risks: amount and extent of assets or business activities vulnerable to physical risks.	OFR 7.8
– Climate-related opportunities: proportion of revenue, assets, or other business activities aligned with climate-related opportunities.	OFR 7.8
– Capital deployment: amount of capital expenditure, financing, or investment deployed toward climate-related risks and opportunities.	OFR 7.8
– Internal carbon prices: price on each tonne of GHG emissions used internally by an organisation.	OFR 7.8
– Remuneration: proportion of executive management remuneration linked to climate considerations.	OFR 7.8 Remuneration Report 3.2

[1] Our sustainability standards index is included in our ESG Standards and Databook, available at bhp.com/sustainability.

Reporting standards and frameworks

We commit to many sustainability frameworks, standards and initiatives and disclose data according to their requirements. Our sustainability reporting, including on our website and in our ESG Standards and Databook, is prepared in accordance with the Global Reporting Initiative (GRI) 2021 Sustainability Reporting Standards, the International Council on Mining and Metals (ICMM) Sustainable Development Framework, the Task Force on Climate-related Financial Disclosures (TCFD) recommendations and the Sustainability Accounting Standards Board (SASB) Metals and Mining standard. It also serves as our UN Global Compact (UNGC) Communication on Progress on implementation of the UNGC Ten Principles and support for its broader development objectives. We have included a summary of our TCFD disclosures in the table below.

There are also responsible mining and sourcing standards that we commit to voluntarily or as part of our memberships.

For more information about our implementation of these standards refer to section Value Chain Sustainability 7.9.

7.2 Our material sustainability issues

Annual sustainability materiality assessment

Each year we identify the sustainability issues most material to our business and stakeholders by assessing the economic, social, environmental and cultural impact of our activities and business relationships.

In FY2022, we adopted the approach of the Global Reporting Initiative (GRI 3: Material Topics 2021) to consider actual and potential negative and positive impacts of our business in order to determine our material sustainability issues for reporting. In doing so we considered BHP's material risk profile[1], information recorded in our internal event management system, our social value framework and social investment priorities and a number of other sources. These included issues raised at our Annual General Meetings and through industry sustainability standards and benchmark assessments. We also consult with stakeholders, such as through the BHP Forum on Corporate Responsibility, via ESG investor round tables and advisory groups and with internal stakeholders via focused discussions.

The material sustainability issues identified through our FY2022 assessment are shown in the table below. These issues are consistent with our FY2021 assessment with the addition of security services, sexual harassment and value chain sustainability.

7.3 Our sustainability performance: Non-financial key performance indicators

We completed our most recent five-year sustainability targets in FY2022. Highlights include three years fatality-free, a reduction in the total number of workers exposed to our most material occupational exposures by 68 per cent, a 15 per cent decrease in operational greenhouse gas (GHG) emissions from our adjusted FY2017 baseline, social investment of US$681.4 million over five years and a 29 per cent reduction in freshwater withdrawal volumes from our adjusted FY2017 baseline.

The FY2017 baselines and FY2018 – FY2022 data for our occupational exposures, GHG emissions and withdrawal of freshwater have been adjusted for the merger of our Petroleum business with Woodside and divestment of our interest in BHP Mitsui Coal (BMC) in FY2022, (to exclude data related to those operations), together with adjustments made and reported in previous years to ensure ongoing comparability of performance. FY2022 data for safety, social investment and significant community and environmental events includes the operated assets in our Petroleum business up to the date of the merger (1 June 2022) and BMC up to the date of completion of the sale (3 May 2022).

Material sustainability issues identified in this year's assessment

Environment

Climate change
OFR 7.8

Environment
OFR 7.15

Biodiversity and land
OFR 7.17

Water
OFR 7.16

Tailings storage facilities
OFR 7.18

People

People
OFR 6

Safety
OFR 7.4

Health (including COVID-19)
OFR 7.6

Sexual harassment
OFR 7.5

Security services
OFR 7.12

Social

Indigenous peoples (including cultural heritage)
OFR 7.13

Community
OFR 7.10

Human rights
OFR 7.11

Governance

Ethics and business conduct
OFR 7.7

Sustainability governance
OFR 7.1

Value chain sustainability
OFR 7.9

Other

Critical incident risk management
OFR 8; 9.1

Digital security
OFR 9.1

Economic performance
ECR

Market presence
Annual report – to be released September 2022

Public policy
OFR 8

Tax
ECR

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[1] 'Material' in this context refers to the materiality of a risk under BHP's Risk Framework. For information on our Risk Framework refer to OFR 9.

Our sustainability performance: Non-financial key performance indicators

	Target	FY2022 result	Year-on-year
People	Zero work-related fatalities	Zero work-related fatalities and there was a 30 per cent decrease in the high-potential injury frequency rate from FY2021. High-potential injury trends remain a primary focus to assess progress against our most important safety objective, eliminating fatalities.	FY2018[1] 2 FY2019[2] 1 FY2020 0 FY2021 0 FY2022[3] 0
	Year-on-year improvement of total recordable injury frequency (TRIF)[4] per million hours worked	An increase in total recordable injury frequency (TRIF) of 8 per cent from FY2021. This shift was influenced by COVID-19 thorugh an 8 per cent reduction in hours worked between the first and second halves of FY2022. TRIF has decreased by 9 per cent since FY2018.	FY2018[1] 4.4 FY2019[2] 4.7 FY2020 4.2 FY2021 3.7 FY2022[3] 4.0
	50 per cent reduction in the number of workers potentially exposed[5] to our most material exposures of diesel particulate matter, respirable silica and coal mine dust compared to our FY2017[6] baseline by FY2022	We exceeded our target by reducing the total number of workers potentially exposed to our most material exposures by 68 per cent compared to our adjusted FY2017 baseline[6]	Adjusted FY2017 baseline[6] 4,176 FY2018[6] 2,803 FY2019[6] 2,160 FY2020[6] 1,683 FY2021[6,7] 1,372 FY2022[6] 1,333
Society	Zero significant community events[8]	No significant community events resulting from BHP operated activities were recorded in FY2022	FY2018 0 FY2019 0 FY2020 0 FY2021 0 FY2022[3] 0
	Not less than 1 per cent of pre-tax profits[9] invested in community programs that contribute to the quality of life in the communities where we operate and support the achievement of the UN Sustainable Development Goals[10]	Social investment of US$681.4 million over five years	FY2018[1] US$77.1 million FY2019[11] US$93.5 million FY2020 US$149.6 million FY2021 US$174.8 million FY2022[3] US$186.4 million
	By FY2022, implement our Indigenous Peoples Strategy across all our operated assets through the development of Regional Indigenous Peoples Plans	Regional Indigenous People Plans have been implemented across Australia (Reconciliation Action Plan (RAP)) and North and South America	
Climate change	By FY2022, maintain operational (Scope 1 and Scope 2) GHG emissions at or below FY2017 levels[12] while we continue to grow our business	Exceeded our short-term target with a 15 per cent decrease in operational GHG emissions from our adjusted FY2017 baseline[12]	Adjusted FY2017 baseline[12] 12.9 million tonnes carbon dioxide equivalent (MtCO$_2$-e) FY2018[12] 13.8 MtCO$_2$-e FY2019[12] 14.1 MtCO$_2$-e FY2020[12] 14.5 MtCO$_2$-e FY2021[12] 14.6 MtCO$_2$-e FY2022[12] 11.0 MtCO$_2$-e
Environment	Zero significant environmental events[8]	No significant environmental events resulting from BHP operated activities were recorded in FY2022	FY2018 0 FY2019 0 FY2020 0 FY2021 0 FY2022[3] 0
	Reduce FY2022 withdrawal of fresh water[13] by 15 per cent from FY2017 levels	Exceeded our target, with a 29 per cent reduction in freshwater withdrawal volumes compared to our adjusted FY2017 baseline[14]	Adjusted FY2017 baseline[14] 152,249 ML FY2018[14] 133,265ML FY2019[14] 149,237ML FY2020[14] 122,331ML FY2021[14] 108,440ML FY2022[14] 107,398ML
	By FY2022, improve marine and terrestrial biodiversity outcomes by: - developing a framework to evaluate and verify the benefits of our actions, in collaboration with others - contributing to the management of areas of national or international conservation significance exceeding our disturbed land footprint ('area conserved' target)	Biodiversity framework was developed with the support of Conservation International and Proteus, a cross-sector partnership between the UN Environment Programme World Conservation Monitoring Centre (UNEP WCMC) and business 'Area conserved' target has been met by our operational and voluntary conservation investments over the target period, given BHP's FY2022 total disturbed land footprint was 149,312 hectares	Year-on-year progress on development of framework to evaluate and verify the benefits of our actions. The total land set aside for conservation on land on which we operate and other land we steward was 65,870 hectares in FY2022. In addition to these conservation areas, we made several voluntary investments over the target period, of which an area of 4,465,260 hectares contributed to the achievement of the 'area conserved' target

[1] FY2018 data includes Continuing and Discontinued operations (Onshore US assets).

[2] FY2019 data includes Discontinued operations (Onshore US assets) to 28 February 2019 and Continuing operations.

[3] FY2022 data includes the operated assets in our Petroleum business up to the date of the merger with Woodside (1 June 2022) and BMC up to the date of completion of the sale (3 May 2022).

[4] The sum of (fatalities + lost-time cases + restricted work cases + medical treatment cases) multiplied by 1 million/actual hours worked by our employees and contractors. Stated in units of per million hours worked. We adopt the US Government's Occupational Safety and Health Administration Guidelines for the recording and reporting of occupational injuries and illnesses.

[5] For exposures exceeding our FY2017 baseline occupational exposure limits without considering protection afforded by the use of personal protective equipment (where required). The baseline exposure profile (as at 30 June 2017) is derived through a combination of quantitative exposure measurements and qualitative assessments undertaken by specialist occupational hygienists consistent with best practice as defined by the American Industrial Hygiene Association.

[6] The FY2017 baseline has been adjusted for Discontinued operations (Onshore US assets and Petroleum) and the divestment of BMC. These adjustments have also been applied to FY2018-FY2022 emissions stated in this table to aid comparability.

[7] As of FY2021, the Occupational Exposure Limit for Coal was reduced to 1.5 mg/m3 compared to 2.0 mg/m3 in previous years.

[8] A significant event resulting from BHP operated activities is one with an actual severity rating of four or above, based on our internal severity rating scale (tiered from one to five by increasing severity) as defined in our mandatory minimum performance requirements for risk management.

[9] To date, our voluntary social investment has been calculated as 1 per cent of the average of the previous three years' pre-tax profit. For FY2023–FY2030, our social investment will be assessed as a total over the seven-year goals period to FY2030, rather than calculated as an average of the previous three years' pre-tax profit.

[10] Expenditure includes BHP's equity share for operated and non-operated joint ventures, and comprises cash, administrative costs, including costs to facilitate the operation of the BHP Foundation.

[11] FY2019 data includes Discontinued operations (Onshore US assets) to 31 October 2018 and Continuing operations.

[12] FY2017 baseline has been adjusted for Discontinued operations (Onshore US assets and Petroleum) and the divestment of BMC and for methodological changes (use of Intergovernmental Panel on Climate Change (IPCC) Assessment Report 5 Global Warming Potentials and the move to a facility-specific emissions calculation methodology for fugitives at Caval Ridge). These adjustments have also been applied to FY2018-FY2022 emissions stated in this table to aid comparability.

[13] 'Withdrawal' is defined as water withdrawn and intended for use (in accordance with 'Water Reporting Good Practice Guide', ICMM (2021)). 'Fresh water' is defined as waters other than seawater, wastewater from third parties and hypersaline groundwater. Freshwater withdrawal also excludes entrained water that would not be available for other uses. These exclusions have been made to align with the target's intent to reduce the use of freshwater sources subject to competition from other users or the environment.

[14] The FY2017 baseline has been adjusted to account for: the materiality of the strike affecting water withdrawals at Escondida in FY2017 and improvements to water balance methodologies at WAIO and BMA, exclusion of hypersaline, wastewater, entrainment, supplies from desalination and removal of data for Discontinued operations (Onshore US assets and Petroleum) and BMC. These adjustments have also been applied to FY2018-FY2022 emissions stated in this table to aid comparability.

7.4 Safety

Our highest priority is the safety of our workforce and the communities where we operate.

Our safety performance

In FY2022, we recorded:

- no fatalities at BHP
- a decrease of 30 per cent in the high-potential injury frequency rate from FY2021. The highest number of events with potential for one or more fatalities was related to vehicle and mobile equipment accidents. High-potential injury trends remain a primary focus to assess progress against our most important safety objective, eliminating fatalities
- an increase in total recordable injury frequency (TRIF) of 8 per cent from FY2021. This shift was influenced by COVID-19 through an 8 per cent reduction in hours worked between the first and second halves of FY2022. TRIF has decreased by 9 per cent since FY2018. The highest number of injuries was related to slips, trips and falls for both employees and contractors
- a consistent application of field leadership activities, which occurred at a sustainable frequency rate of 9,341 activities per million hours worked with over 1,517,117 activities completed and more than 68,000 employees and contractors participating in the program at least once. Scheduled activities compared to non-scheduled activities increased by 46 per cent from FY2021 and coaching increased by 6 per cent
- one safety fine at our operated assets

Our results were achieved through a sustained focus on improving our management of risk, including through new and existing programs such as:

- Fatality Elimination Program
- Integrated Contractor Management Program
- Field Leadership Program

Fatality Elimination Program

In FY2022, we continued our Fatality Elimination Program (FEL) towards our goal of no fatalities across our business.

Fatality elimination is not a new priority for us. We have been seeking to improve our safety performance for many years and have considerably reduced high-potential injuries. However, there continues to be more to do to systematise a common set of controls.

In FY2022 we:

- developed five-year fatality elimination roadmap guidelines, including the recommended sequencing of strengthened controls based on effort, cost and near miss reduction impact
- updated the *Our Requirements for Safety* standard to reflect FEL deliverables
- created the 'Control Shift' methodology for assets to replicate FEL processes for specific risks not considered within our top 10 risks (i.e. vehicle and mobile equipment, dropped object, electrical, lifting, geotechnical failure, entanglement/crushing, energy release, loss of containment, fire/explosion, fall from height)
- created an online dashboard to enhance local implementation plans, providing global visibility of challenges, similarities and differences, thereby assisting assets with their implementation
- published technical bulletins related to FEL controls to provide detailed implementation guidance based on site experience and lessons learnt
- undertook a human performance benchmarking study to identify the latest developments and best practices in the field of human behaviour

Integrated Contractor Management Program

Our Integrated Contractor Management Program is designed to make it safer and easier for contractors to work with us. Introduced in FY2020, the program is focused on building long-term mutually beneficial relationships, integrating and simplifying processes and systems, and creating an inclusive, respectful and caring workforce culture. Since its introduction, the program has standardised roles and responsibilities of contract owners and promoted improved partnerships with BHP service providers through the implementation of the *Our Requirements for Contractor Management* standard for existing and new onsite service contracts.

In FY2022 we:

- developed the scope of work library as an online resource containing best practice examples for different types of contractor engagements
- created contract execution plans as a means of applying the *Our Requirements for Contractor Management* standard
- established an integration stream ensuring enhancements are holistic and cover functional interactions
- undertook assurance and audit activities across BHP including contractor engagements
- implemented a contractor perception survey that runs in parallel with our internal survey. The survey highlighted some results on the experience of our contractor workforce consistent with the internal survey and other areas of focus
- determined organisational design changes to improve contract ownership and management practices
- commenced deployment of a technology solution which supports an enterprise-wide approach to contractor on-boarding and management

Field Leadership Program

Leaders spending time in the field is vital to maintaining safe operations. Our global Field Leadership Program encourages the workforce to provide feedback to their leaders about safety to reinforce an interdependent culture of safety. It involves leaders engaging with workers in the field to drive a common approach to improving health, safety and environment (HSE) performance. The program helps verify that critical safety controls are in place, being applied and are effective in managing risks that have the potential to result in fatalities.

In FY2022 we:

- enhanced the efficiency and effectiveness of supervisor time in the field by integrating the BHP Operating System (BOS) process confirmation and field leadership planned task observation processes into a planned task confirmation
- continued to improve the quality of field leadership activities by increasing coaching and delivery of field leadership engagements
- conducted field leadership activities to support the verification of risks that have

Performance data – workforce health and safety for FY2022[1]

High-potential injuries[2]

Year ended 30 June	2022	2021	2020
High-potential injuries	**23**	33	42

	Employees	Contractors
High-potential injury frequency[3]	0.03	0.03

Total recordable injury frequency

Year ended 30 June	2022	2021	2020
Total recordable injury frequency[4]	**4.0**	3.7	4.2

	Employees	Contractors
Total recordable injury frequency[3]	0.77	0.82

[1] Data includes BMC up to the date of completion of the sale (3 May 2022) and operated assets in our Petroleum business up to the date of the merger with Woodside (1 June 2022).

[2] High-potential injury includes injuries with fatality potential. The basis of calculation was revised in FY2020 from event count to injury count as part of a safety reporting methodology improvement.

[3] Employee and contractor frequency per 200,000 hours worked.

[4] Combined employee and contractor frequency per 1 million hours worked.

the potential to result in fatalities across our operated assets

- embedded the global, standardised field leadership procedure designed to increase the effectiveness of field leadership activities across the business
- conducted field leadership on COVID-19 controls, designed to sustain effectiveness within the changing environment

More information on safety is available at bhp.com/safety

7.5 Sexual harassment

Sexual harassment[1] is not acceptable and is contrary to our values. Our position on this is clear and aligned to our aspiration of a gender-balanced employee workforce by FY2025. Gender balance in every team and at every level is an important part of our approach to eliminate sexual harassment.

The Australian Human Rights Commission's most recent national survey on sexual harassment in Australian workplaces has found that 71 per cent of Australians have been sexually harassed in their lifetimes and 39 per cent of Australian women experienced sexual harassment in the workplace in the five years to 2018. The same survey concluded that in the mining industry, an estimated 74 per cent of women and 32 per cent of men had experienced workplace sexual harassment in the past five years. Back in 2018, we accepted those findings as true for our industry and for BHP globally, and we have focused on understanding why the behaviours exist, and what we needed to do to urgently address them at BHP.

We are deeply sorry and apologise unreservedly to those who have experienced, or continue to experience, any form of sexual harassment anywhere at BHP. We recognise the harmful impacts on individuals resulting from these behaviours.

We understand that it can be difficult for people to come forward to report sexual harassment and thank all of those who have, for their courage in doing so. We are also grateful to our employees and other stakeholders for their insights and suggestions for changes in our workplaces. Their feedback informs our approach. We are determined to make continued progress in eliminating sexual harassment and in ensuring our workplaces are safe and inclusive for everyone.

Our approach to prevent sexual harassment

In 2018, we defined sexual harassment as a health and safety risk, to be overseen in the same way as other occupational health and safety risks. This approach provides the right framework for addressing these behaviours, allowing us to apply a systematic, risk-based approach to evaluating and managing the risks. Our approach includes conducting risk assessments to identify scenarios in which sexual harassment risks may arise, their causes and the controls we can implement to prevent them and reduce harm.

As part of our risk assessment processes, we engaged members of our workforce with experience at site and accommodation villages, and experts in health and safety, harassment and inclusion and diversity. Through this, we identified factors that can contribute to the risk of workplace sexual harassment that are more pronounced in the mining industry, as well as factors that are common across all industries and workplaces. Examples of risks that can be more pronounced in the mining industry include isolated or remote working locations, a largely male-dominated workforce and accommodation villages.

Taking these into account, we identified and developed controls and actions to help prevent sexual harassment and reduce its harmful impacts. Our core controls and areas for action are culture, leadership and training; security measures at accommodation villages; recruitment processes; contractor and third-party engagement; emergency response; trauma-informed (wellbeing) care; accessible, confidential reporting and person-centred investigations; and appropriate disciplinary action.

Reports of sexual harassment

The reporting rate of sexual harassment at BHP has increased in recent years. We believe this reflects the actions we have taken to increase awareness and promote and centralise reporting and investigations, along with broader societal developments and intolerance of this behaviour. Since October 2020, BHP managers and leaders have been required to enter any serious conduct issues raised directly with them, including sexual harassment, into EthicsPoint[2] (anonymously if requested).This year, 47 per cent of reports received into EthicsPoint have been logged by managers or leaders in accordance with this policy.

During FY2022, across BHP's global operations and offices, 103 reported and investigated cases of conduct of sexual harassment were substantiated.[3]

Of the 103 substantiated cases:

- 37 involved non-consensual kissing or touching of a sexual nature, which includes a broad range of behaviour of varying severity. None of these cases involved non-consensual penetration or intercourse, however we recognise that this conduct can occur and has occurred in the past,
- 66 involved other forms of sexual harassment, including inappropriate comments of a sexual nature, unwelcome gestures or comments, sending inappropriate text messages or images, or other unwanted advances or invitations,
- Of these 103 substantiated cases, in 101 cases the individual responsible has had their employment terminated (or they have been removed from site if a contractor), they have resigned or are otherwise no longer working at BHP.

In addition to the matters listed above, in FY2022 87 reports of sexual harassment went through Alternative Resolution Options (AROs). AROs are alternative forms of response and resolution other than investigations, including supported conversations with respondents, additional training, monitoring or awareness raising on BHP's expectations of respectful behaviours in the workplace. This process only occurs where an ARO is proportionate to the nature of the conduct and with the agreement of the impacted person.

We continue to work with external experts on how best to respond to cases to ensure we have a proportionate approach to reports. We will continue to monitor and review the use of AROs to ensure it is meeting the needs of impacted people where it is used and to improve reporting to support organisational learnings.

We will continue to encourage reporting and we are committed to taking action. We put the needs of anyone impacted by this behaviour at the forefront of our processes and we are committed to validating, caring for and supporting anyone in our business who is affected by this behaviour. This includes internal practical and wellbeing support mechanisms, support through our tailored Employee Assistance Program and options to access trauma-specific clinical and non-clinical care with experienced clinicians.

We are committed to working closely with our people, others in industry and other stakeholders to implement the necessary processes and systems designed to ensure our workplaces are safe and inclusive for everyone.

Actions we are taking

Oversight

In FY2022, a Project Management Office (PMO) was established through the office of the CEO to provide central governance over all sexual harassment work. The priority focus areas of that work include driving progress toward gender balance, creating a safe and respectful workplace, building accountability and capability of leaders, upskilling our workforce to be 'active bystanders', enhancing our policies, processes and controls, and providing person-centred and trauma-informed response and support. The PMO reports on progress against implementation of our critical controls and other key focus areas that underpin our overarching sexual harassment prevention strategy to senior management and the Board.

Security and physical infrastructure

We have continued to invest in security programs and physical infrastructure designed to prevent and respond to sexual harassment at our accommodation facilities. Our minimum security requirements for all BHP owned and operated accommodation villages include requirements for access controls, village policies and procedures

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[1] 'Sexual harassment' is, as defined in the Respect@Work report, an unwelcome sexual advance, unwelcome request for sexual favours or other unwelcome conduct of a sexual nature, which makes a person feel offended, humiliated and/or intimidated, where a reasonable person would anticipate that reaction in the circumstances. Sexual harassment encompasses a range of conduct including displaying sexually graphic images, sexually suggestive comments, suggestive or inappropriate looks, gestures or staring, non-consensual touching or acts of a sexual nature and sexual assault.

[2] EthicsPoint is our confidential reporting tool. It is accessible to all, including external stakeholders and the public, to report conduct that may be unethical, illegal or inconsistent with *Our Code of Conduct*.

[3] This does not include investigations that are currently in progress.

to manage respectful behaviours, CCTV, lighting, security signage, room allocation procedures, security personnel and incident response.

Reporting and response

We encourage our workforce to report concerns, including providing centralised and confidential reporting tools and mandatory reporting requirements for line leaders. We do not tolerate any form of retaliation for raising a concern and we address these actions if they occur. We ceased using non-disclosure agreements (NDAs) or imposing confidentiality obligations on complainants in settlement agreements relating to sexual harassment in March 2019 and we do not enforce any NDAs or confidentiality obligations on complainants in historical agreements.

Investigation of reports of sexual harassment are conducted by our specialised central investigation team, which is independent of our other business units. This team includes experts trained in a person-centred, trauma-informed approach, to ensure that the impacted person is placed at the centre of all decisions made during the investigation process and to minimise the risk of further harm to that individual.

We established our global Support Service in FY2022, to provide dedicated, end-to-end case coordination for anyone impacted by sexual harassment, designed to ensure they obtain appropriate support and information. The Support Service can also provide resolution options when an investigation is not wanted by the impacted person or cannot proceed.

Communication of expectations

Our position on sexual harassment has been reinforced through regular senior leadership communications. These include messages from our CEO, on-site signage regarding our expectations and avenues for support, and we have provided sexual harassment prevention training to BHP line leaders, aimed at setting clear expectations about appropriate conduct and driving consistent disciplinary outcomes. Across June and July 2022, we held Safety Stops specifically focused on sexual harassment, racism and bullying for our teams globally. The stops were intended to build awareness, understanding, and capability, as well as to reinforce expectations within our teams.

Alcohol use

As part of our commitment to health and safety, all workplaces should be free from the use of alcohol and illegal drugs, and the misuse of other substances, in accordance with *Our Code of Conduct*. All those who attend a BHP site, including employees, are expected to be alcohol and drug free, and may be asked to undergo random alcohol and drug testing. We also provide support for those who need it to address an alcohol or drug dependency.

For accommodation villages, our Minerals Australia Alcohol Management Standard was implemented across our owned and operated village facilities from 1 July 2021. It includes a range of limits on alcohol consumption. Residents and visitors who breach the standard may be subject to action, including removal of access to the village for a resident or visitor, or disciplinary action for employees. Since the introduction of the standard, our reviews have indicated that there has been a reduction in alcohol consumption, and residents are making healthier choices, with an increase in the use of recreational facilities. Alcohol is not permitted at our accommodation villages in Chile and Canada.

Listening to employees, measuring progress and assigning accountability

We have channels through which the Board and senior leaders receive information on workplace culture and conduct. These include anonymous employee and contractor perception surveys and our Field Leadership Program. Our perception surveys are conducted three times per year and were redesigned in FY2021 to include more targeted questions to provide leaders with greater insight into key safety and engagement metrics, which we have identified as critical foundations for our culture. Executive leadership and Group-wide performance criteria are linked to remuneration that includes progress towards greater inclusion, diversity and gender representation. In FY2022, we introduced key performance indicators for our Executive Leadership Team and other BHP employees that linked remuneration outcomes to progress against our program of work to address sexual harassment. This includes implementation of controls in line with BHP's sexual harassment risk assessments.

Engaging with and learning from others

We continue to measure and test our focus and areas for action. In FY2022 we:

- engaged and learnt from external experts who reviewed the controls we have in place and advised on best practice in preventing sexual harassment, and minimising further harm when responding to sexual harassment
- engaged Kristen Hilton (former Victorian Equal Opportunity and Human Rights Commissioner) to provide expert guidance on our prevention and response framework
- conducted a sexual harassment audit across Minerals Americas further to the FY2021 sexual harassment audit conducted across Minerals Australia
- contributed to knowledge sharing with other industry participants in relation to addressing sexual harassment, and considered broader learnings from external reports such as the Australian Human Rights Commission's *Respect@Work: Sexual Harassment National Inquiry Report* and the R*eport into Workplace* Culture at Rio Tinto by Elizabeth Broderick & Co
- worked with our contracting and supplier organisations to address sexual harassment, including collaboration on response protocols, joint training sessions and knowledge sharing
- undertook a series of listening workshops

Through these initiatives we identified a need for further focus on preventative controls, particularly with respect to culture and behaviours. This is in addition to the controls already in place or committed for implementation in FY2022 which included security, accommodation standards, alcohol measures, recruitment and discipline.

We are committed to working with others in the industry and beyond to address sexual harassment risks. BHP is a member of the Minerals Council of Australia Respect@Work Taskforce and the Chamber of Minerals & Energy WA Safe and Respectful Behaviours Working Group. Both groups aim to build industry capability and capacity though sharing knowledge and developing shared resources.

In FY2022, we participated in Western Australia's parliamentary inquiry into sexual harassment against women in the FIFO mining industry (WA Inquiry), including through a detailed written submission in August 2021 (available at parliament.wa.gov.au). BHP welcomes the final report titled 'Enough is enough' released on 23 June 2022. We acknowledge the significant work of the parliamentary committee and in particular, the many people who shared their stories and experiences as part of the inquiry process.

Continuing to make progress

While we have made progress, there is still much more to do. Our focus in FY2023 will be to continue:

- focusing on increasing female leader representation across our operations
- continuous improvement across our suite of controls
- engaging with our people, encouraging and empowering them to take action as active bystanders and enhance capability
- encouraging increased reporting
- enhancing our approach to supporting impacted persons to thrive at BHP and have successful careers with us

7.6 Health

We are committed to protecting the health and wellbeing of our workforce.

We set clear mandatory minimum performance standards to identify, assess and manage health risks and their potential impacts and monitor the health of our workforce.

Occupational illness

The reported occurrence of occupational illness[1] for employees in FY2022 was 265, which was 3.89 per million hours worked, representing a decrease in incidence compared to FY2021, which was 4.36 per million hours worked.

For our contractor workforce, the reported occupational illness[1] in FY2022 was 151, which was 1.61 per million hours worked, representing a decrease in incidence compared to FY2021 which was 1.87 per million hours worked. Due to regulatory regimes and limited access to data, we do not have full oversight of the incidence of contractor noise-induced hearing loss (NIHL) cases.

Musculoskeletal illness is the predominant occupational illness category representing 65 per cent of our workforce illnesses. These are conditions impacting the musculoskeletal system and connective tissues caused by repetitive work-related stress or strain or exposure over time.

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[1] An illness that occurs as a consequence of work-related activities or exposure.

Musculoskeletal illness does not include disorders caused by slips, trips, falls or similar incidents.

Noise-induced hearing loss contributes to the second highest illness category representing 10 per cent of illnesses. Where workers are exposed to noise above acceptable levels, workers are placed in hearing conservation programs, which include a periodic hearing test and hearing protection fit testing. Through our Sustainability in Design program, we have also established design recommendations that seek to eliminate or reduce high or prolonged noise exposures. Other illness categories include skin diseases, temperature-related illnesses, mental illness, bites, stings and other unspecified illnesses.

Our occupational illness data excludes cases of COVID-19 among our employees and contractors. In settings of high levels of community transmission and with an evolving understanding of the epidemiological criteria for infection and COVID-19 variants with evidence of increased transmission, it is difficult to conclude, with reasonable certainty, that a person was infected because of work-related activities or exposure. For information on our response to COVID-19, refer to 'COVID-19' further in 7.6.

Occupational exposures

Occupational exposure limits (OELs) for our most material exposures are set according to the latest scientific evidence, which for a number of agents, such as diesel particulate matter (DPM), resulted in lower limits than the applicable regulatory requirements. Where exposures potentially exceed regulatory limits or our stricter limits, respiratory protective equipment is required.

For our most material exposures of DPM, silica and coal mine dust, we had a five-year target to achieve, by the end of FY2022, a 50 per cent reduction in the number of workers potentially exposed[1] as compared to our 30 June 2017 baseline exposure profile.[2,3,4] Exposure data in this Report in all cases is presented without considering protection afforded by the use of personal protective equipment (where required).

We are pleased to have achieved our target by reducing the total number of workers potentially exposed to our most material exposures by 68 per cent. That achievement at the end of FY2022 in number of workers potentially exposed to levels exceeding our OELs include; no workers potentially exposed to coal mine dust, 78 per cent reduction in the number of workers potentially exposed to DPM[5] and a 61 per cent reduction in the number of workers potentially exposed to respirable silica.

This year, an internal audit conducted on FY2021 workforce occupational exposures data at Nickel West identified that a statistical analysis error resulted in an underestimation of the number of workers assessed as potentially exposed to DPM.

This has resulted in an increase in the FY2021 total number of workers potentially exposed to material exposures compared to what was reported last year.

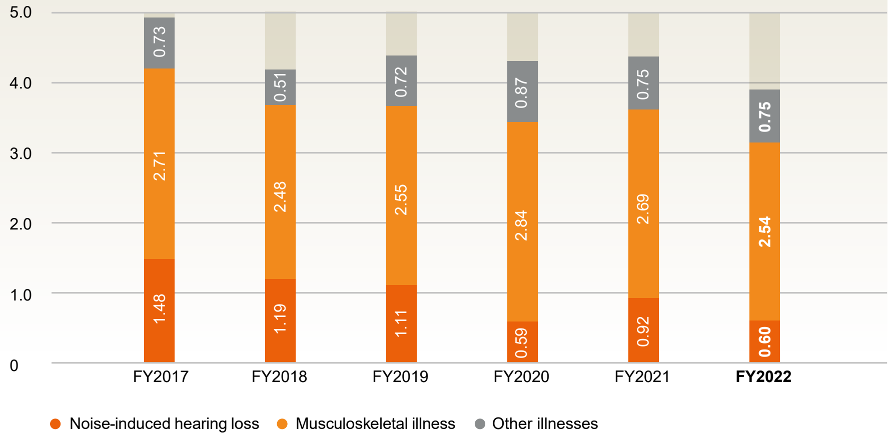
With the conclusion of our five-year public target, we will continue to manage exposures to as low as reasonably practicable by focusing our efforts in FY2023 on further implementation of exposure reduction projects, sustaining the exposure reductions achieved by leveraging our Risk Framework and identifying exposure reduction opportunities for inclusion in FY2024 plans and beyond.

Coal mine dust lung disease

As at 30 June 2022, 12 cases of coal mine dust lung disease (CMDLD)[6] among our employees were reported to the Queensland Department of Natural Resources Mines and Energy (DNRME).[7] In addition to these cases, there were four

Occupational illness

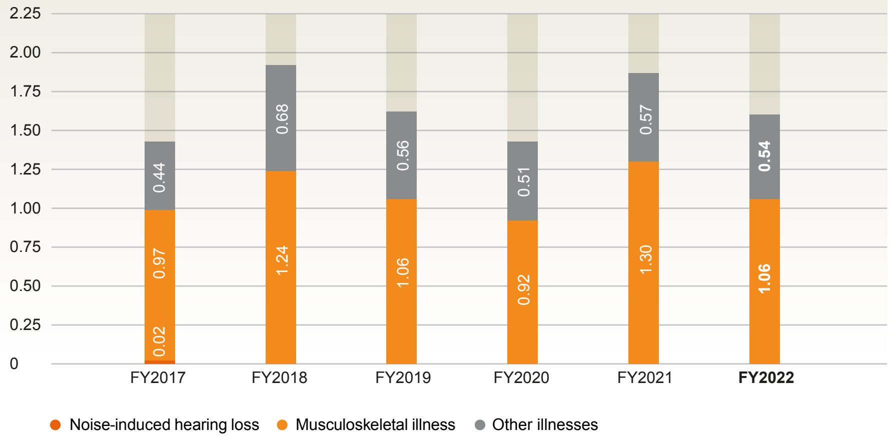
Per million employee hours worked[1,2,3]



1 Data includes BMC up to the date of completion of the sale (3 May 2022), operated assets in our Petroleum business up to the date of the merger with Woodside (1 June 2022) and Onshore US assets up to the date of completion of the sale (31 October 2018), as applicable.
2 Occupational illnesses excludes COVID-19 related data.
3 Due to the lag nature of incident reporting and subsequent verification, final results may vary post reporting. Prior year data has not been adjusted.

Occupational illness

Per million contractor hours worked[1,2,3,4]



1 Data includes BMC up to the date of completion of the sale (3 May 2022), operated assets in our Petroleum business up to the date of the merger with Woodside (1 June 2022) and Onshore US assets up to the date of completion of the sale (31 October 2018), as applicable.
2 Occupational illnesses excludes COVID-19 related data.
3 Due to the lag nature of incident reporting and subsequent verification, final results may vary post reporting. Prior year data has not been adjusted.
4 Due to regulatory regimes and limited access to data, we do not have full oversight of the incidence of contractor noise-induced hearing loss (NIHL) cases.

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[1] For exposures exceeding our FY2017 occupational exposure limits discounting the use of personal protective equipment, where required.

[2] The baseline exposure profile is derived through a combination of quantitative exposure measurements and qualitative assessments undertaken by specialist occupational hygienists consistent with best practice as defined by the American Industrial Hygiene Association.

[3] Occupational Exposure target excludes Projects.

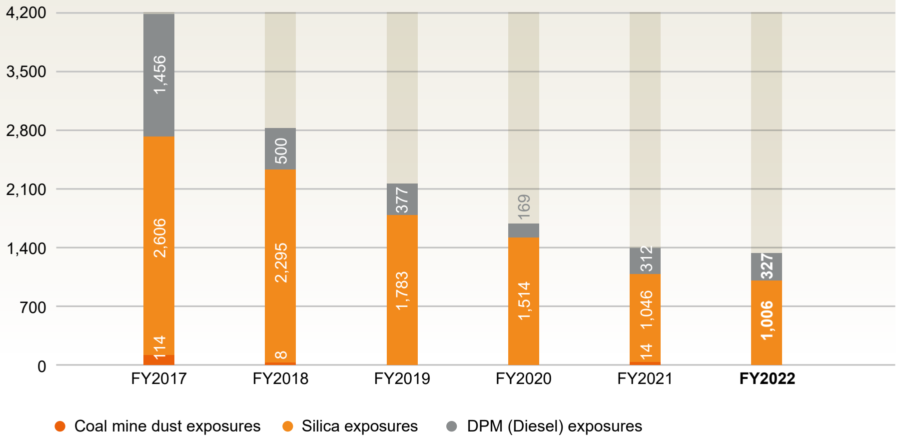
[4] The FY2017 baseline to FY2022 data has been adjusted to exclude Discontinued operations (Onshore US assets, Petroleum) and the divestment of BMC.

[5] FY2021 data includes adjustment to DPM exposures as a result of misstatement in previous year.

[6] CMDLD is the name given to the lung diseases related to exposure to coal mine dust and includes coal workers' pneumoconiosis, silicosis, mixed dust pneumoconiosis and chronic obstructive pulmonary disease.

[7] Cases reported to DNRME are not an indication of work relatedness. BHP evaluates each case for work relatedness and where identified, the case will be included in illness reporting.

Exposure reduction trend over time[1,2,3,4,5]



1 For exposures exceeding our FY2017 occupational exposure limits, without considering protection afforded by the use of personal protective equipment (where required).

2 The baseline exposure profile is derived through a combination of quantitative exposure measurements and qualitative assessments undertaken by specialist occupational hygienists consistent with best practice as defined by the American Industrial Hygiene Association.

3 Occupational Exposure target excludes Projects

4 The FY2017 to FY2022 data has been adjusted to exclude Discontinued operations (Onshore US assets, Petroleum) and the divestment of BMC.

5 FY2021 data includes adjustment to DPM exposures as a result of misstatement in previous year.

Business conduct cases by issue type FY2022

● Harassment and bullying	49.6%
● Sexual harassment	11.9%
● Fraud	9.8%
● Discrimination	8.4%
● Other[1]	8.6%
● Health, safety or environment breach	9.8%
● Retaliation for speaking up	2%

1 Inclusions are anti-competitive behaviour; attempts to identify an anonymous reporter, community relations or human rights breach; cybersecurity or data privacy breach; deficiencies in a business conduct investigation; improper political or governmental conduct; inappropriate or unauthorised external communication; information on other support service providers; physical violence; and trade control breach.

coal mine dust lung disease claims accepted in FY2022, which consisted of three former workers and one current worker. For cases involving current employees, we offer counselling, medical support and redeployment options where relevant.

Mental health

The mental health of our people continues to be a focus. In FY2022, we continued to implement our Group-wide Mental Health Framework to raise awareness of mental wellbeing, reduce stigma and increase the capacity of our leaders to recognise and support individuals experiencing mental illness. As a founding member of the Global Business Collaboration for Better Workplace Mental Health, we continue to contribute to the global business-led alliance to advocate for and accelerate positive change for mental health in the workplace worldwide.

To support the proactive management of mental wellbeing and give our workforce the tools and skills needed to build resilience and positive mental health, we provide and promote the Employee Assistance Program, our mental health toolkit, Thrive, education and awareness campaigns (including stigma reduction) and the BHP Resilience Program.

In May 2022, we continued with our annual BHP Mental Health month, with the aim of increasing mental wellbeing and encouraging everyone to support and look out for one another. We continued to support global mental health campaigns during FY2022, including World Mental Health Day, R U OK? Day and Movember. In FY2022, we also commenced work to develop a Group-wide psychosocial risk management approach with the aim of taking a proactive and systemic approach to sustaining a mentally healthy workplace. This process will contribute to achieving our 2030 goal for a safe, inclusive and future ready workforce.

COVID-19

We continued to navigate the challenges of the global COVID-19 pandemic, including high community transmissions and variants that are more transmissible. In FY2022, we continued to adapt COVID-19 controls based on current scientific evidence and medical advice designed to protect our workforce and minimise the risk of workplace transmission.

We strongly support vaccination as a control to protect the health of our workforce and the communities where we operate. As part of our COVID-19 controls, we require vaccinations as a condition of workplace entry subject to local laws and regulatory requirements. We also implemented pre-entry testing programs across our operations and offices globally – aimed at reducing workplace transmissions.

More information on health, including a case study on how we supported our people and the communities where we operate through COVID-19, is available at bhp.com/health.

7.7 Ethics and business conduct

Our conduct

Our *Code of Conduct* (*Our Code*)[1] brings our values to life so we can make the right choices every day. It applies to everyone who works for us, with us, or on our behalf. To ensure all employees and contractors understand how *Our Code* applies, regular training is mandatory. There are consequences for breaching *Our Code* and we encourage people to speak up where a decision or action is not in line with *Our Code* or *Our Charter*.

Our Code is available in five languages and accessible at bhp.com.

BHP encourages individuals to speak up and report concerns about any conduct that is inconsistent with *Our Charter*, *Our Code* or internal requirements, or conduct that may be illegal or improper. BHP requires reports of business conduct concerns to be treated with appropriate confidentiality and prohibits any kind of retaliation against people who make or may make a report, or who cooperate with an investigation. We consider all forms of retaliation to be misconduct and grounds for disciplinary action, up to and including termination of employment.

In FY2022, 5,402 reports were received into EthicsPoint (of these 4,714 were classified as business conduct concerns)[2] representing an increase of 33 per cent in business conduct concerns from FY2021. These include reports directly made by employees, contractors or community members. It also includes reports made to leaders (31 per cent) who are then required to register them in EthicsPoint. We believe the increase corresponds to the continuous effort by BHP to promote the reporting of disrespectful behaviour to create an environment in which people can feel safe speaking up. The introduction of a global service to support people involved in sexual harassment incidents and discuss resolution options has also encouraged employees and contractors to report instances of sexual harassment. Of the business

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1 Information is available at bhp.com/our-approach/our-company/our-code-of-conduct/.

2 Some EthicsPoint reports are enquiries, or are not related to business conduct concerns, or are a duplicate of an existing report.

3 This excludes reports not containing a business conduct concern and excludes reports logged by leaders on behalf of others.

conduct reports received, 36 per cent were made anonymously,[3] compared with 42 per cent in FY2021. Of the total business conduct reports closed during FY2022, 43 per cent contained one or more substantiated allegations.[4]

Transparency and accountability

We support initiatives by governments of the countries where we operate to publicly disclose the content of our licences or contracts for the development and production of minerals that form the basis of our payments to government, as outlined in the Extractive Industries Transparency Initiative (EITI) Standard.

Other initiatives include our work in partnership with Transparency International, our representation on the Board of the EITI, our financial support for and Steering Committee membership of the Bribery Prevention Network (in Australia) and our funding of the BHP Foundation, including its Natural Resource Governance Global Program.

In FY2022, we also continued our active and public support for ultimate beneficial ownership transparency. This support included co-hosting (with EITI, Open Ownership and the B Team) a Beneficial Ownership Transparency Forum in London and leading efforts with EITI for BHP and other leading resources companies to publicly commit to a Statement by Companies on Beneficial Ownership Transparency, launched at the Forum. Through the Statement, BHP and other leading resources companies recognise the need for publicly available company ownership information and (among other things) commit to promote the global adoption of beneficial ownership transparency, to disclose beneficial ownership data, and to identify and use beneficial ownership data in due diligence processes. Our efforts are complementary to BHP Foundation's partnership with EITI and Open Ownership to support governments to transform the availability and use of beneficial ownership data for effective governance in the extractive sector.

Multi-lateral measures to improve governance, such as these, should help ensure transparency and accountability are cornerstones of a successful energy transition that benefits the citizens of countries bestowed with critical minerals.

Anti-corruption

We continue our commitment to the global fight against corruption in the resources industry. Our commitment to anti-corruption is embodied in *Our Charter* and *Our Code*.

As part of this commitment, we prohibit authorising, offering, giving or promising anything of value directly or indirectly to anyone to influence them in their role, or to encourage them to perform their work disloyally or otherwise improperly.

We also prohibit facilitation payments, which are payments to government officials for routine government actions. Our people must take care that third parties acting on our behalf do not violate anti-corruption laws. Disciplinary action including dismissal, or termination of contractual relationships, may follow from a breach of these requirements.

To manage corruption risk, we work to ensure optimal resource allocation to areas of our business with the highest exposure to corruption risks. The identification, assessment and management of corruption risks associated with growth opportunities remains a significant area of focus for our Compliance function, via a sub-team dedicated to supporting functions that are responsible for initiating transactions and growth opportunities in countries with high corruption risks.

All activities that potentially involve higher exposure to corruption risk require review or approval by our Compliance function, as documented in our anti-corruption compliance framework. In FY2022 Compliance and Global Corporate Affairs implemented a new end-to-end workflow system for sponsorships, donations and community development projects, which provides greater data for enhanced monitoring and increased governance over contracting and post-contact expenditure reporting.

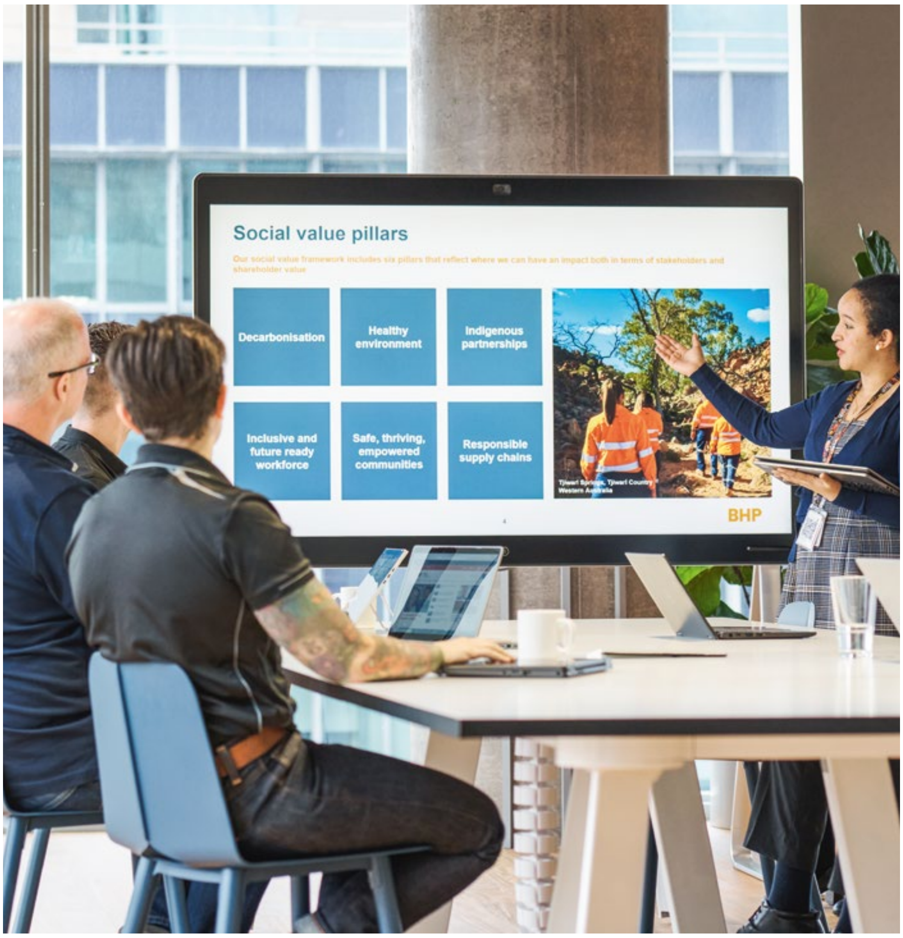
Our Compliance function regularly reviews our anti-corruption framework for compliance with the requirements of the US Foreign Corrupt Practices Act, the UK Bribery Act, the Australian Criminal Code and the applicable laws and regulatory developments of all places where we do business. These laws are consistent with the standards of the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions.

Our Compliance function is independent of our assets and regions and reports to the Chief Legal Governance and External Affairs Officer. The Chief Compliance Officer also reports quarterly to the Risk and Audit Committee on compliance issues and meets at least annually with the Committee Chair.

The Compliance team also participates in anti-corruption risk assessments in respect of our operated assets or functions, our interests in non-operated assets and new business opportunities that we consider are exposed to material anti-corruption risks. In FY2022, the team provided input into 44 anti-corruption risk assessments.

Risk awareness in first-line employees remains a critical preventative measure. Anti-corruption training is required to be provided to all employees and contractors as part of mandatory annual training on *Our Code*. Our Compliance function also regularly communicates and engages with identified higher-risk roles. In FY2022, additional risk-based anti-corruption training was undertaken by 1,578 employees and contractors, as well as employees of some of our business partners and community partners.

More information on ethics and business conduct is available at bhp.com/ethics



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[4] The calculation is based on reports received and completed in FY2022, containing one or more substantiated allegations. Not all reports resulted in a finding. This can occur if there is insufficient information, the respondent is not able to be identified, was previously terminated, or that the impacted person did not wish to proceed.

7.8 Climate change

We believe the world must pursue the aims of the Paris Agreement with increased levels of national and global ambition to limit the impacts of climate change.

In September 2021, we published our Climate Transition Action Plan (CTAP), which sets out our strategic approach to achieving our long-term GHG emissions reduction goals.

The CTAP, together with more information on our climate positions, actions and performance is available at bhp.com/climate.

BHP's climate change targets and goals[1]

Following completion of a number of portfolio changes in FY2022, we have taken the opportunity to streamline the expression (without change to the substance) of the climate change targets and goals we outlined in the CTAP, as set out here.

To support the net zero transition that the world must make, we will continue to pursue sustainable provision of our products, many of which are essential building blocks of decarbonisation.

For operational greenhouse gas (GHG) emissions (Scope 1 and Scope 2 from our operated assets), we have:

- a medium-term target to reduce operational GHG emissions by at least 30 per cent from FY2020 levels by FY2030
- a long-term goal to achieve net zero operational GHG emissions by 2050

For value chain greenhouse gas (GHG) emissions (Scope 3):

- We are pursuing the long-term goal of net zero Scope 3 GHG emissions by 2050. Achievement of this goal is uncertain, particularly given the challenges of a net zero pathway for our customers in steelmaking, and we cannot ensure the outcome alone. To progress towards this goal:[2]
  - We will target net zero by 2050 for the operational GHG emissions of our direct suppliers.[3]
  - We will target net zero by 2050 for GHG emissions from all shipping of BHP products.
  - We will continue to partner with customers and others to try to accelerate the transition to carbon neutral steelmaking and other downstream processes.
- Our 2030 goals are to:
  - support industry to develop technologies and pathways capable of 30 per cent emissions intensity reduction in integrated steelmaking, with widespread adoption expected post 2030
  - support 40 per cent emissions intensity reduction of BHP-chartered shipping of BHP products

Climate Transition Action Plan progress

FY2022 progress on operational decarbonisation targets and goals

To support progress towards our long-term goal to achieve net zero operational GHG emissions by 2050, in FY2022, we achieved our short-term target due to significant progress made through the execution of Power Purchase Agreements (PPAs), particularly in Chile at two of our copper operated assets but also increasingly across our Australian operations. Meeting our FY2022 target keeps us on track to achieve our FY2030 medium-term target.

[1] These positions are expressed using terms that are defined in the Glossary to this Report, including the terms 'target', 'goal', 'net zero' and 'carbon neutral'. The baseline year(s) of our targets will be adjusted for any material acquisitions and divestments, and to reflect progressive refinement of emissions reporting methodologies. The targets' boundaries may in some cases differ from required reporting boundaries. The use of carbon offsets will be governed by BHP's approach to carbon offsetting described at bhp.com/climate.

[2] The targets are referable to a FY2020 baseline year. Our ability to achieve the targets is subject to the widespread availability of carbon neutral solutions to meet our requirements, including low/zero-emissions technologies, fuels, goods and services.

[3] Operational GHG emissions of our direct suppliers means the Scope 1 and Scope 2 emissions of our direct suppliers included in BHP's Scope 3 reporting categories of purchased goods and services (including capital goods), fuel- and energy-related activities, business travel and employee commuting.

Targets	Baseline (adjusted)[1]	FY2022 result (adjusted)[1]	FY2022 progress
Short-term: Target to maintain operational GHG emissions at or below FY2017 levels by FY2022, while we continue to grow our business.	FY2017:12.9 $MtCO_2$-e	11.0 $MtCO_2$-e 15% below the adjusted FY2017 baseline	We have achieved and exceeded our FY2022 target by 15 per cent on the basis of significant progress securing renewable energy supply via PPAs, notably in Minerals Americas, with Escondida and Spence mostly supplied by renewable energy for their electricity in the first half of CY2022.
Medium-term: Target to reduce operational GHG emissions by at least 30 per cent from FY2020 levels by FY2030.	FY2020: 14.5 $MtCO_2$-e	11.0 $MtCO_2$-e 24% reduction from the adjusted FY2020 baseline	

FY2022 progress on value chain decarbonisation targets and goals

Targets and goals	FY2022 progress
Steelmaking **2030 goal:** Support industry to develop technologies and pathways capable of 30 per cent emissions intensity reduction in integrated steelmaking, with widespread adoption expected post 2030.	– Announced a Memorandum of Understanding (MOU) for up to US$10 million investment with POSCO in October 2021 to jointly study optimising coal/coke quality for low-carbon blast furnace operation and Carbon Capture Utilisation and Storage (CCUS). – This, together with MOUs announced in FY2021, provides up to US$75 million for steel decarbonisation partnerships with four key customers representing approximately 12 per cent of reported global steel production. For more information refer to our steel decarbonisation framework in Value chain GHG emissions. – Commenced feasibility studies with Baowu, HBIS, JFE, into CCUS and Direct Reduced Iron (DRI) technologies, use of hydrogen in steelmaking, and iron ore blends suitable for DRI production. – Invested US$11 million in venture investments in electrolysis technology companies Electrasteel and Boston Metal.
Maritime **2030 goal:** Support 40 per cent emissions intensity reduction of BHP-chartered shipping of BHP products. **Target:** We will target net zero by 2050 for GHG emissions from all shipping of BHP products.	– In May 2022, we joined the First Mover's Coalition as a member in the shipping sector, on the basis of committing that 10 per cent of BHP's products shipped to our customers, on our time charter vessels, will be on vessels using zero emissions fuels by 2030.[2] – Formed a consortium with Rio Tinto, Oldendorff, Star Bulk, and the Global Maritime Forum to analyse and support the potential to develop an iron ore maritime green corridor, fuelled by green ammonia. – Chartered the world's first LNG-fuelled Newcastlemax bulk carriers to transport iron ore from Western Australia to Asia for five years. The fuel, along with improved efficiency of the vessel design, is expected to significantly reduce GHG emissions intensity per voyage.

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[1] Adjustment for divestments and methodology changes: FY2017 baseline has been adjusted for Discontinued operations (Onshore US assets and Petroleum) and the divestment of BMC, and for methodological changes (use of Intergovernmental Panel on Climate Change (IPCC) Assessment Report 5 (AR5) Global Warming Potentials and move to facility-specific emissions calculation methodology for fugitives at Caval Ridge). These adjustments have also been applied to the GHG emissions stated in this table to aid comparability.

[2] Subject to the availability of technology, supply, safety standards, and the establishment of reasonable thresholds for price premiums.

FY2022 progress on CTAP climate change commitments

Commitment	FY2022 progress
Assessing capital alignment with a 1.5ºC world – our approach to strategy and operational and commercial decision-making in consideration of a range of different global, sectoral and regional scenarios, including a 1.5ºC outcome	– The impact of our 1.5°C Paris-aligned scenario on portfolio value was assessed and reviewed against the portfolio mix and major capital allocation decisions. All investment decisions now require an assessment of viability under our 1.5°C scenario. Work continues to determine future climate requirements for planning and capital allocation processes.
Climate policy engagement – including our strengthened approach to industry associations to ensure our review identifies areas of inconsistency with the Paris Agreement	– We plan to publish our next formal industry association review in the second half of CY2022. – As part of our normal practice, we intend to analyse the industry association reviews published by our peers and relevant material published by civil society groups and other stakeholders, with the goal of strengthening our own review methodology, where possible.
Just transition – our approach to dealing with the challenges associated with the transition of our communities and workforce as assets come to the end of their operating life	– We have set out our Equitable Change and Transition Position establishing our approach to changes and transitions in our communities. Refer to OFR 7.1.

Climate governance and management

Climate change is a material governance and strategic issue for us. Our Board is actively engaged in the governance of climate change issues, including our strategic approach, oversight of material risk management and performance against our targets, goals and strategies, supported by the Sustainability Committee and the Risk and Audit Committee.

The Board strengthened the link between executive remuneration and delivery of our climate change strategy in 2020, with performance on decarbonisation and adaptation now representing 10 per cent of the Cash and Deferred Plan scorecard.

The Board obtains advice from climate change experts, including by seeking the input of management (including Dr Fiona Wild, our Vice President Sustainability and Climate Change) and independent advisers. In addition, our Forum on Corporate Responsibility (which includes Don Henry, former CEO of the Australian Conservation Foundation and Changhua Wu, former Greater China Director, the Climate Group) engages with operational management teams and with the Sustainability Committee and the Board as appropriate.

Below Board level, key decisions in relation to climate change are made by the CEO and management, in accordance with their delegated authority. Our Executive Leadership Team (ELT) is held to account for a range of measures, including climate-related performance, which are then cascaded through the organisation. While our Board is ultimately responsible for our strategic approach to climate change issues, management has primary responsibility for the design and implementation of our climate change strategy with execution overseen by the Climate Change Steering Committee. BHP has a dedicated Climate Change team responsible for advising the ELT. The team collaborates with BHP's asset and function teams, external partners and industry to develop practical climate change solutions, designed to preserve and unlock long-term value for BHP. It regularly prepares information and advice for the ELT, Sustainability Committee, Risk and Audit Committee and the Board on climate-related strategy, risks (both threats and opportunities) and performance against climate-related metrics. It also uses key risk indicators to help monitor performance against our appetite for climate change-related risks and monitors relevant signposts through our emerging risk process. Climate-related activity is also undertaken across the Group, including in our Portfolio Strategy and Development; Commercial; Planning and Technical; and Environment teams.

Climate risk management

BHP applies a single, Group-wide approach to the management of risk, known as the Risk Framework. Risks are assessed to determine their potential impacts and likelihood, enable prioritisation and determine risk treatment options. We then implement controls designed to prevent, minimise or mitigate threats, and enable or enhance opportunities. Risks and controls are reviewed periodically and on an ad hoc basis to evaluate performance.

For more information on BHP's Risk Framework refer to OFR 9.

Climate-related risks can be grouped into two categories:

- **Transition risks** arise from policy, regulatory, legal, technological, market and other societal responses to the challenges posed by climate change and the transition to a low-carbon economy.

For more information refer to Transition risks.

- **Physical risks** refer to acute risks that are event-driven, including increased severity and frequency of extreme weather events, and chronic risks resulting from longer-term changes in climate patterns.

For more information refer to Physical risks.

Transition risks

Transition risks are identified, assessed and managed in line with BHP's Risk Framework. We consider these across short (up to two years), medium (two to five years) and long-term (five to 30 years) time horizons.

For more information on risks associated with the transition to a low-carbon economy and why these risks are important to BHP, potential threats and opportunities, and key management actions refer to OFR 9.1.

Scenario analysis

When forming strategy, we consider the impact of a range of future pathway scenarios, including our 1.5°C Paris-aligned scenario,[1] and potential responses to the threats and opportunities presented by climate change. At the time of publication of this Report, signposts do not yet indicate the appropriate measures are in place to drive decarbonisation at the pace or scale required for us to assess achieving the aims of the Paris Agreement as the most likely future outcome. However, as governments, institutions, companies and society increasingly focus on addressing climate change, the potential for a non-linear and/or more rapid transition and the subsequent impact on threats and opportunities increases.

We seek to maximise our exposure to products with significant opportunity under all scenarios and to minimise the risk that capital will be stranded in a rapidly decarbonising world – through portfolio commodity mix and the position of our operated assets on their cost curves.

Two scenarios (Central Energy View and Lower Carbon View)[2] are currently being used as inputs to our operational planning cases, based on our current estimates of the most likely range of future states for the global economy and associated sub-systems. In addition to our operational planning scenarios, we utilise a range of scenarios, including our 1.5°C Paris-aligned scenario when testing the resilience of our portfolio, forming strategy and making investment decisions. These scenarios are reviewed periodically to reflect new information and are benchmarked against scenarios from the Intergovernmental Panel on Climate Change (IPCC) and third-party energy and resource research organisations (including the

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[1] This scenario aligns with the aims of the Paris Agreement and requires steep global annual emissions reduction, sustained for decades, to stay within a 1.5°C carbon budget. 1.5°C is above pre-industrial levels. For more information about the assumptions, outputs and limitations of our 1.5°C Paris-aligned scenario refer to the BHP Climate Change Report 2020 available at bhp.com.

[2] Central Energy View reflects, and is periodically updated to respond to, existing policy trends and commitments. Lower Carbon View accelerates decarbonisation trends and policies, particularly in easier-to-abate sectors such as power generation and light duty vehicles. For more information refer to the BHP Climate Change Report 2020 available at bhp.com.

International Energy Agency, IHS Markit, Wood Mackenzie, Bloomberg New Energy Finance and CRU); an update of the scenarios is expected during FY2023.

The energy and resources modelling from BHP's 1.5°C scenario, which was conducted in 2020, remains consistent with the updated carbon budget released in the Working Group I report as the first part of the IPCC's Sixth Assessment Report (AR6) in 2021.

Capital alignment

During FY2022, we systematically integrated our 1.5°C Paris-aligned scenario into our strategy and capital allocation process to test the extent to which our capital allocation is aligned with a rapidly decarbonising global economy. Specifically, we apply our 1.5°C scenario to assess whether future demand for our products under that scenario supports ongoing capital investment. Our analysis and that of others, including the International Energy Agency, have shown that many of the commodities we currently produce are critical for the aims of the Paris Agreement to be met.

The impact of our 1.5°C scenario on our portfolio value was assessed after the merger of our Petroleum business with Woodside and the sale of a number of our coal assets, and was reviewed against portfolio mix and major capital allocation decisions. Our portfolio value increased under the 1.5°C scenario, consistent with the demand outcomes of the analysis published in the BHP Climate Change Report 2020[1] that indicated the world would need around twice as much steel, copper and potash, and four times as much nickel in the next 30 years as it did in the last 30. It also indicated a reduction in the future demand for oil and energy coal.

Our focus for capital expenditure is now on commodities we assess as having a significant upside through the transition. Furthermore, the internal allocation of capital under our Capital Allocation Framework and all major investment decisions now require an assessment of investment viability under our 1.5°C Paris-aligned scenario.

Through these processes, we demonstrate our commitment to ensuring our capital expenditure plans are not misaligned with the Paris Agreement's aim to pursue efforts to limit global warming to 1.5°C. Our total capital and exploration expenditure for Continuing operations in FY2022 was US$6.1 billion, of which US$73 million or 1 per cent was for our energy coal assets. Spend in FY2022 and all currently approved spend for energy coal assets is limited to maintenance capital. Additional capital is expected to be required for the proposed life extension of the Mt Arthur Coal mine through to the end of FY2030, should relevant approvals be received. This is expected to provide certainty for our people and the community about the future of the mine and time to work together with the community on a plan that contributes to helping the region diversify and strengthen its economy.

In FY2020, we announced a commitment of at least US$400 million to invest in GHG emissions reduction across our operated assets and value chain over the five-year life of our Climate Investment Program. We spent US$47 million on initiatives consistent with this program in FY2022, targeting operational, maritime, and steelmaking emissions and BHP Ventures investments. This figure does not include the operating expenditure associated with renewable electricity arrangements established at a number of our operations, which collectively represented the main source of operational emissions abatement for BHP in FY2022. More than US$200 million has been included in approved budgets for FY2023 as our decarbonisation programs further mature, and we will continue expenditure of up to US$75 million over the coming years channelled towards partnerships with our customers in the steel sector.

Our capital allocation process is structured to ensure capital expenditure plans are aligned with our FY2030 and 2050 operational emissions reduction target and goal. We expect to spend around US$4 billion on operational decarbonisation by FY2030, with plans reflecting an annual capital allocation of between approximately US$200 million and approximately US$600 million per year over the next five years. Going forward, as our climate response is further integrated into business-as-usual planning, our spending on climate initiatives is expected to become increasingly indistinguishable from normal business spending.

How we think about and use carbon pricing

Our assets and markets are likely to continue to be subject to variations in regulation and levels of carbon pricing depending on location and industry. Similarly, the competitiveness of our products and the processes in which they are used will be impacted by the adoption of carbon legislation in customer countries. We utilise an explicit regulatory carbon price forecast for major BHP operational, competitor and customer countries. In determining our forecast, we consider factors such as a country's current and announced climate policies and targets and societal factors such as public acceptance and demographics. We forecast the global range of regional carbon prices to reach between US$0-175/$tCO_2$-e in FY2030, and US$10-250/tCO_2-e in FY2050, and US$10-175/$tCO_2$-e in FY2030 and US$100-250/tCO_2-e in FY2050 in BHP's current major operational and market countries.

We have incorporated regional carbon price assumptions in our planning, investment decisions and asset valuations for more than 10 years. They are used together with our operational planning cases based on the current economic outlook for asset planning, asset valuations and operational decision-making.

Our carbon price forecasts are also used along with other qualitative and quantitative metrics, such as the outcomes of our Paris-aligned 1.5°C scenario analysis (refer to 'Scenario analysis' and 'Capital alignment'), in our assessment of investments under the Capital Allocation Framework and to inform our portfolio strategy and investment decisions.

When considering initiatives to meet our operational emission medium-term target and long-term goal, we consider a number of additional metrics including the initiatives' position on our internal marginal abatement project cost curve, technology maturity and ultimate abatement potential. This informs the implied costs and benefits of our decarbonisation initiatives, allowing us to prioritise and rank those initiatives based on an implied price on carbon.

Green revenue

Green revenue is intended as a measure of the extent to which products and services contribute to the transition to a green economy.[2] While these contributions will be measured on a range of important indicators (including water conservation, biodiversity or reforestation), much of the discussion about green revenue remains focused on the contribution to the transition to clean energy that is vital for climate change mitigation.

We expect many of the resources we produce to be important for the energy transition. For example, the International Energy Agency's 'The Role of Critical Minerals in Clean Energy Transitions' report[3] highlights the critical role of copper and nickel, and BHP's own 1.5°C scenario[4] indicates the case for copper, nickel and potash could be more compelling as the world takes action to decarbonise. Iron ore also fares slightly better under our 1.5°C scenario versus certain other scenarios, as steel requirements of the energy transition are expected to be considerable.

In FY2022, we consulted with investors, industry and standard setters to explore ways of establishing clear methodologies for classification and measurement of green revenue within the resources sector. As yet, no agreed or established approach exists. A green revenue measure based on end use continues to be challenging for copper and steel as they

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[1] There are inherent limitations with scenario analysis and it is difficult to predict which, if any, of the scenarios might eventuate. Scenarios do not constitute definitive outcomes for us. Scenario analysis relies on assumptions that may or may not be, or prove to be, correct and may or may not eventuate, and scenarios may be impacted by additional factors to the assumptions disclosed.

[2] A green economy is defined by the UN Environment Programme (unep.org/regions/asia-and-pacific/regional-initiatives/supporting-resource-efficiency/green-economy) as low-carbon, resource efficient and socially inclusive. In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services.

[3] The Role of Critical Minerals in Clean Energy Transitions – World Energy Outlook Special Report, May 2021.

[4] This scenario aligns with the aims of the Paris Agreement and requires steep global annual emissions reduction, sustained for decades, to stay within a 1.5°C carbon budget. 1.5°C is above pre-industrial levels. For more information about the assumptions, outputs and limitations of our 1.5°C Paris-aligned scenario refer to the BHP Climate Change Report 2020 available at bhp.com.

undergo multiple stages of processing and have a diverse range of end uses. This challenge is despite the widely recognised importance of copper for the energy transition and the ongoing role for steel in development as well as decarbonisation.

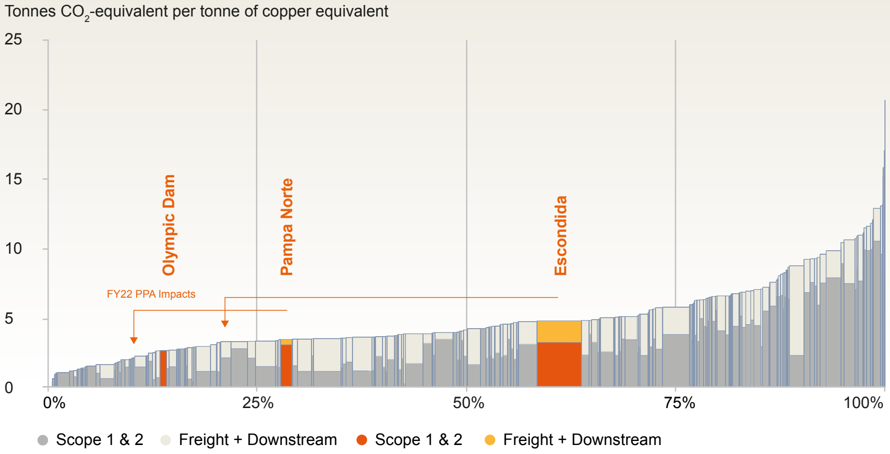
We are continuing our approach to reporting green revenue based on end use, using nickel and uranium by way of illustration as they are the most straightforward of our commodities for which to determine contribution to the energy transition from their end use. Battery manufacture contributes to climate change mitigation.[1] Therefore, for illustrative purposes,[2] we have measured the revenue from our sales to battery materials suppliers as green revenue. Battery-suitable nickel is defined as nickel briquettes, nickel powder and nickel sulphate. It does not include off-specification nickel metal. A total of 87 per cent of BHP's battery-suitable nickel was sold to global battery material suppliers in FY2022,[3] an increase of 15 per cent on FY2021. For FY2022, BHP's green revenue from battery-suitable nickel amounted to US$1,164 million,[4] an increase of 53 per cent on FY2021.

Australian uranium is sold for nuclear power generation only, a low emissions source of electricity. Therefore, also for illustrative purposes, we have measured all revenue from uranium as green revenue. For FY2022, BHP's green revenue from uranium was US$207 million, which is a decrease of 17 per cent on FY2021.

Emissions intensity of production

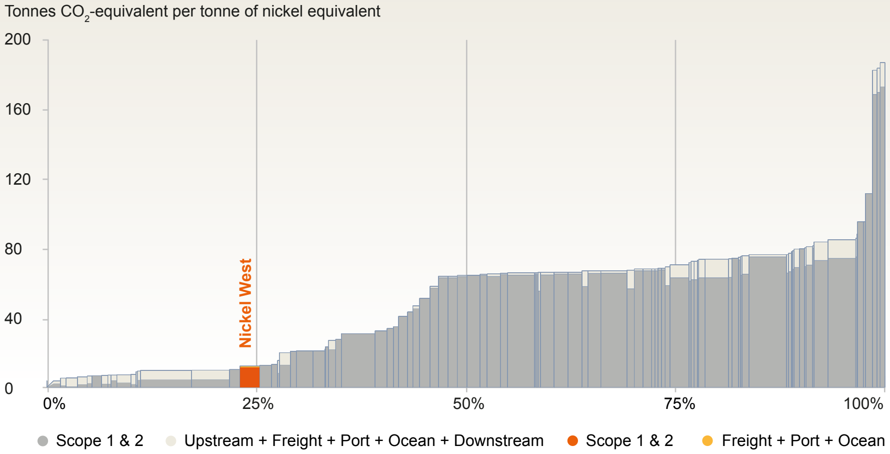
As well as assessing commodities based on their end uses, it is important to consider the GHG emissions associated with the production of commodities in determining their role in the transition to a net zero economy. Given production of many commodities is expected to need to continue or even increase, it is critical that their production has the lowest possible associated GHG emissions and optimal performance under other sustainability indicators. For example, our Chilean copper operated asset, Escondida, is aiming to have 100 per cent renewable electricity supply by the mid-2020s and sources desalinated water for operational purposes, minimising water extraction from sensitive Andean aquifers.

2021 Carbon Intensity – Copper Mines[1,2]



Source: Skarn Associates, BHP

2021 Carbon Intensity – Nickel[2,3]



Source: Skarn Associates, BHP

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1. For example, the EU taxonomy recognises battery manufacture as a significant contributor to climate change mitigation. The EU Taxonomy is a classification system, establishing a list of environmentally sustainable economic activities. Note the EU taxonomy does not presently cover the mining sector. For more information refer to 32021R2139 – EN – EUR-Lex, available at eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32021R2139.
2. Recognising that a settled methodology for classifying green revenue in the resources sector has yet to be determined.
3. Based on percentage of battery-suitable nickel sales to battery material suppliers. Where a customer's planned end use is not known with certainty to be for battery supply, assumptions of usage have been made using historical nickel usage for those customers.
4. Calculated based on gross revenue from battery-suitable nickel multiplied by percentage of BHP's sales of battery-suitable nickel, as applicable to battery material suppliers.

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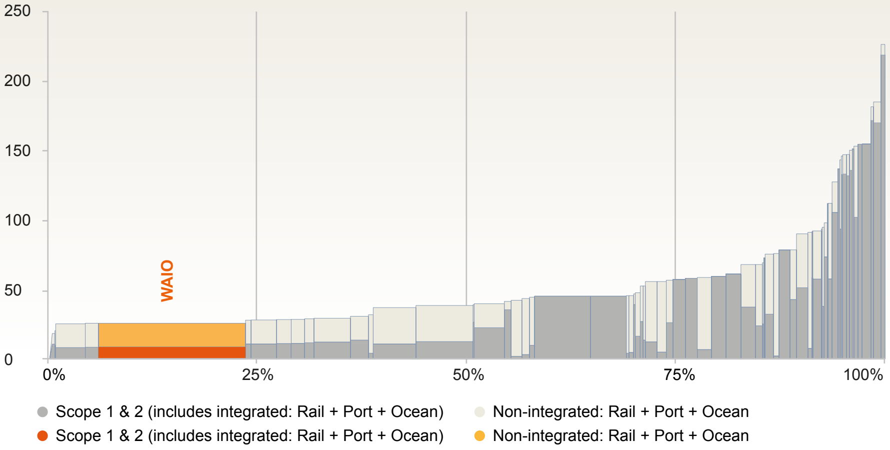
1. The copper mines emissions intensity curve is based on CY2021 data estimates from Skarn Associates. The emissions intensity basis is tonnes of CO_2-equivalent per tonne of copper equivalent finished metal per mine. We have overlayed Escondida, Pampa Norte (comprised of Spence and Cerro Colorado) and Olympic Dam with reported BHP data points for CY2021 for: i) production (copper – concentrate and cathode; copper equivalent tonnes); ii) Scope 1 emissions; and iii) Scope 2 emissions. For copper cathode only, emissions intensity estimates from freight only are included and utilise Skarn Associates' data. This is to avoid double counting as smelting and refining emissions would already be included in the Scopes 1 and 2 emissions of BHP assets for cathode production. Downstream emissions intensity estimates of copper concentrate, relating to smelting and refining – to produce finished metal as well as emissions from freight – utilise Skarn Associates' data across the dataset. Noting the renewable PPA arrangements that commenced at Escondida and Spence in FY2022, we have also provided the indicative emission intensities for Escondida and Pampa Norte based on FY2022 data (noting the rest of the of data in the curve is based on CY2021 data).
2. Copper-and-Nickel equivalent calculations: For the copper mines and nickel emission intensity curves, the basis of the intensity is tonne of copper equivalent and nickel equivalent production respectively. Copper equivalent and nickel equivalent production allows comparison of single commodity operations with those that produce by- and co-products. For example, Escondida's copper equivalent production is calculated as Escondida's CY2021 revenue, divided by the CY2021 average realised copper price. For FY2022 estimates in the copper mines intensity curve – highlighting renewable PPA impacts – FY2022 revenue, divided by the FY2022 average realised copper price are used.
3. The nickel emissions intensity curve is based on CY2021 data estimates from Skarn Associates. The emissions intensity basis is tonnes of CO_2-equivalent per tonne of nickel equivalent in first saleable metal. Under the Skarn Associates methodology, this includes processed output from the mine, concentrator and smelter (production and emissions from refineries are not included). For Nickel West, this includes only production attributable to BHP ores (Mt Keith and Leinster) and excludes any production and emissions from third party ores. We have overlayed Nickel West with reported BHP data points for CY2021 for: i) production attributable to BHP ores (nickel tonnes and nickel equivalent tonnes); ii) Scope 1 emissions; and iii) Scope 2 emissions. To calculate nickel equivalent production, we have used average realised CY2021 nickel prices as well as Skarn Associates' estimate for the CY2021 cobalt price. For emissions, we have pro-rated Scopes 1 and 2 emissions from the Kalgoorlie smelter to account for emissions attributable to BHP production only (i.e. excluding third-party feed) and excluded emissions from the Kambalda concentrator. To avoid double counting, we have removed Skarn Associates' estimated intensity for downstream processing (i.e. that attributable to smelting) and have not included emissions from the Kwinana refinery as this is outside of the boundary of the Skarn Associates' methodology. Emissions intensity estimates for Upstream+Freight+Port+Ocean utilises Skarn Associates data across the dataset. Upstream emissions are applicable to only Nickel pig iron (NPI) and Ferro-nickel (FeNi) plants' emissions relating to upstream mining and logistics per Skarn Associates' methodology.

2021 Carbon Intensity – Seaborne Iron Ore[1]

Kilograms CO_2-equivalent per tonne of iron ore (wet)

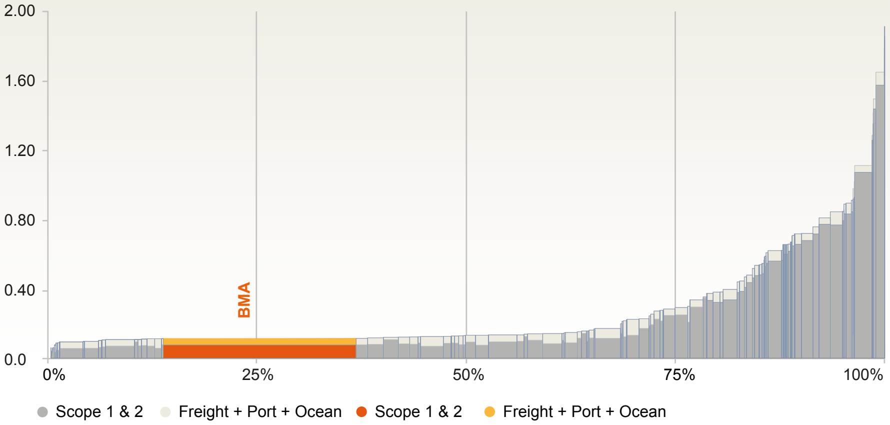


Source: Skarn Associates, BHP

1 The iron ore emissions intensity curve is based on CY2021 data estimates from Skarn Associates for seaborne iron ore operations. The emissions intensity basis is kilograms of CO_2-equivalent per tonne of iron ore (wet basis) produced per mine. BHP operations have been aggregated to WAIO level and overlayed with reported BHP data points for CY2021 for: i) iron ore production (wet basis); ii) Scope 1 emissions; and iii) Scope 2 emissions incorporating integrated rail, port and ocean emissions. Non-integrated Port + Rail + Ocean emissions intensity estimates utilise Skarn Associates data across the dataset. In case of WAIO, only the emissions from non-integrated Ocean freight are applicable as Rail & Port emissions are included as part of Scopes 1 and 2 emissions.

2021 Carbon Intensity – Metallurgical Coal[2]

Tonnes CO_2-equivalent per tonne of saleable metallurgical coal



Source: Skarn Associates, BHP

2 The metallurgical coal emissions intensity curve is based on CY2021 data estimates from Skarn Associates. The emissions intensity basis is tonnes of CO_2-equivalent per tonne of saleable coal produced per mine. BHP operations have been aggregated to BMA level, noting BMC is not highlighted as a BHP operation given the recent divestment of BHP's interest in BMC. BMA has been overlayed with reported BHP data points for CY2021 for: i) metallurgical coal production; ii) Scope 1 emissions; and iii) Scope 2 emissions incorporating BHP operated integrated rail and port emissions. Emission intensity estimates for Freight + Port + Ocean logistics of metallurgical coal products utilise Skarn Associates data across the dataset. As BMA utilises both integrated (included in Scopes 1 and 2 emissions) and third-party rail and port services, this may result in partial double counting of emissions. We have also updated the global warming potential factor for CH_4 to the IPCC AR5 across the dataset for better comparability.

This year, in addition to the absolute emissions from each of our operated assets, we disclose CY2021 GHG operational emissions intensity estimates for BHP's iron ore, metallurgical coal, copper and nickel operated assets compared to other mines. Due to the different structure of various mines to aid comparability and consistency with the Skarn Associates[3] data for the non-BHP mines, we have included select Scope 3 emissions estimates for downstream transport and processing of the commodity, where appropriate. Given the commencement of renewable PPAs at Escondida and at Spence (which, together with Cerro Colorado, comprises Pampa Norte) during FY2022, we have also overlayed the FY2022 intensity of Escondida and Pampa Norte to reflect an indicative change in emissions intensity on the curve from these initiatives from FY2022 onwards. Based on this analysis, GHG emissions intensity of BHP's operated assets is estimated to be either in the lowest quartile or the lowest half of the mines covered. As our decarbonisation strategy is executed, we expect the emissions intensity of our operated assets to further decline.

Other sustainability indicators for our operated assets are disclosed in our ESG Standards and Databook available at bhp.com/sustainability. More information on our performance in relation to absolute GHG emissions is provided in 'Operational GHG emissions and energy consumption' and 'Value chain GHG emissions'.

Equitable change and transitions

There are communities around the world that rely on mining certain commodities that may therefore be disproportionately impacted by the transition to a low-carbon economy. Solutions will require a multi-stakeholder approach including the local community, investors, financiers, government at all levels and, of course, resource companies such as BHP.

We have outlined our approach to equitable change and transition, taking into account the Paris Agreement and the International Labour Organisation's (ILO's) Just Transition Guidelines, in OFR 7.1, recognising the role of BHP through changes and transitions. The approach to equitable change and transition will inform implementation of our strategy for decarbonisation and adaptation to the potential physical impacts of climate change, as well as apply to the intended closure of NSWEC.

Physical risks

Our Adaptation Strategy outlines the proactive and collaborative approach we need to take to build the safety, productivity and climate resilience of our operated assets, investments, portfolio, supply chain, communities and ecosystems by adapting to the physical risks of climate change. We have analysed specific climate-related hazards and developed a more detailed approach to enable financial and economic evaluation of physical climate risks and adaptation measures in future years.

BHP requires operated assets and functions to identify and progressively assess potential physical climate change risks (including to our value chain) and build climate change adaptation into their plans, activities and investments. In FY2022, we progressed our Adaptation Strategy, conducting a physical climate risk identification process for our operated assets and supply chain. Risks associated with each hazard were prioritised in accordance with our risk process under BHP's Risk Framework, including consideration of their materiality. Across our portfolio of operated assets and associated value chains, we have identified a number of common, high potential impact physical climate risks; where the 'Highest potential impact physical climate risks across BHP's operated assets' table presents the top eight.[4]

[3] For more information refer to skarnassociates.com/ghg.

[4] The first seven risks in the table were selected based on the number of operated assets that identified them as material in accordance with BHP's Risk Framework and the average Maximum Foreseeable Loss severity rating assigned to each. The absence of a tick means either the risk was identified at the asset, but not rated as material under our Risk Framework, or that it was not identified for that asset. Legacy assets and non-operated joint ventures have been excluded from the analysis. Legacy assets are to be included in the risk evaluations planned for FY2023. The eighth risk in the table is a collation of material value chain risks with implications across the regions; its position in the table does not indicate its level of potential impact relative to the other risks.

Highest potential impact physical climate risks across BHP's operated assets

	Minerals Australia					Minerals Americas			
Risk description	**BMA**	**NSWEC**	**Nickel West**	**Olympic Dam**	**WAIO**	**Escondida**	**Jansen**	**Pampa Norte**	**Risk management**[1]
Geotechnical instability and erosion of tailings storage facility (TSF) landforms and structures under conditions of extreme rainfall, leading to TSF failure	✓	✓	✓	✓	✓	✓	✓		Our approach to TSF failure risk management at operated assets is multi-dimensional and includes the following key elements: maintenance of dam integrity; operation, surveillance and maintenance; emergency preparedness and response; TSF governance and standards; and Group-level oversight and assurance. The *Our Requirements for Tailings Storage Facilities* standard is aligned to the Global Industry Standard on Tailings Management (GISTM) and we contribute to efforts to improve TSF management across the mining industry, including through the ICMM Tailings Working Group. For more information on our management of TSF failure risk refer to OFR 7.18. We are working to incorporate climate risk management into the TSF life cycle and have conducted a detailed study on the potential impact of climate change on Laguna Seca TSF at Escondida.
Water shortages impacting production, associated activities (e.g. dust suppression, ore handling) and reputation due to changes in average rainfall and temperature/ evaporation	✓	✓	✓	✓	✓		✓		We have a range of risk management measures for our water-related risks, including consideration of climate change projections as relevant (and where available), covered in more detail at bhp.com/water.
Flooding of mine and/or key production infrastructure (e.g. plants, conveyor belts etc.) due to extreme precipitation	✓	✓	✓			✓	✓		Per above, risk management measures for our water-related risks are covered in more detail at bhp.com/water. We have developed internal guidance on incorporating climate change projections into mine water planning, hydrologic assessment and infrastructure design. We are conducting a pilot study on quantifying the potential impact of this risk, to inform future value-at-risk assessments. While our methodology is still under development, our intent is to support more effective decision-making when prioritising capital investment in risk controls.
Disruption and/or damage to port and coastal infrastructure and operations due to higher sea levels, cyclones, storm surge and changes in marine ecosystems	✓	✓	✓		✓		✓		We maintain response plans for various scenarios that could impact our ability to access key markets, including physical disruptions of outbound supply chain logistics. Stockpile and capacity management and use of weather forecasts are some of the tools that may assist in minimising operational disruption at our ports from weather and/or climate-related events. We are undertaking more detailed evaluations of the potential climate change impacts for our port and coastal infrastructure, including at Port Hedland and Hay Point.
Workforce health and safety incidents due to extreme events (e.g. extreme temperature causing heat stress)	✓	✓	✓		✓		✓		The *Our Requirements for Health, Our Requirements for Safety* and *Our Requirements for Community* standards, together with BHP's Risk Framework, govern our health and safety risk management approach. At our operating sites, we have weather detection monitoring (e.g. wet bulb temperature) and associated weather preparation and response plans (including Trigger Action Response Plans (TARPs)) to enable our response to potential extreme weather events. Our sites also have Emergency Management Plans in place, and personnel trained in emergency response.
Disruption and/or damage to electrical infrastructure (e.g. motors, cooling and control systems) due to extreme temperatures	✓	✓	✓	✓					We aim to operate our critical equipment in accordance with industry best practice and ensure that critical equipment components are compliant with relevant design standards. We have extensive inspection and maintenance routines, hold inventory of critical spares, and undertake detailed contingency planning, in order to remain resilient in the face of potential equipment failure or inefficiencies. A number of our sites in FY2023 will evaluate the potential impact on electrical infrastructure of extreme temperatures under different climate scenarios.
Disruption and/or damage to water supply infrastructure due to extreme precipitation or flooding				✓		✓		✓	Regular maintenance of water infrastructure, such as treatment plants, pipelines and tanks is critical to ensure that water is adequate for our operated assets, both in quantity and quality. BHP requires our water infrastructure to be designed and constructed to meet internal and external standards.
Disruption in the supply of critical production inputs and critical infrastructure due to extreme weather events	Identified as value chain risks across the relevant regions								We assess supply categories according to commercial dependency and supplier risk, both elements that have informed our selection of key value chain inputs for further evaluation of physical climate risk. This work aims to minimise potential adverse impacts from physical climate risk in our value chain. At our Spence copper asset, we have assessed supply chain resilience in relation to the impact that swells, extreme rainfall, earthquakes and tsunamis could have on the supply of diesel, sulphuric acid and supplies for concentrates. The assessment identified specific mitigating controls for consideration by the asset.

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[1] The risk management measures in this column describe our current approach, which is subject to review for new or additional climate-related measures arising from the subsequent risk evaluation work program planned across all of our operated assets (including legacy assets) in FY2023.

The risk management column in the table describes our current approach, which is subject to review for new or additional climate-related measures arising from the subsequent risk evaluation work program planned for our operated assets (including legacy assets) in FY2023.

To underpin the subsequent risk evaluation work program planned across all of our operated assets (including legacy assets) and key supply chain infrastructure, we have sourced projections of acute and chronic climate variables from a leading climate science consultancy. The risk evaluation process will be a further step toward identifying and prioritising additional adaptation measures and reporting potential financial impacts in later years, including a value-at-risk range. We have already allocated US$200 million to studies on physical climate risk prevention and mitigation measures at our Minerals Americas operated assets.

We have also identified a number of opportunities to adapt to the potential physical impacts of climate change, primarily related to improving operational efficiency and innovation, taking collaborative action to grow the resilience of our value chain, and supporting local communities and ecosystems. In FY2023, we plan to undertake risk evaluations at our operated assets (including legacy assets) including assessment of chronic physical risks, implement any 'quick win' adaptation actions and initiate studies on measures expected to require significant capital investment. We also plan to further study prioritised value chain risks to understand with more specificity where risk is concentrated. These actions are intended to contribute to addressing the climate-related risks noted under the Inadequate business resilience risk factor in OFR 9.1. We also intend to continue to build an understanding of how the communities where we operate may be impacted by future climate events and embed consideration of ecosystem-based adaptation, to contribute to both climate resilience and BHP's biodiversity commitments and goals.

Operational GHG emissions and energy consumption

We recognise the role we must play in helping the world achieve its decarbonisation ambitions. This includes reducing our operational emissions and working with our supply chains to reduce their emissions. Looking to the future, our aim remains to position BHP to thrive in a low-carbon world by minimising emissions from existing products while helping to provide commodities that the world needs to achieve a net zero future.

Refer to 'BHP's climate change targets and goals' for our operational emissions target and goal.

We review our performance against targets annually and consider opportunities to accelerate ambition regularly. We have successfully achieved our short-term target set in 2018 to maintain operational GHG emissions at or below adjusted FY2017 levels by FY2022, while continuing to grow our business. Our performance against our short-term target is described in 'Operational GHG emissions and energy consumption – FY2022 performance'.

Our operational GHG emissions are measured against our target performance based on an operational control, market-based methodology. We also disclose operational GHG emissions by equity share and financial control in our ESG Standards and Databook available at bhp.com/climate.

Operational GHG emissions and energy consumption – FY2022 performance

In FY2022, our operational GHG emissions were 15 per cent lower than the adjusted FY2017 baseline[1] of 12.9 $MtCO_2$-e on the basis of operated assets held by BHP as at 30 June 2022, demonstrating achievement of our short-term target for FY2022. With inclusion of BHP's recent divestments, Discontinued operations (Petroleum) and BMC operations (both annualised for FY2022), operational GHG emissions were also 15 per cent lower than the previously adjusted FY2017 baseline.[2]

In FY2022, total operational energy consumption decreased 4 per cent from FY2021. This was largely driven by reduced energy use at Olympic Dam due to scheduled maintenance and reduced fuel consumption at our operated coal assets. Scope 1 and 2 emissions decreased 25 per cent from FY2021 primarily due to an increase in the renewable component of our energy consumption at Escondida and Pampa Norte in Chile.

Operational energy consumption by source (PJ)[1,2]

Year ended 30 June	**2022**	2021	2020
Consumption of fuel	**112**	118	114
– Coal and coke	**1**	1	1
– Natural gas	**22**	23	21
– Distillate/gasoline	**87**	*91*	90
– Other	**2**	*3*	2
Consumption of electricity	**37**	37	36
– Consumption of electricity from grid	**33**	33	32
Total operational energy consumption	**149**	*155*	150
Total operational energy consumption (adjusted for divested operations)[8]	**132**	137	135
Operational energy consumption from renewable sources[3]	**17.1**	0.5	0.0
Operational energy intensity (gigajoules per tonne of copper equivalent production)[9]	**18**	21	19

Operational GHG emissions ($MtCO_2$-e)[1,4,5,11]

Year ended 30 June 2022	**2022**	2021	2020
Scope 1 GHG emissions[6]	**9.2**	*10.1*	9.6
Scope 2 GHG emissions[7]	**3.1**	6.2	6.3
Total operational GHG emissions	**12.3**	*16.3*	15.9
Scope 1 GHG emissions (adjusted for divested operations)[8]	**7.9**	8.8	8.3
Scope 2 GHG emissions (adjusted for divested operations)[8]	**3.0**	6.1	6.2
Total operational GHG emissions (adjusted for divested operations)[8]	**11.0**	*14.9*	*14.6*
Carbon offsets retired[12]	**–**	0.3	
Total operational GHG emissions (including carbon offsets)[12]	**12.3**	*16.0*	
Operational GHG emissions intensity (tonnes CO_2-e per tonne of copper equivalent production)[9]	**1.5**	2.2	2.0
Percentage of Scope 1 GHG emissions covered under an emissions-limiting regulation[10]	**78%**	81%	*81%*
Percentage of Scope 1 GHG emissions from methane[13]	**18%**	*22%*	19%
Scope 2 GHG emissions (location based)[7]	**4.8**	5.0	5.1

[1] Data in italics indicates that data has been adjusted since it was previously reported. FY2021 originally reported energy data that has been restated is 92 PJ distillate/gasoline consumption, and 2 PJ other energy consumption, due to amended classification of petroleum based oils and greases to the 'other' category. FY2021 originally reported emissions data that has been restated is 10.0 $MtCO_2$-e for Scope 1 GHG emissions and 16.2 $MtCO_2$-e for total operational GHG emissions, due to minor amendments to fugitive emissions from the coal operated assets as part of the annual reconciliation process for Australian regulatory reporting purposes. FY2021 and FY2020 'Total operational GHG emissions (adjusted for divested operations)' have been restated from 16.2 and 15.9 Mt CO_2-e respectively due to the exclusion of Discontinued operations (Petroleum) and BMC (also see footnote 8). Previously reported data excluded Discontinued operations (Onshore US assets) only. Additionally, non-material adjustments in prior year asset-level data and changes to presentation of the data has, in certain instances, resulted in minor impacts to the rounding of data since it was previously reported.

[2] Calculated based on an operational control approach in line with World Resources Institute/World Business Council for Sustainable Development guidance. Consumption of fuel and consumption of electricity refers to annual quantity of energy consumed from the combustion of fuel; and the operation of any facility; and energy consumed resulting from the purchase of electricity, heat, steam or cooling by the company for its own use. Data has been rounded to the nearest 1 PJ to be consistent with asset/regional energy information in this Report. In some instances, the sum of totals for sources, commodities and assets may differ due to rounding.

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[1] Baseline adjusted to remove Discontinued operations (Onshore US assets and Petroleum) and BMC and for method changes (use of IPCC AR5 Global Warming Potentials (GWP) and a move to facility-specific emissions calculation methodology for fugitives at Caval Ridge) to ensure ongoing comparability of performance. For more information refer to the BHP Scopes 1, 2 and 3 GHG emissions calculation methodology available at bhp.com/climate.

[2] Original baseline adjusted in FY2019 to remove Discontinued operations (Onshore US assets).

3 Renewable energy consumption includes third-party supplied electricity from renewable generation where PPAs are in place specifying generation requirements, evidenced by Renewable Energy Certificates (RECs) or supplier-provided documentation in line with the Greenhouse Gas Protocol Scope 2 Guidance unless otherwise specified. Renewable energy consumption at Escondida and Pampa Norte is currently sourced from invoice data; some refinements may need to be made to renewable energy reported from these assets in the future.

4 BHP currently uses GWP from the IPCC AR5 based on a 100-year timeframe for all operations. Minerals Americas operated assets transitioned from IPCC Assessment Report 4 (AR4) to AR5 GWP in FY2022; all other operated assets transitioned in FY2021.

5 Scope 1 and Scope 2 GHG emissions have been calculated based on an operational control approach (unless otherwise stated) in line with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard. For more information refer to the BHP Scope 1, 2 and 3 GHG emissions calculation methodology available at bhp.com/climate. Data has been rounded to the nearest 0.1 $MtCO_2$-e to be consistent with asset/regional GHG emissions information in this Report. In some instances, the sum of totals for sources, commodities and assets may differ due to rounding.

6 Scope 1 refers to direct GHG emissions from operated assets. Scope 1 emissions currently include diesel consumed in explosives; some refinements may be made to emissions reported from this source in future.

7 Scope 2 refers to indirect GHG emissions from the generation of purchased or acquired electricity, steam, heat or cooling that is consumed by operated assets. Our Scope 2 GHG emissions have been calculated using the market-based method, in line with the Greenhouse Gas Protocol Scope 2 Guidance unless otherwise specified. A residual mix emission factor is currently unavailable to account for grid electricity emissions remaining after removal of quantities directly contracted between parties; this may result in double counting of low emissions or renewable electricity contributions across grid-supplied consumers. Scope 2 emissions from Escondida and Pampa Norte are currently sourced from metered data; some refinements may need to be made to emissions reported from these assets in the future.

8 Divested operations are BMC (sale completed on 3 May 2022), BHP's Petroleum business (merger with Woodside completed on 1 June 2022) and Onshore US assets (sale completed on 31 October 2018). Non-material acquisitions and divestments are included in the total.

9 For this purpose, copper equivalent production has been calculated based on FY2022 average realised product prices for FY2022 production, FY2021 average realised product prices for FY2021 production and FY2020 average realised product prices for FY2020 production. Production figures used are consistent with energy and GHG emissions reporting boundaries (i.e. BHP operational control) and are taken on 100 per cent basis.

10 Scope 1 GHG emissions from BHP's facilities covered by the Safeguard Mechanism administered by the Clean Energy Regulator in Australia, Saskatchewan Output-Based Performance Standards (OBPS) program in Canada, and the distillate and gasoline emissions from turbine boilers at the cathode plant at Escondida covered by the Green Tax legislation in Chile. FY2020 has been restated from 80 per cent due to changes in reported emissions at Australian Petroleum operations.

11 More information on our strategy to further reduce GHG emissions, including our investments in low-emissions technology and natural climate solutions, is available in the BHP Climate Change Report 2020 and the BHP Climate Transition Action Plan 2021 available at bhp.com/climate.

12 From FY2021, we have calculated an additional operational GHG emissions total for the reporting year including contributions from the retirement of a quantity of carbon offsets. This figure is calculated by subtracting the number of carbon offsets retired, if any (each equivalent to a single tonne of CO_2-e reduced or 'removed' from the atmosphere) from the total GHG emissions reported under our operational control boundary for the year. This is not intended to establish a recurrent approach. More information on our approach to carbon offset use and the specifics of the carbon offsets retired in FY2021 is available at bhp.com/climate. BHP is committed to transparently disclosing the carbon offsets that we retire towards meeting our own climate change targets and goals. We did not retire any offsets for this purpose in FY2022.

13 In FY2022, the Caval Ridge operation moved to a facility-specific emissions calculation methodology for fugitive emissions as detailed in the NGER (Measurement) Determination 2008 (Method 2 – extraction of coal). When comparing FY2022 to FY2021, this methodology change contributed 1.6 per cent of the overall 4 per cent reduction in our Percentage of Scope 1 GHG emissions from methane.

Our operational decarbonisation pathway

Decarbonising electricity

Decarbonising electricity by switching to renewables at our operated assets is a priority decarbonisation lever for this decade, in addition to a focus on preparing the business for widespread diesel displacement in the 2030s. The majority of our electricity supply is delivered via electricity networks and is accounted for as Scope 2 emissions. We are currently working to reduce Scope 2 emissions via renewable energy PPAs, such as those already executed in Chile, Queensland, South Australia and grid connected sites in Western Australia. Additionally, work is underway to decarbonise remote power demands in Western Australia either through PPAs with independent power producers or via 'behind the meter' renewable energy installations where we self-generate electricity in the Pilbara.

Power decarbonisation progressed with key successes in FY2022 including:

- The Minerals Americas PPAs became operational in August 2021 and January 2022, with Escondida and Spence aiming to use 100 per cent renewable electricity by the mid-2020s.
- BMA's PPA with CleanCo will deliver approximately 50 per cent of its annual electricity from renewable sources by 2025.[1]
- Nickel West signed PPAs to provide its operations with renewable power, with agreements for the Flat Rocks Wind Farm, the Merredin Solar Farm and the Northern Goldfields Solar Project.
- Olympic Dam entered into renewable energy supply arrangements for up to 50 per cent of its electricity by 2025.[2]

Decarbonising diesel

Diesel displacement represents the largest technical challenge to our decarbonisation pathway for operated assets in terms of the magnitude of GHG emissions abatement required, predominantly driven by consumption by our haul truck fleet. We are taking steps now to accelerate the essential role that original equipment manufacturers must play in the development of new equipment to address emissions from our trucks and rail fleet. This includes partnerships to trial battery-electric locomotives, to develop electrified haul trucks and collaboration such as the 'Charge On Innovation Challenge' aimed at developing concepts for large-scale haul truck electrification and charging systems. In addition to progressing the availability of fleet solutions for zero emission material movement, we are working on readying the business for electrification of material movement by better understanding the energy balance associated with a fully electrified operation, quantifying future electricity demand and associated infrastructure requirements (e.g. transmission lines), modelling potential changes to our concept of operations, and evaluating our reliance on supporting infrastructure such as trolley lines and fast charging capabilities.

Decarbonising fugitive emissions

Although currently relatively small in relation to other emissions sources at BHP's operated assets, fugitive methane emissions pose considerable technical and economic challenges for our abatement ambitions. We are working closely with a range of leading organisations in technology, research and industry across the globe, to develop new approaches and address the issue collectively. This includes investigating opportunities for improving the comprehensiveness and accuracy of methane emissions measurement. Under current reporting requirements, we use a combination of direct measurement and default, production-based factors for different coal mine methane sources. While emerging satellite and aerial-based sensing technology is providing new and potentially valuable perspectives, much more work is required to understand its practical application to geographically large, diffuse sources of very dilute methane such as open-cut coal mines – particularly in crowded neighbourhoods such as the Bowen Basin and Hunter Valley where numerous mines co-exist in close proximity with a range of other significant industrial and agricultural methane sources.

Project prioritisation

Through studies and our capital allocation process, we seek to optimise the risk and reward proposition for operational decarbonisation projects to allocate capital and optimise decarbonisation at a portfolio level. We have developed an internal marginal abatement cost curve designed to support the allocation of capital towards the most economically efficient and effective decarbonisation projects.

We regularly monitor our forecasted operational GHG emissions to check we are on track. As a result of actions taken in recent years, particularly securing the supply of renewable energy at some operations, we achieved our short-term target, for FY2022, and our currently projected performance in FY2030 is tracking to plan against our medium-term target. Progression of planned project studies are regularly reviewed.

Value chain GHG emissions

We recognise the importance of supporting the climate transition in our value chain. In 2020, BHP set Scope 3 emissions goals for 2030 to support decarbonisation for processing of our steelmaking products and maritime transportation of our products. In 2021, we added to these goals with a long-term goal and targets for Scope 3, supported by an action

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[1] Including the purchase of large-scale generation certificates (LGCs).

[2] Including the purchase of LGCs. A portion of the LGCs are to be created from the new Port Augusta Renewable Energy Park.

plan of working with industry, including our customers and suppliers, to achieve sectoral decarbonisation. Refer to 'BHP's climate change targets and goals' for our goals and targets for Scope 3 emissions. As a producer of materials that are essential building blocks of decarbonisation, BHP is supporting the global transition to a more sustainable development trajectory by evolving the solutions we provide to our customers and the solutions we procure from our suppliers and partners.

Progress in FY2022

Steelmaking

In FY2022, we progressed our work in supporting the steelmaking industry to accelerate decarbonisation. To support positive climate outcomes in both the near term and long term, we believe it is important to help enable our customers at whatever stage of the 'steel decarbonisation framework' they are in. This 'steel decarbonisation framework' is designed by BHP to describe the technology pathways to decarbonising the global integrated iron and steel industry.

BHP's customers in steelmaking are diverse, with some integrated steelmakers in the 'optimisation' stage, focused on energy and process efficiency, increasing scrap ratios and raw materials optimisation. Other customers are exploring 'transition' stage solutions like alternative fuels, modified blast furnace (BF) operations, and end-of-pipe solutions like Carbon Capture and Utilisation (CCU) and Carbon Capture, Utilisation and Storage (CCUS). Some companies are investigating the viability of 'green end-state' technologies, such as hydrogen-based direct reduction iron (DRI) with electric arc furnace steelmaking and direct electrolysis processes, like molten-oxide electrolysis.

Steel decarbonisation framework

Potential emissions intensity reduction	**Optimisation stage** 20% CO_2 reduction vs. BAU[1]	**Transition stage** 50-60% CO_2 reduction vs. BAU	**Green end state** 90% CO_2 reduction vs. BAU
Customer partnerships	– HBIS: Enhanced lump utilisation, slag recycling – POSCO: Coke quality optimisation – JFE: Coking coal and iron ore impact on agglomeration	– Baowu: Modified BF oxygen and hydrogen injection – Baowu & POSCO: CCUS application within integrated steelmaking – Tata: Use of biomass and CCU	– HBIS: Hydrogen DRI – JFE: DRI pathways with BHP ores
Innovation & technology	– R&D novel beneficiation technologies – R&D microalgae blending for premium coking coal quality	– R&D ultramafic sequestration – R&D with Hatch and University of Newcastle on hydrogen injection into modified BF – Supported the CCUS Knowledge Centre, as a member of the CO2CRC	– Ventures completed lab trials producing metallic iron using BHP ores with Boston Metal and Electra Steel
Product & portfolio	– Studying beneficiation at our Jimblebar iron ore operation – Studying improvements of BMA metallurgical coal quality		– Testing programs to assess performance of BHP's ores in DRI and electric furnace steel production
Advocacy & standards	– Joined the Global Low-Carbon Metallurgy Innovation Alliance, which is led by Baowu and includes World Steel Association and many steel industry stakeholders – Engage with industry decarbonisation initiatives, including our customers, Responsible Steel, and the Australia Industry Energy Transition Initiative, by sharing expertise and participating in consultation on emissions standards and accelerating decarbonisation pathways		

[1] BAU means business as usual, referring to a trajectory of steelmaking emissions intensity if no changes occur.

Our strategy to support steelmaking is to partner, innovate, advocate and supply the optimal products across these stages. Access by steelmakers to higher-quality metallurgical coal and iron ore products, which enables them to be more efficient and lower-emissions intensity, is an important component of the transition to a low-carbon future. To support this, we are assessing the opportunity to implement beneficiation at our Jimblebar iron ore operation and metallurgical coal product improvements at our BMA operations.

In FY2022, BHP signed a Memorandum of Understanding (MOU) to partner with South Korean steelmaking company POSCO to study optimising coal/coke quality for low-carbon blast furnace operation and CCUS. This is in addition to our existing partnerships with Baowu, JFE and HBIS. Across the four partnerships, we are working with companies that represent approximately 12 per cent of reported global steel production capacity, covering 31 per cent of our direct sales in iron ore and 19 per cent in metallurgical coal in FY2022. BHP has committed to invest up to US$75 million in research and development of steel decarbonisation pathways through these customer partnerships. The goal of these partnerships is to support the maturation and scaling-up of fit-for-purpose solutions across the steelmaking value-chain in all stages of steel decarbonisation.

We intend to progress our customer partnerships over three phases:

1. Conduct feasibility studies or lab/bench-scale research and development in priority areas.
2. Pilot-scale trial, where we jointly test potential solutions to key technical challenges at a larger scale that is sufficient to understand the impact of raw material and operational parameters.
3. Trial at a customer plant, where we focus on optimal, high impact decarbonisation solutions for deployment on a limited basis at select sites.

In FY2023, we intend to progress a subset of existing customer partnerships on projects that in aggregate have the potential to deliver 30 per cent emissions intensity reduction if adopted at scale post-2030. We will also continue exploring other partnerships that are complementary to our geographic or technology priorities, or that can help make existing projects more effective and efficient. For instance, on 20 July 2022, we announced a new MOU with Tata Steel to collaborate on the use of biomass as a source of energy and the application of CCU in steel production.

Maritime

Our strategy for supporting the maritime industry's climate transition includes advocacy, adoption of low- and zero-emissions fuels or other efficiency technologies (like wind-assisted propulsion) and deploying real-time data analytics to optimise vessel and route selection to improve operational efficiency. For example, in FY2022:

- **Advocacy:** We signed the industry call to action with more than 150 other organisations urging governments to commit to decarbonising international shipping by 2050, surpassing the levels of ambition set out in the International Maritime Organisation's Initial GHG Strategy. This is in addition to the advocacy work we do with the Global Centre for Maritime Decarbonisation in Singapore, of which we became a founding member in FY2021.
- **Zero-emission fuels:** We joined the US Government's First Mover's Coalition, launched at COP26 in Glasgow, as a member in the shipping sector. This means we commit to 10 per cent of BHP's products shipped to our customers on our time charter vessels being on vessels using zero-emissions fuels by FY2030.[2] BHP has also formed a consortium with Rio Tinto, Oldendorff, Star Bulk and the Global Maritime Forum to analyse and support the development of an iron ore maritime green corridor, fuelled by green ammonia.

[2] Subject to the availability of technology, supply, safety standards and the establishment of reasonable thresholds for price premiums.

- **Transition fuels:** We progressed use of LNG as a transitional fuel. BHP has chartered the world's first LNG-fuelled Newcastlemax bulk carriers to transport iron ore from Western Australia to Asia from Eastern Pacific Shipping (EPS) for five years and awarded the LNG fuel contract to Shell. The fuel, along with improved efficiency of the vessel design, is expected to reduce GHG emissions intensity by up to 30 per cent on a per voyage basis. We have already operationalised two vessels and expect to deliver another three vessels in FY2023. BHP is also exploring biofuels as an interim GHG emission abatement option for shipping. In FY2022, we issued a Request for Proposal for procurement of sustainable-certified (REDII or ISCC)[1] biodiesel.

Procurement

In FY2022, we conducted a survey and assessment of the climate positions of our top 500 direct suppliers, representing approximately 76 per cent of our spend.[2] Through this study, we found that 27 per cent of the suppliers surveyed have Scope 1 and Scope 2 targets and/or goals aligned with our own. In the coming years, we intend to systematise our tracking and engagement of suppliers in relation to their public climate strategies.

In order to engage and incentivise our suppliers, we integrated climate commitments into our sourcing document and evaluation criteria. We intend to continue to refine and integrate metrics related to incentivising positive climate outcomes from our suppliers going forward.

Scope 3 GHG emissions performance

The most material part of BHP's reported Scope 3 emissions inventory comes from the downstream processing of our products, in particular from the emissions generated by steelmaking through the processing of iron ore and metallurgical coal. We estimate that in FY2022, emissions associated with the processing of our sold products was 307 MtCO$_2$-e, an increase of 2 per cent from FY2021. The increase comes primarily from an increase in the production of iron ore from Samarco.

After the merger of our Petroleum business with Woodside, emissions associated with the use of our energy products is now only from energy coal,[3] which in FY2022 was 38 MtCO$_2$-e.

We are also progressing and improving our approach and methodology for GHG emissions estimations. Key refinements to our methodology for Scope 3 this year, in line with the GHG Protocol, include:

- **Categories 1 and 2 Purchased goods and services (including capital goods):** We piloted switching the emissions estimation of high-spend goods from select categories (including explosives, grinding media, conveyor belts, tyres, and select bulk materials) from spend-based emissions factors to industry average quantity-based emissions factors or emissions factors sourced directly from suppliers.
- **Categories 4 and 9 Upstream and downstream transportation and distribution:** We successfully developed and operationalised a carbon accounting and decision support system tailored to ship chartering, leveraging DNV's Veracity platform.
- **Category 10 Processing of sold products:**
  - We increased the granularity of calculations for downstream emissions associated with the processing of our copper products, removing the double counting of our Scope 1 and 2 emissions previously present in our calculations.
  - We also began reporting downstream Scope 3 emissions for nickel processing accounting for emissions from battery and non-battery products to increase transparency as our nickel business grows to be sufficiently material to report.
- **Category 11 Use of sold products:** BHP has historically marketed a small portion of BMA products against thermal coal indexes. In FY2022, this portion was approximately 6 per cent, up from 2 per cent in FY2021. For purposes of enhancing the transparency and accuracy of our Scope 3 emissions reporting, for FY2022 we have broken out the energy coal portion of BMA product. The portion of energy coal in BMA's product mix is influenced by both production and market forces; we anticipate that assessments into improved product quality will support a reduction in BMA products marketed as thermal coal.

For more information refer to the BHP Scope 1, 2 and 3 GHG emissions calculation methodology available at bhp.com/climate.

Scope 3 GHG emissions by category (MtCO$_2$-e)[1]

Year ended 30 June	**2022**	2021	2020
Upstream			
Purchased goods and services (including capital goods)[2]	**9.9**	10.1	*9.8*
Fuel and energy related activities	**1.0**	1.1	1.2
Upstream transportation and distribution[3]	**4.6**	*4.8*	*4.6*
Business travel[4]	**0.1**	0.1	0.1
Employee commuting[4]	**0.3**	0.4	0.2
Downstream			
Downstream transportation and distribution[5]	**3.2**	*3.1*	*2.9*
Investments (i.e. our non-operated assets)[6]	**2.7**	*2.7*	*2.7*
Processing of sold products[7]			
GHG emissions from steelmaking[8]	**305.3**	300.5	292.9
– Iron ore processing to crude steel	**270.8**	260.7	252.8
– Metallurgical coal processing to crude steel[9]	**34.5**	39.8	40.1
Copper processing[10]	**1.0**	*1.0*	*1.0*
Nickel processing[11]	**0.3**		
Total processing of sold products	**306.7**	*301.5*	*294.0*
Use of sold products			
Energy coal[12,13]	**37.6**	38.3	56.4
Natural gas[13]	**17.4**	19.5	20.6
Crude oil and condensates[13]	**15.9**	16.8	17.9
Natural gas liquids[13]	**1.7**	1.8	1.9
Total use of sold products	**72.6**	76.4	96.8
Total Scope 3 GHG emissions	**401.2**	*400.1*	*412.3*
Total Scope 3 GHG emissions (adjusted for divested operations)[14]	**364.3**	359.7	369.5

1 Scope 3 GHG emissions have been calculated using methodologies consistent with the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (Scope 3 Standard). Scope 3 GHG emissions reporting necessarily requires a degree of overlap in reporting boundaries due to our involvement at multiple points in the life cycle of the commodities we produce and consume. For more information on the calculation methodologies, assumptions and key references used in the preparation of our Scope 3 GHG emissions data refer to the BHP Scope 1, 2 and 3 GHG emissions calculation methodology available at bhp.com/climate.

2 In FY2022, we made further improvements in how we calculate Scope 3 GHG emissions associated with the 'Purchased goods and services (including capital goods)' category by switching the emissions estimation of high-spend goods from select categories (including explosives, grinding media, conveyor belts, tyres, and select bulk materials) from spend-based emissions factors to industry average quantity-based emissions factors or emissions factors sourced directly from suppliers. Previously reported GHG emissions for the 'Purchased goods and services (including capital goods)' category were 8.9 MtCO$_2$-e in FY2021 and 8.8 MtCO$_2$-e in FY2020.

3 Includes product transport where freight costs are covered by BHP, for example under Cost and Freight (CFR) or similar terms, as well as purchased transport services for process inputs to our operations. In FY2022, we successfully developed and operationalised a carbon accounting and decision support system tailored to ship chartering, leveraging DNV's Veracity platform. This also resulted in a restatement of our maritime emissions in the 'Upstream transportation and distribution' category for FY2021 and FY2020. For FY2022, we have also added GHG emissions associated with inbound freight to this category of purchased goods that we transitioned to a quantity method in the 'Purchased goods and services (including capital goods)' category. Previously reported GHG emissions for the 'Upstream transportation and distribution' category were 3.8 MtCO$_2$-e in both FY2021 and FY2020.

4 Minor restatements of emissions for Scope 3 GHG emissions associated with the 'Business travel' and 'Employee commuting' categories, resulting from adjustments to underlying data due to spend data reclassifications, have been made for both FY2021 and FY2020.

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[1] Renewable Energy Directive or International Sustainability and Carbon Certification.

[2] This percentage is calculated as a share of our total spend in FY2021, and total spend is defined as the categories of spend that are relevant to Scope 3 emissions reporting categories, which excludes intra-company payments, internal payroll, community and charitable donations, and expenses associated with regulatory compliance and taxation.

[3] In line with our reporting methodology for Scope 3 emissions, we define our energy products as oil, gas and energy coal. We account for metallurgical coal within the 'Processing of sold products' category (within emissions from steelmaking).

5 This category includes emissions associated with transportation of BHP's products to the customer where we do not cover the freight costs, for example under Free on Board (FOB), Ex Works (EXW) or similar terms. In FY2022, we successfully developed and operationalised a carbon accounting and decision support system tailored to ship chartering, leveraging DNV's Veracity platform. This also resulted in a restatement of our maritime emissions in the 'Downstream transportation and distribution' category for FY2021 and FY2020. Previously reported GHG emissions for this category were 3.8 $MtCO_2$-e in FY2021 and 4.0 $MtCO_2$-e in FY2020.

6 For BHP, this category covers the Scope 1 and Scope 2 GHG emissions (on an equity basis) from our assets that are owned as a joint venture but not operated by BHP. In FY2022, all GHG emissions estimates from non-operated assets were developed from data provided directly by operators. Emissions from Tamakaya Energía SpA (i.e. the Kelar Power plant) that are additional to the emissions reported under Scope 2 for Escondida and Pampa Norte under the operational control boundary are reported in the Scope 3 'Investments' (i.e. our non-operated assets) category. The categorisation of Scope 3 emissions from Tamakaya Energía SpA is under review and may change in the future. Tamakaya Energía SpA emissions for FY2021 and FY2020 have been restated to include emissions associated with Kelar Power Plant generation that was sold to the grid and to update data that was provisional in FY2021. Due to the effective economic date of 31 December 2020 for the sale of BHP's interest in Cerrejón, Scope 1 and Scope 2 emissions (on an equity basis) from Cerrejón are not included in FY2022. Scope 1 and 2 emissions (on an equity basis) from our Petroleum non-operated assets are reported for the Rhourde Ouled Djemma (ROD) Integrated Development, Algeria up to the date of divestment of our interest in the ROD Integrated Development in April 2022, and for the other Petroleum non-operated assets up to the completion date of the merger of our Petroleum business with Woodside of 1 June 2022. Previously reported GHG emissions for this category were 2.5 $MtCO_2$-e in FY2021 and 2.6 $MtCO_2$-e in FY2020.

7 Scope 3 GHG emissions associated with downstream processing of our zinc, gold, silver, ethane, cobalt, and uranium oxide products are not currently included, as production volumes are relatively low and a large range of possible end uses apply and/or downstream emissions are estimated to be immaterial. Processing/refining of petroleum products is also excluded as these emissions are considered immaterial compared to the end-use product combustion reported in the 'Use of sold products' category.

8 All our iron ore and metallurgical coal products are assumed to be processed into steel. Allocation of steelmaking GHG emissions to BHP's metallurgical coal is based on the global average input mass ratio of metallurgical coal vs iron ore to the blast furnace-basic oxygen furnace (BF-BOF) steelmaking route. The GHG emission factor used to estimate Scope 3 GHG emissions reflects the blast furnace integrated steelmaking route into which the majority of BHP's steelmaking raw materials portfolio is sold. The estimation also considers BHP iron ore product quality and its impact on the amount of ore required to produce steel. We will monitor and adjust, as required, the balance of intensity factors to reflect any evolution in our product quality and/or flows through to other pathways (such as direct reduced iron electric arc furnace (DRI-EAF)).

9 Emissions associated with customers' processing of metallurgical coal products (on an equity basis) from BMC are reported up to the completion date of divestment of our interest in BMC of 3 May, 2022. This does not have an impact on total GHG emissions reported from steelmaking due to the integrated nature of our calculations with our iron ore production volumes, and therefore does not impact the illustrative 'Total Scope 3 emissions (adjusted for divested operations)' figure provided at the end of the table. See footnote 14 for more details.

10 In FY2022, we increased the granularity of calculations for downstream emissions associated with the processing of our copper products. We now split our product volumes into copper concentrates that are processed into cathodes by third parties and our own copper cathodes, which are assumed to be processed into copper semi-fabricated products. This has also removed the double counting of our Scope 1 and 2 emissions previously present in our calculations. This has resulted in a restatement of copper processing in the 'Processing of sold products' category for FY2021 and FY2020. Previously reported GHG emissions for copper processing in the 'Processing of sold products' category were 5.0 $MtCO_2$-e in FY2021 and 5.2 $MtCO_2$-e in FY2020.

11 In FY2022, we also began reporting downstream Scope 3 emissions for nickel processing to increase transparency as our nickel business grows to be sufficiently material to report. Our methodology covers downstream emissions from customers' processing of BHP's nickel products in four segments. Based on sales data, we estimate emissions of (1) our nickel intermediates that goes to third-party refiners; (2) nickel metal that goes into stainless steel and alloys production; (3) nickel metal that goes into nickel sulphate ($NiSO_4$) for battery value chains; and (4) BHP's $NiSO_4$ that goes directly into battery precursor active material production. Historical emissions have not been retroactively reported as GHG emissions for nickel processing in the 'Processing of sold products' category are estimated to be immaterial.

12 BHP has historically marketed a small portion of BMA products against thermal coal indexes. In FY2022, this portion was approximately 6 per cent, up from 2 per cent in FY2021. For purposes of enhancing the transparency and accuracy of our Scope 3 emissions reporting, for FY2022 we have estimated the energy coal component of BMA production based on the percentage of BMA product marketed as thermal coal and associated GHG emissions and included that under energy coal in the 'Use of sold products' category. We have not restated energy coal emissions in the 'Use of sold products' category for FY2021 and FY2020 as the energy coal component of BMA's sales in those years is estimated to be immaterial. We will continue to review the energy coal contribution from BMA in future years. Due to the effective economic date of 31 December 2020 for sale of BHP's interest in Cerrejón, Scope 3 emissions for customers' processing of product from Cerrejón are not included in FY2022.

13 All crude oil and condensates are conservatively assumed to be refined and combusted as diesel. Energy coal, natural gas and natural gas liquids are assumed to be combusted. Scope 3 emissions associated with customers' use of energy products from our Petroleum business were reported up to the date of divestment of our interest in the ROD Integrated Development in April 2022, and up to the effective date of the merger of our Petroleum business with Woodside of 1 June 2022 for the other Petroleum assets.

14 Due to the merger of our Petroleum business with Woodside (completed on 1 June 2022), divestment of our interest in the ROD Integrated Development (completed in April 2022), divestment of our interest in BMC (completed on 3 May 2022), and divestment of our interest in Cerrejón (completed 31 December 2020), associated downstream Scope 3 emissions from the 'Use of sold products' and 'Investments' categories are removed to generate this illustrative total, noting that other categories have not been removed for the merger or divestments due to the complexity of underlying data. Due to the current methodology we use for estimating steelmaking emissions, the removal of BMC emissions does not impact the total for 'Processing of sold products' category (also see footnote 9). Due to the effective economic date of 31 December 2020 for sale of BHP's interest in Cerrejón, Scope 3 emissions (on an equity basis) from Cerrejón are not included in FY2022 reporting. As a result, the removal of Cerrejón only impacts FY2021 and FY2020 emissions totals for the 'Total Scope 3 GHG emissions (adjusted for divested operations)' figure.

Natural climate solutions

Investing in natural ecosystems is a cost-effective and immediately available solution to mitigate climate change that often provides sustainability co-benefits, such as biodiversity conservation, improved water quality or support for local communities. We support the development of market mechanisms that channel private sector finance into projects that increase carbon storage or avoid GHG emissions through conservation, restoration and improved management of terrestrial landscapes, wetlands and coastal and marine ecosystems. We focus on project support, governance, knowledge and innovation, and market stimulation for carbon credits generated by these projects. For example, in FY2022 we launched a new A$3 million grants program to help drive the development of the Australian blue carbon market by providing funding and support to emerging blue carbon projects.[1]

Governance

BHP advocates for the development of efficient global carbon markets that facilitate high-quality offsetting that is both cost-effective and delivers broader sustainability co-benefits. We are an active member on several international carbon markets bodies including the International Emissions Trading Association and the Taskforce on Scaling Voluntary Carbon Markets.

Use of carbon credits or offsets

BHP prioritises emissions reduction at our operated assets to achieve our Scope 1 and 2 target and goal, with investments in external carbon offset projects considered complementary to this 'structural abatement'. Although we prioritise internal emission reduction, we acknowledge a role for offsets in a temporary or transitional capacity while abatement options are being studied, as well as for 'hard to abate' emissions with limited or no current technological solutions, and where access to renewable energy is constrained.

BHP has five potential 'use cases' for carbon offsets, to complement the structural emissions abatement that we prioritise (refer to the 'BHP Carbon Offset Use Cases' table). This includes contributing to our Scope 1, 2 and 3 emission reduction targets and goals and complying with emissions regulations (e.g. under the Australian Safeguard mechanism) as we work to decarbonise our business. We use our social investment to fund research into new and emerging natural carbon offsetting methodologies, and to fund offsets projects with social value co-benefits in line with our social value framework.[2] We also explore commercial opportunities to work with organisations in our value chain to supply offsets to supplement their focus on emissions abatement, including the bundling of offsets into product transactions.[3]

Sourcing

We perform due diligence designed to ensure we invest in carbon offsets that adhere to the following minimum quality standards:[4]

- **Registered under an internationally recognised standard** that independently verifies and issues voluntary carbon credits and/or satisfies national carbon offset standards for compliance offsets.
- **Adheres to a robust emission reduction accounting methodology** to provide assurance of the volume of emissions reduced through a project.
- **Demonstrates that the emissions reductions are additional** to ensure that the emissions would not have been reduced in the absence of a carbon offset market.
- **Has a high likelihood of permanence** to ensure the emissions reduction are ongoing and not reversed (e.g. in the case of forestry projects, the trees are not cut down or destroyed by a natural disaster).
- **Provides robust mitigation against leakage** ensuring an offsetting project does not increase emissions elsewhere (e.g. an area is protected from deforestation through offsetting but another forest area is destroyed).

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[1] For more information refer to bhp.com/news/articles/2022/06/new-bhp-grants-to-support-blue-carbon-market.

[2] For more information refer to bhp.com/sustainability/communities/social-investment.

[3] For example, we undertook a pilot carbon neutral commodity transaction with US copper cable and wire manufacturer, Southwire. We did not retire any of the offsets tied to that transaction against our own voluntary targets or goals. For more information refer to bhp.com/news/media-centre/releases/2021/10/bhp-and-southwire-collaborate-for-first-carbon-neutral-copper-cathode-delivery.

[4] For more information refer to bhp.com/sustainability/climate-change/carbon-offsets.

BHP carbon offset use cases

BHP may use carbon offsets in five cases, to complement the structural emissions abatement that we prioritise

1. Scope 1 and 2 voluntary targets and goals	2. Scope 3 voluntary targets and goals	3. Regulatory compliance	4. Social investment	5. Commercial opportunities
Using offsets to meet the target and goal that we have set for our operational emissions, as we work to decarbonise our business.	Working with our suppliers and customer on the use of offsets to supplement their focus on emissions abatement.	Using offsets to comply with regulation in our operational locations, as we work to decarbonise our business.	Offsets generated through our actions to develop global carbon markets, invest in nature and support communities to deliver social value.	Bundling offsets into BHP product transactions to differentiate our products and supplement our customers' focus on emissions abatement.

- **Demonstrates high environmental and social integrity** ensuring no broader social or environmental harm (e.g., hydropower projects that require forest clearing and community displacement).
- **Restrict early vintage years** to avoid claiming emissions reduction from activities that occurred a long time ago; typically this means not purchasing offsets with a vintage greater than five years.

BHP's carbon offsets are from a variety of sources including (but not limited to) spot markets and project origination. We see a role for offsets from solutions that remove atmospheric carbon as well as avoid emissions. While we prioritise offsets from nature-based solutions, we also consider the sourcing of offsets from engineered solutions.

BHP is committed to transparently disclosing the carbon offsets that we retire towards meeting our own climate change targets and goals. We did not retire any offsets for this purpose in FY2022.

Engagement and disclosure

Achieving the aims of the Paris Agreement will require supportive policy across jurisdictions globally. The policy-making process is complex, and change is unlikely to be smooth or linear. We believe BHP can best support policy development by ensuring we meet our own climate targets, goals and strategies, continuing to make the case for the economic opportunities arising from the energy transition, and focusing on those policy areas where we are likely to have the greatest ability to influence change.

Our Global Climate Policy Standards clarify how our policy positions on climate change should be reflected in our own advocacy and the advocacy of the associations we belong to. Over the past five years, we have introduced a range of measures to strengthen governance of our membership of industry associations and monitor their climate change advocacy.

More information on our approach to industry associations is available at bhp.com/about/operating-ethically/industry-associations.

BHP was one of the first companies to align its climate-related disclosures with the recommendations of the Financial Stability Board's TCFD, of which our Vice President Sustainability and Climate Change, Dr Fiona Wild, has been a member since its inception in late 2015. We published our Climate Change Report in 2020, and also participate in the CA100+ Net Zero Carbon Benchmark (NZCB), which assesses the world's largest corporate GHG emitters on their progress in the transition to the net zero future.

In September 2021, we published the CTAP, which sets out the steps BHP intends to take to reduce GHG emissions to net zero within our own operations and to pursue net zero in our value chain. The CTAP received approval from 84.9 per cent of shareholders in the 'Say on Climate' advisory vote at our AGMs in 2021.

We also engage on policy matters directly with government and through our membership of industry associations and issue-specific coalitions and initiatives. Examples of these engagements are provided at bhp.com and in the 'Climate policy engagement' section of our CTAP.

Our TCFD-aligned disclosures and information in support of our NZCB assessment can be found throughout this Report, in our BHP Climate Change Report 2020 and CTAP and at bhp.com. For a navigator showing where to find relevant information in relation to the TCFD recommendations refer to 'TCFD index' in OFR 7.1.

7.9 Value chain sustainability

Our role as both a supplier and a customer means it is important we have a coordinated and integrated approach to sustainability across the value chain. We strive to work with our customers, suppliers and other stakeholders in the value chain to create social value through sustainable practices across the full life cycle of our products.

BHP takes a systems approach to value chain sustainability, designed to assess and work with others to improve the sustainability impacts of our upstream supply chains, inbound and outbound logistics, and our products as they move through extraction, processing and use.

In FY2022, BHP developed a sustainability standards strategy that defines our pathway for the implementation of responsible mining and sourcing standards. The strategy is focused on the foundations needed to enable a more efficient adoption of standards to better position BHP's participation in the sustainability standards landscape. We also established a global sustainability standards team to enhance our systems and processes, integrate planning and enable a more strategic approach to the governance and implementation of sustainability standards across BHP's operated assets. This team also has accountability for sustainability reporting and disclosure, bringing together our work on sustainability standards and further strengthening our approach to transparency and standards across the value chain.

The standards that form part of our strategy are:

- the Copper Mark
- the London Metal Exchange (LME) Policy on Responsible Sourcing of LME-Listed Brands
- the ICMM Mining Principles and associated Performance Expectations
- the Global Industry Standard on Tailings Management
- Towards Sustainable Mining (TSM)

Accreditations

Our Chilean operations Escondida and Spence, and Olympic Dam in Australia were awarded the Copper Mark during FY2022 to recognise their responsible production practices. The Copper Mark is a voluntary assurance framework that independently assesses participants in 32 critical areas, including environment, community, human rights and governance issues for mining, smelting and refining operations.

Escondida, Spence and Olympic Dam also completed independent third-party verification of self-assessments against the ICMM Mining Principles and associated Performance Expectations. The ICMM Mining Principles require member companies to conduct a prioritisation process to determine which assets will be subject to third-party validation across a three-year cycle.

All BHP's operated assets have completed their self-assessments and the external validation sequence has been determined in consideration of commitments made by BHP to other standards, such as Copper Mark and the LME Policy on Responsible Sourcing of LME-Listed Brands, to enable operational efficiencies.

We recognise the importance of engaging in the sustainability standards ecosystem and we support simplification of the standards landscape and convergence of standards. Integrating multiple global and commodity-specific standards is a complex task and in FY2022 we engaged in a number of forums focused on sustainability standards – through the ICMM, the Minerals Council of Australia and the Mining Association of Canada as well as with standard-setting bodies like the Copper Mark, and the OECD and LME.

In FY2022, BHP disclosed aspects of our sustainability performance through the LMEpassport, which is the LME's new digital credentials register to enable companies that trade LME-listed brands to disclose their sustainability metrics and certifications at corporate, asset and brand levels. BHP added information related to our copper and nickel LME-registered products from Olympic Dam, Escondida, Pampa Norte and Nickel West.

Due diligence

In FY2022, a cross-functional team defined a clear scope and began developing a due diligence management system for our minerals and metals supply chain that aligns with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (OECD Guidance). This means that, for our operated assets and our inbound supply chain of minerals and metals, BHP intends to adopt the OECD Guidance's Annex I five-step, risk-based due diligence framework in the form of a new due diligence management system. The new system will involve updating policies and procedures, and ensuring appropriate resources designed to identify, assess and manage risks in our minerals and metals supply chain where there is any origin, transport or trade association with conflict-affected and/or high-risk areas.

Alignment with the OECD Guidance is a reflection of better practice supply chain due diligence and it is also a requirement under the responsible sourcing standards of leading mining and metals industry bodies, including the LME, the Copper Mark, the ICMM, and TSM. In FY2023, we aim to finalise our OECD-aligned due diligence management system and commence implementation of that system for our minerals and metals supply chain.

For more information about the scope of our OECD-aligned due diligence refer to our Modern Slavery Statement 2022 to be published in September 2022 at bhp.com.

Emerging sustainability initiatives

We also continue to identify sustainability-related opportunities in BHP's value chain.

We see traceability as a key enabler to lifting sustainability standards across the value chain. In FY2022, BHP and leading US copper cable and wire manufacturer, Southwire, completed their first 'carbon neutral'[1] copper transaction, involving delivery from BHP's mines in Chile to Southwire's processing activities in Georgia, United States. The pilot forms part of a collaboration for BHP that reflects our Climate Transition Action Plan commitment to support industry to develop technologies for improved traceability and the pursuit of carbon-neutral production.

Additionally, circular economy principles are an increasingly critical consideration for building sustainable supply chains in relation to our commodities that meet growing demand for our products, support goals to reduce GHG emissions and minimise the impact of mining and downstream processing on the environments and communities where we operate. Across the business, we are working to identify opportunities that leverage our capabilities to create solutions that can contribute towards a circular economy.

7.10 Community

Making a positive contribution to the social and economic wellbeing of the communities where we operate requires long-term partnerships based on respect, transparency and trust. Our actions and approach are governed by the *Our Requirements for Community* standard and *Our Code*.

Community understanding

We understand our activities have the potential to create social, cultural, environmental and human rights impacts, both positive and negative. To analyse the potential risks to communities where we operate, we conduct due diligence to better understand social and human rights contexts, work collaboratively with our community stakeholders, and look for opportunities to create social value.

As part of our due diligence processes, we conduct community perception research in local host communities for each of our operated assets every two years. In FY2022, quantitative and qualitative surveys at all operated assets provided insights into the public's general concerns and priorities as well as perceptions of mining sector and BHP performance. Globally, community perceptions of our overall performance is positive, being on par or above average when compared to others in the sector in most markets. We tend to be perceived as being safety driven, behaving in a way that promotes diversity and inclusion, having a positive relationship with the community, and providing opportunities for local employment and procurement. The areas where people perceive room for improvement include exceeding regulatory requirements, doing the right thing by the environment, being a leader in water management and taking a more active role in the global response to climate change.

Our operated assets are also required to maintain annual stakeholder engagement plans and conduct regular engagement activities, including one-on-one meetings, multi-stakeholder roundtables, issue-based consultation and written communications. These engagements provide a valuable space for more open and in-depth dialogues with stakeholders on issues such as those raised in our community perception research, exploring mutually beneficial solutions and building trust.

Community events, complaints and grievances

With no significant community events recorded as resulting from BHP operated activities in FY2022, our five-year target of no significant community events between FY2018 and FY2022 has been met.[2] There were 50 community concerns and 106 complaints (five of which were classified as grievances)[3] received globally across our operated assets through our local complaints and grievance mechanisms. This represented a total increase of 8 per cent from FY2021 figures. The increase is attributable in large part to an overall rise in the level of community reporting, which we consider to be a positive sign that provides earlier opportunities to seek to address issues and understand sentiment to avoid or reduce the adverse impact and risk of escalation.

These concerns, complaints and grievances included:

- The two most common themes across BHP operated assets were concerns regarding: (i) the continued impacts of the COVID-19 pandemic and associated recovery initiatives; and (ii) local employment.
- In Chile, community concerns focused on environmental impacts and the overall sustainability of the mining industry, the development of local communities and the impacts of automation. Complaints about contractor behaviour included claims that certain commitments were not honoured and some local Indigenous community stakeholders raised concerns about water resources in the high Andean wetlands and greater employment opportunities at Escondida.
- In Canada, community concerns and complaints related to the increase in activity at the Jansen Potash Project, including routes of haul trucks and greater community support and local procurement opportunities.
- In Australia, key community issues centred on local employment and associated skills and labour shortages, the impact on local procurement from supply chain delays, and our COVID-19 vaccination mandate with particular mental health and wellbeing concerns raised by Traditional Owners. Community complaints also related to operational impacts, largely lighting, dust, noise, odour, emissions, blasting overpressure and vibration.
- Following the announcement of the divestment of our interest in BMC, some local stakeholders focused on whether community support would continue under new ownership and the local Traditional Owners sought assurance that the Indigenous Land Use Agreement would be honoured by the new owners.
- The announcement that BHP would retain New South Wales Energy Coal and intends to proceed with a managed process to cease mining at the asset by the end of FY2030 was received in a neutral to positive manner overall, with community stakeholders generally expressing support for BHP retaining the asset to a managed closure rather than selling to new owners.

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[1] 'Carbon neutral' is not intended to imply certification under any standard or application of a particular methodology and includes all those greenhouse gas emissions as defined for BHP reporting purposes.

[2] A significant event resulting from BHP operated activities is one with an actual severity rating of four or above, based on our internal severity rating scale (tiered from one to five by increasing severity) as defined in our mandatory minimum performance requirements for risk management.

[3] An event or community complaint relating to an adverse impact/event that has escalated to the point where a third-party intervention or adjudication is required to resolve it.

While we have collected information and sought to understand community issues for some time, in FY2022 we identified opportunities to enhance the visibility and representation of community issues across BHP, including:

- broadening our community data sets to create a more integrated and multidimensional understanding of community issues, including the incorporation of inputs received via Indigenous-specific engagement channels
- greater data triangulation and the overlay of regional, national, global and industry emerging trends analysis with local insights
- implementing an enterprise-wide stakeholder management system with linkages to our local community complaint and grievance mechanisms
- enhancing internal understanding of reporting processes, systems and requirements

More information on community is available at bhp.com/community.

7.11 Human rights

Governance and capability

The basis for BHP's human rights approach is an ongoing commitment to operate in a manner consistent with the UN Guiding Principles on Business and Human Rights (UNGPs) and the 10 UN Global Compact Principles.

Our Human Rights Policy Statement (HRPS) details our commitment, including the additional issue-specific frameworks we adhere to as well as the standards and processes set out for our people, business partners and other relevant parties. Updates to the HRPS commenced in FY2022 to more clearly articulate how our human rights governance and due diligence approach is organised.

Our Code of Conduct (Our Code), which applies to everyone who works for us, with us, or on our behalf, includes a section on human rights. Annual training on *Our Code* is mandatory and we provide an additional introductory human rights training video on our internal learning system and our website. Teams within Corporate Affairs and Commercial who lead our operational and supply chain human rights practices completed further human rights training with an external expert to better support their capabilities to identify and manage human rights risks and potential impacts. Our Directors also participated in human rights training, led by an external expert.

Due diligence

In FY2022, we used human rights impact assessments completed in FY2021 to conduct a gap analysis of each operated assets' material risk profile (as recorded in our enterprise risk management system) and identified opportunities for improvement, including:

- better representing the human rights context and potential impacts to human rights for existing material risks, including labour conditions (such as sexual harassment and mental health) and environment (such as climate change, water and biodiversity)
- improving representation of specific human rights risks in our risk profile, such as risks in local procurement programs that operate

Stakeholder concerns by region[1]

Chile

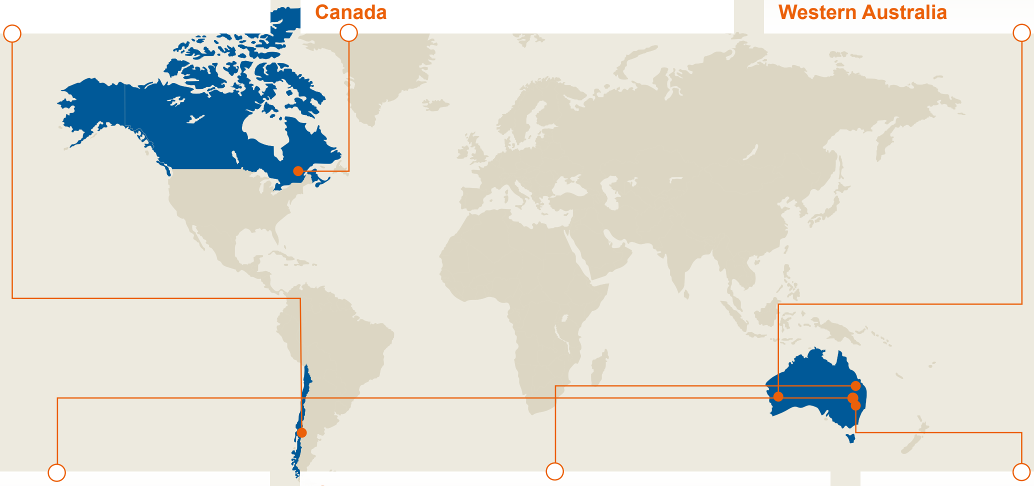
- Environmental performance and sustainability of the industry
- Local employment
- Automation
- Air quality (Spence)
- Contractor behaviours (Spence)

Canada

- Road and traffic impacts due to enhanced operations
- Legitimacy of Community Perception Survey
- Contractor behaviour and performance
- Lack of small business opportunities

Western Australia

- Emissions – dust and noise
- Crime and anti-social behaviour
- Traditional Owner engagement
- Lack of access to health services
- Heritage protection



New South Wales

- Operational impacts including lighting, blasting overpressure and vibration
- Divestment uncertainty
- Thermal coal export markets
- COVID-19 impacts and recovery

Queensland

- Local employment including skills and labour shortages
- Local procurement and supply chain delays for goods and services
- COVID-19 including workforce vaccination mandates, Traditional Owner engagement, labour and supply chain shortages, and mental health impacts
- Cost of living, housing affordability and availability
- Regional childcare availability
- Divestment of BMC asset and continuity of community commitments

South Australia

- Lack of childcare availability
- Availability and affordability of community flights
- Youth mental health
- Smelter maintenance campaign

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[1] Data includes BMC up to the date of completion of the sale (3 May 2022).

Human rights signpost

Priority area	FY2022 update
Health and safety	Given the scope, scale and nature of our business, our workforce health and safety conditions are an important focus area for human rights considerations. **OFR 7.4 – Safety** details the ongoing work to eliminate the risk of fatalities and injuries, create workplaces safe from sexual harassment, as well as improve our workplace culture through field leadership and contractor relationships. **OFR 7.6 – Health** details the ongoing work to prevent or mitigate occupational exposures and illnesses, address COVID-19 and support mental health.
Ethics and business conduct	*Our Code* brings our values to life. It includes an emphasis on respecting human rights and is reviewed annually. **OFR 7.7 – Ethics and business conduct** describes how we apply *Our Code* and provides an update on progress related to transparency, accountability and anti-corruption. **OFR 6 – People and culture** describes our approach to inclusion and diversity, gender balance and employee relations.
Community	There are many human rights potentially relevant to the communities where we operate, including rights related to freedom of expression and self-determination as well as economic, social and cultural rights, such as health and wellbeing, work, adequate housing and water and sanitation. **OFR 7.10 – Community** details our work to build and maintain respectful, mutually beneficial relationships with the communities where we operate. **OFR 7.14 – Social investment** describes how we seek to support key community priorities across our operational footprint through our voluntary investment to social and environmental initiatives.
Indigenous peoples	We recognise our approach must be founded on a deep respect for the distinct rights, cultures, perspectives, aspirations and needs of Indigenous peoples. **OFR 7.13 – Indigenous peoples** provides an update on our Global Indigenous Peoples Framework.
Climate change	We recognise climate change is a human rights issue, with potential risks to the fundamental rights to life, health, food and an adequate standard of living. We continue to progress our climate targets, goals and strategies and implement our Adaptation Strategy, which includes a focus on building the safety, productivity and climate resilience of our operated assets, investments, portfolio, supply chain, communities and ecosystems by adapting to the physical risks of climate change. **OFR 7.8 – Climate change** details our ongoing work in this space.
Environment, water, biodiversity and land	We acknowledge the nature of our operations can have significant environmental impacts and those impacts can affect people and their human rights. **OFR 7.15 – Environment** details our overall approach to environmental management, including seeking to avoid, minimise and mitigate our adverse impacts and contribute to the resilience of the natural environment. **OFR 7.16 – Water** provides an update on our Water Stewardship Position Statement, which emphasises working with communities on shared water challenges, including water infrastructure, access, sanitation and hygiene. **OFR 7.17 – Biodiversity and land** provides an update on our work to develop a marine and terrestrial biodiversity framework for BHP and the revision and formalisation of our global-level biodiversity strategy.
Tailings storage facilities	We recognise the failure of a tailings storage facility could result in adverse health and safety outcomes and environmental damage, potentially infringing on the rights to health, property, an adequate standard of living and at worst, the right to life. **OFR 7.18 – Tailings storage facilities** provides an update on our ongoing commitment to the Global Industry Standard on Tailings Management and our aspiration to achieve zero harm from tailings.

independently of our global procurement process, the risk of violating consultation and consent frameworks that respect the rights of Indigenous peoples, the risk of lacking accessible and effective complaints and grievance mechanisms, and analysis regarding potential impacts specific to vulnerable groups (such as Indigenous peoples, women and LGBT+ community)

We are reflecting these learnings in our internal governance standards and processes, which are planned to be updated in FY2023.

In FY2023, relevant risk owners and regional teams will work with our human rights subject matter experts to progress these opportunities for improvement. We intend to also pursue opportunities to improve our overall due diligence process, such as enhancing our external human rights research, better highlighting stakeholder voices throughout our due diligence and better integrating human rights analysis into business planning cycles and our Risk Framework.

Our Modern Slavery Statement 2022, prepared under the Australian Modern Slavery Act (2018) and UK Modern Slavery Act (2015), provides additional information regarding the management of modern slavery risks for our operations and global supply network and will be available in September 2022 at bhp.com.

Response and remedy

In FY2022, we continued to evaluate feedback from our stakeholders, external experts and internal teams on how to make our complaints and grievance mechanisms more accessible and our internal culture and processes more effective in identifying concerns that have a human rights connection. We plan to embed this feedback in our approach by the end of FY2023.

We recognise our business activities create human rights risks and potential impacts across several different areas. In FY2023, we will continue to integrate a human rights perspective when designing, implementing and evaluating our ways of working related to these issues. The human rights signpost table highlights the priority areas identified by our human rights impact assessments and where key updates may be found in this Report.

Reporting and disclosure

During FY2023, we intend to develop a refreshed human rights reporting framework that will:

- better align to the UNGP Reporting Framework Index
- include quantitative metrics for our operations and our supply chain, as well as qualitative commentary and the voices of rights holders
- focus on mid- to long-term outcomes in addition to short-term outputs

7.12 Security services

Security risk management

Identifying, understanding and managing physical security risks is critical to the protection of BHP's people, assets and reputation. The security risks we face are complex, constantly evolving and differ across the jurisdictions where we operate. We seek to understand the physical security threats we face, to inform the development of security programs that protect our people within a dynamic and constantly changing external environment. We use security controls and mandatory minimum performance requirements to reduce the likelihood of security risks materialising and mitigate their impact if they do. We support this with external environment monitoring, including through our enterprise emerging risk process, to identify changes in the external environment that could shift our exposure to security threats across the jurisdictions where we operate.

BHP is committed to aligning with the Voluntary Principles on Security and Human Rights and sets mandatory minimum performance requirements for our operated assets, to support implementation of these principles.

Responding to a rapidly changing external environment

We are operating in an increasingly volatile, uncertain world, where the physical security risks we face are evolving from local criminal activity and asset protection risks to more complex transnational threats, which transcend traditional asset and jurisdictional boundaries. Key emerging themes include social activism, international criminal enterprise, global terrorism and war. We are also seeing the increasingly integrated nature of physical security with other risk areas, including the physical security threats that stem from cybersecurity risks or climate-related risks. These threats are developing against a backdrop of increasing anti-government sentiment, inequality and political polarisation across the globe; challenges that have been exacerbated by COVID-19.

To respond to this shifting external landscape, in FY2022 we established a new Group Security function, to provide additional expertise and support to the business and conduct assurance over security risk management globally.

Priorities for the function include revising our security framework, to refresh BHP's mandatory minimum global security requirements and developing a consistent taxonomy for defining and categorising security threats. This is designed to support robust security risk identification across our operated assets and functions. The team will also build upon its existing network of intelligence sources in FY2023, by establishing an integrated approach to threat intelligence. This will provide decision-makers with a tailored and consolidated view of security insights and support risk-informed decisions.

We are also enhancing BHP's understanding of the key intersecting security risks that could impact us to provide an integrated view of potential vulnerabilities. This will be complemented by the implementation of a structured global assurance program.

7.13 Indigenous peoples

We respect the distinct identities and perspectives of Indigenous peoples and recognise the rights, cultures, insights, aspirations and needs that result from those identities and perspectives. We also recognise our responsibility to develop partnerships based on respect and to pursue mutually beneficial outcomes. These responsibilities are central to BHP's Global Indigenous Peoples Framework.

The Global Indigenous Peoples Framework consists of three key elements:

1 BHP Indigenous Peoples Policy Statement

2 BHP Indigenous Peoples Strategy and Good Practice Guidance

3 Regional Indigenous Peoples Plans

First adopted in FY2015, this Framework has played a key part in guiding BHP towards being an organisation that engages meaningfully and respectfully with Indigenous peoples. However, it has been several years since it was developed and during this time the external environment and BHP's own purpose, strategy and operating footprint have significantly evolved. Accordingly, BHP has undertaken a review of the Framework, informed by an extensive process of internal and external research and consultation, including extensive engagement with Traditional Owners and First Nations representative organisations, leading external experts, BHP employees and leaders, and several investors.

This review has identified a number of opportunities for BHP to further strengthen the Framework, so that it continues to be aligned with our purpose, advances across our mandatory minimum requirements for community and human rights, and our social value framework and new 2030 goals.

BHP agreement-making processes are built on the core principles of good faith negotiation aimed at achieving consent, with a focus on understanding the historical, legal, social, cultural and political contexts relevant to Indigenous peoples in the areas where we operate or seek to operate; and how our activities might impact the rights of potentially affected Indigenous peoples.

The newly established Global Indigenous Engagement and Community team continues to progress immediate opportunities for alignment and improvement initiatives across our operated assets and functions, globally. New senior Indigenous leaders have been appointed and are actively working with the regional teams to support our approach to cultural heritage management, agreement-making, procurement, employment and social investment – all of which are core components of our Global Indigenous Peoples Framework.

Global Indigenous Peoples Framework

BHP Indigenous Peoples Policy Statement

BHP aims to be a partner of choice for Indigenous peoples through which our relationships contribute to their economic empowerment, social development needs and cultural wellbeing.

BHP Indigenous Peoples Strategy

Governance

Indigenous peoples should derive significant and sustainable benefit from BHP operations through the effective governance and management of land access, cultural heritage management, agreement-making and benefit distribution processes.

Economic empowerment

BHP seeks to contribute to the economic empowerment of Indigenous peoples through investment which provides opportunities for employment, training, procurement and Indigenous enterprise support.

Outcomes

Social and cultural support

BHP will seek to contribute to improved quality of life for Indigenous peoples through voluntary social investment, support for reinforcement and promotion of Indigenous culture and building the Indigenous cultural awarenesss of our workforce.

Public engagement

BHP will seek to contribute to specific initiatives, programs and public policy processes which advance the interests of Indigenous peoples consistent with the BHP Indigenous Peoples Policy Statement.

Regional Indigenous Peoples Plans

BHP Good Practice Guidance

Minerals Australia

Indigenous cultural heritage protections are a key component of our relationships with Indigenous peoples and our ability to operate sustainably. We seek to ensure our standards are best practice and forward looking.
On 18 October 2021, the Commonwealth Joint Standing Committee on Northern Australia handed down its report into the destruction of Indigenous heritage sites at Juukan Gorge. While there were no adverse findings or recommendations made specifically in relation to BHP, we are committed to understanding the lessons available from this extensive body of work.

Significantly, the finalisation of the Committee's Report has coincided with important law reform in Western Australia. The Aboriginal Cultural Heritage Act 2021 (WA) provides a revised framework for the recognition, protection, conservation and preservation of Western Australian Aboriginal cultural heritage. The new Act repeals the outdated Aboriginal Heritage Act 1972 (WA) and removes the former section 18 approvals process.

In advance of this law reform, in FY2021, BHP confirmed to Traditional Owners that we would not act on existing section 18 approvals from the Western Australian Government without further extensive consultation with the Traditional Owners. In the case of the South Flank project, BHP and the Banjima people established a Heritage Advisory Council. In the period since, the Heritage Advisory Council has met many times to consider appropriate heritage management practices in the Central Pilbara and to record this common understanding in the form of Cultural Heritage Management Plans that will guide BHP's operations at those locations.

We are committed to the making of land use agreements to formalise relationships in a manner that is responsive to the aspirations of Traditional Owners and in compliance with the law. These agreements create partnerships designed to realise mutually beneficial outcomes.

Further to the Indigenous Land Use Agreement reached between BMC and the Barada Barna people in FY2021, in April 2022, BMC and the Widi people entered into a native title project agreement for shared country where both the Barada Barna and Widi peoples hold determined native title rights in the vicinity of BMC's South Walker Creek Mine. In assuming majority ownership and operational control of BMC, Stanmore Resources will be subject to this agreement and its commitments.

With our existing Reconciliation Action Plan (RAP) having concluded in FY2022, we commenced the development of a new FY2023–FY2027 RAP. In a commitment to moving beyond consultation, BHP has been co-developing this new RAP with our stakeholders including, Traditional Owners, Aboriginal and Torres Strait Islander organisations, community partners and our employees across Australia. This process has involved nine separate RAP forums held across Australia. The new RAP will also align to and embed the principles of our Global Indigenous Peoples Framework.

BHP's spend with Indigenous businesses has steadily increased over the past four years. In FY2022, Minerals Australia saw an 75 per cent increase, to US$149.9 million, in our direct spend with Indigenous businesses across our operated assets compared to FY2021 levels. Compared to FY2021 levels, we also increased the number of Indigenous businesses we directly procure from by 53 per cent.

In May 2022, we announced that WAIO intends to more than double its spend with Indigenous vendors to more than US$300 million by the end of FY2024, as it looks to create more opportunities for Indigenous businesses. We also achieved a significant milestone in FY2022 by reaching our Australian Indigenous employment target of 8 per cent, three years ahead of schedule.

In FY2022, in support of efforts to ensure COVID-19 vaccination was accessible to Indigenous Australians, BHP provided A$2 million to Aboriginal Community Controlled Health Organisations (ACCHOs) across Australia. These funds enabled Queensland, Western Australian, New South Wales and South Australian ACCHOs each to receive A$500,000 to distribute to their local Aboriginal Medical Service members or to collective programs that help local medical services accommodate demand. This contribution builds on a donation of A$3.9 million in FY2021, which laid the foundation for partnerships between BHP and organisations in the Indigenous-led health sector as COVID-19 emerged.

Minerals Americas

In line with our Indigenous Peoples Plan for South America, we seek to work closely with the communities where we operate to make a positive contribution, including through reaching agreements with local communities.

In FY2022:

– We created and resourced a new Minerals Americas Indigenous Engagement team to centralise accountability for Indigenous engagement. This promotes alignment across our regions of operation and enables us to share standards and processes designed to support Indigenous communities affected by our existing operations.

– We delivered against our commitment to strengthen our cultural heritage practices within the Americas. Commencing with a particular emphasis on our operations in Chile, we:

- established new critical controls and procedures to manage cultural heritage values within and around our operations
- introduced new information systems and geospatial tools to track and protect cultural heritage sites
- created a dedicated team within our HSE function to administer cultural heritage management activities at the asset level
- reinforced the consideration of cultural heritage management dimensions within our agreement-making practices
- engaged independent experts to analyse existing practice against the emerging Indigenous policy landscape

At Escondida, we continued to advance the implementation of the agreement concerning the environmental sustainability of the Salar de Punta Negra, signed at the end of FY2021 between Escondida, the Chilean Attorney General's Office, the Peine Atacameño Indigenous community and the Council of Atacameño Peoples. Key governance mechanisms have been established and the terms of reference for the conduct of technical studies are currently under development.

At Cerro Colorado, as part of the Indigenous consultation process for operational continuity of this asset, we reached agreement with the San Isidro de Quipisca Indigenous agricultural association. Within the framework provided by the Opportunity Agreement Development Plans, FY2022 saw BHP support the advancement of electrical infrastructure that benefits approximately 80 rural families within the Parca Aymara Indigenous community.

Across our Chilean assets, FY2022 delivered steady increases in our levels of Indigenous workforce participation – with representation reaching 8.7 per cent at year-end. In total, BHP's regional annual spend with Indigenous business for the period was US$9.2 million.

In Canada, following the approval of our Jansen Potash Project in Saskatchewan, we continued our commitment to strengthening our Indigenous relationships and engagement practices with those Indigenous communities impacted by the project. There are six primary First Nations in the vicinity of the Jansen Potash Project. BHP has entered into Opportunity Agreements with all six. Two of these agreements were targeted for refresh in FY2022. In the period, we finalised the review of our Opportunity Agreement with the Fishing Lake First Nation and reached an agreement in principle with regards to refreshing our Opportunity Agreement with the Beardy's & Okemasis' Cree Nation. The Opportunity Agreements we have entered with our Indigenous partners continue to provide a governance framework and a platform to enable economic participation.

In support of the Canadian Government Truth and Reconciliation Commission's calls to advance the process of reconciliation in Canada, we plan to develop our first RAP for Canada in FY2023. The RAP will be designed to enable BHP to address the needs and interests of Indigenous communities within our direct area of influence. The RAP is expected to be co-developed with the stakeholders we seek relationships with, using similar principles to the process undertaken in Australia.

Resolution Copper

Resolution Copper Mining is owned by Rio Tinto (55 per cent) and BHP (45 per cent) and managed by Rio Tinto.

We acknowledge the Resolution Copper project area includes areas of cultural significance for Native American Tribes and their members. Development of the project continues to be studied and remains subject to regulatory reviews by federal, state and local governments. Resolution Copper Mining continues to cooperatively engage in these regulatory processes and has publicly stated its commitment to deepening ongoing engagement with, Native American Tribes and other stakeholders to understand and seek to mitigate potential negative impacts. We are monitoring and supporting Resolution Copper Mining's engagement processes.

7.14 Social investment

Social investment is a further tool to create social value and contribute to the resilience of communities and the environment, in line with our broader business priorities. Our long-standing commitment is to invest not less than 1 per cent of pre-tax profits[1] in voluntary social and environmental initiatives. For FY2023–FY2030, our social investment will be assessed as a total over the seven-year goals period to FY2030, rather than calculated as an average of the previous three years' pre-tax profit. Our social investment performance in the last five years saw BHP fund US$681.4 million in projects with a continued focus on good governance, human capability and social inclusion and environment. For more information on our performance against these and other targets refer to OFR 7.3.

In FY2022, our voluntary social investment totalled US$186.4 million, an increase of 7 per cent compared with FY2021. This investment consisted of US$99.4 million in direct community development and environmental projects and donations, US$14.5 million equity share to non-operated joint venture social investment programs, a US$52.4 million donation to the BHP Foundation and US$1.5 million under the Matched Giving Program. Administrative costs[2] to facilitate direct social investment activities totalled US$16.1 million and US$2.5 million supported the operations of the BHP Foundation.

More information on social investment, including case studies and other initiatives to support communities where we operate is available at bhp.com.

With our most recent five-year sustainability targets completing in FY2022, BHP developed new 2030 goals to further lift our ambitions as we look to the end of the decade. They represent a shift towards partnership, listening and co-creation, and recognise that addressing challenges like community and environment resilience requires close community and stakeholder collaboration.

For more information on our 2030 goals refer to OFR 2.2.

The 2030 goals are intended to be complemented by a continued commitment to social investment of at least 1 per cent of pre-tax profit[3] in addition to our direct operational decision-making and financial contributions.

We intend to continue to report annually our contribution to social value through our social investment.

The BHP Foundation

The BHP Foundation is a charitable organisation established and funded by BHP that blends ambition, transformational partnerships and business acumen to catalyse new solutions to some of the world's most complex social and environmental challenges. The BHP Foundation partners with NGOs and international institutions with the goal of driving systemic change. Globally the Foundation focuses on the governance of natural resources, environmental resilience and education equity. These global programs are complemented by the Foundation's country programs in Australia, Canada, Chile and the United States which work towards improving long-term, economic, social and environmental sustainability at a national level.

Indigenous community investment[1]

RAP target deliverable or metric[2]	Performance				
	FY2018	FY2019	FY2020	FY2021	**FY2022**
Indigenous spend[3]	US$42.8m	US$57.5m	US$67.4m	US$85.5m	**US$149.9m**
Indigenous community investment[4]	US$11.1m	US$8.2m	US$16.6m	US$12.5m	**US$29m**

1 Data includes BMC up to the date of completion of the sale (3 May 2022), operated assets in our Petroleum business up to the date of the merger with Woodside (1 June 2022) and Onshore US assets up to the date of completion of the sale (31 October 2018), as applicable.

2 These RAP targets concluded 31 December 2021.

3 RAP target – The identification of specific opportunities for business development and engagement for Aboriginal and Torres Strait Islander communities in Local Procurement Plans and associated targets.

4 RAP target – Australian operations engage and consult with Aboriginal and Torres Strait Islander Peoples in social research that is conducted to understand local and regional contexts, that then informs social investment planning and outcomes.

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[1] To date, our voluntary social investment has been calculated as 1 per cent of the average of the previous three years' pre-tax profit.

[2] The direct costs associated with implementing social investment activities, including labour, travel, research and development, communications and costs to facilitate the operation of the BHP Foundation.

[3] For FY2023–FY2030, our social investment will be assessed as a total over the seven-year goal period to FY2030, rather than calculated as an average of the previous three-years' pre-tax profit.

Social investment framework

Theme	Aim	FY2022
Future of work	We aim to enhance human capability and social inclusion through education and vocational training and skills development.	– Through our support, 22,401 people completed education or training courses in digital, technology, leadership and/or problem-solving initiatives. Over 10,469 of these participants were Indigenous people and 7,583 were women. – 426 education institutions aligned course content to business needs to better prepare participants for future work readiness. – 1,249 participants found paid employment following completion of their training.
Future of environment	We aim to contribute to environmental resilience through biodiversity conservation, ecosystem restoration, water stewardship and climate change mitigation and adaptation.	– We made 131 investments in nature-based solutions. – We contributed to improved management of approximately 8 million hectares. – 77 scientific or thought leadership papers or specific knowledge sharing events were supported.
Future of communities	We aim to contribute to the understanding, development and sustainable use of resources to support communities to be more adaptive and resilient.	– Through our support, 940 organisations enhanced their internal capability to be able to support and deliver solutions that contribute to building efficient and sustainable communities. – 1,168 organisations planned or delivered initiatives that increase/improve infrastructure, use technology and/or use resources that enhance community resilience, including 171 initiatives specific to Indigenous peoples.

The Foundation's focus is complementary to the social investment work of BHP. Its partnerships include:

- Healthy environment: the Great Barrier Reef Foundation's Resilient Reefs Initiative has been recognised by UNESCO as a model for successful resilience-based coral reef management and will be promoted as a global model for the management of all World Heritage listed reefs.
- Safe inclusive, and future-ready workforce: UN Women's Second Chance Education project is providing more than 90,000 marginalised women access to quality learning, entrepreneurship and employment opportunities.
- Thriving, empowered communities: Open Contracting Partnership works with governments and key stakeholders to ensure money flowing from natural resource wealth is converted into better outcomes for citizens, for example, the implementation of open contracting in Chile has reduced the cost of some medicines.
- Indigenous partnerships: Reconciliation Australia's Narragunnawali: Reconciliation in Education program has resources and tools for schools and early learning services to contribute to the reconciliation movement. Approximately 10,000 Australian schools and early learning services registered to develop a Reconciliation Action Plan on the Narragunnawali platform.

7.15 Environment

We are committed to preventing or minimising our adverse environmental impacts and contributing to the resilience of the natural environment. Our operations and growth strategy depend on obtaining and maintaining the right to access environmental resources. However, with growing pressure on and competition for these resources, and with climate change amplifying certain sensitivities of our natural systems, our environmental performance and management of our environmental impacts on the communities where we operate is critical to creating social value. This is recognised in our social value framework where the objective under our healthy environment goal is to create nature-positive outcomes by having at least 30 per cent of the land and water we steward under conservation, restoration or regenerative practices by 2030.

At every stage in the life cycle of our operated assets, we seek to avoid, minimise and mitigate our adverse environmental impacts in line with our defined risk appetite.

We recognise our activities have an environmental footprint and commit to making voluntary contributions to support environmental resilience across the regions where we operate. Our Group-wide approach to environmental management is set out in the *Our Requirements for Environment and Climate Change* standard and our mandatory minimum performance requirements for risk management.

These standards have been designed taking account of the ISO management system requirements, including ISO14001 for Environmental Management Systems, and set the basis for how we manage risk, including realising opportunities, to achieve our environmental objectives.

The *Our Requirements for Environment and Climate Change* standard requires us to take an integrated, risk-based approach to managing any actual or reasonably foreseeable adverse and positive impacts (direct, indirect and cumulative) on biodiversity, land, water and air. This includes establishing and implementing environmental risk monitoring and reviewing practices throughout our business planning and project evaluation cycles. In addition to the broader environment-specific components, the standard includes climate change related requirements for our operated assets.

To support continuous improvement, each of our operated assets is required to have an Environmental Management System (EMS) that aligns with ISO14001 standards and set target environmental outcomes for biodiversity, land, air and water resources that are consistent with the assessed risks and potential impacts. Target environmental outcomes are included in the life-of-asset plan and approved by the relevant Asset President or equivalent. We verify our EMS by ISO14001 certification (for sites currently holding ISO14001 certification) or through our internal assurance processes.

In FY2022, no significant environmental events resulting from BHP operated activities were recorded, resulting in our five-year public target of no significant environmental events between FY2018 and FY2022 being met.

During FY2022, we successfully delivered the full suite of five-year environment-related sustainability targets. We also continued work to:

- develop a more integrated nature-positive approach and healthy environment goal as part of our 2030 goals
- refresh our Water Stewardship Strategy and formalise our biodiversity strategy
- invest in voluntary conservation projects as part of BHP's contribution to environmental resilience more broadly

BHP joined the Taskforce for Nature-related Financial Disclosure (TNFD) Forum (a group of organisations that support the TNFD Member Group) in recognition of the increasing awareness and understanding needed on nature-related risk and the implications for the resilience of economies and society.

More information on our environmental approach, the *Our Requirements for Environment and Climate Change* standard, and our environmental management and governance processes is available at bhp.com/sustainability.

Contributing to a resilient environment

Biodiversity is essential to maintain healthy ecosystems and the clean air, water and productive landscapes and seascapes we all need to survive and thrive. We are seeing an increasing societal focus on the urgent need to reverse current trends in biodiversity loss and protect vital ecosystems that are the foundation of the world's economic security. As a global resources company, we acknowledge we have a role to play in contributing to environmental resilience both inside and outside our footprint. We do this through our Group-wide water stewardship and biodiversity strategies, our social investment strategy and our work with strategic partners and communities. In June 2022, we expressed our aspiration via our 2030 healthy environment goal (described above) to create nature-positive outcomes. 'Nature positive' is a high-level goal and a concept describing a future state of nature (e.g. biodiversity, ecosystem services and natural capital) which is greater than the current state. This definition comes from the TNFD.

Our collaborative work with strategic partners, including Conservation International, and local communities is focused on contributing to enduring environmental and social benefits through biodiversity conservation and ecosystem restoration, water stewardship and climate change mitigation and adaptation. Our preference is to invest our voluntary social investment funds in projects that contribute to cultural, economic and community benefits in addition to environmental resilience.

Since FY2011, we have invested more than US$95 million of our social investment funds in voluntary environmental resilience initiatives outside our operational area. This funding is in addition to our investment in day-to-day environmental management activities relating to our operations.

More information on the environment and our environmental projects is available at bhp.com/environment.

Our focus on environmental resilience is complementary to the work of the BHP Foundation under its Environmental Resilience Global Program.

More information is available at bhp.com/foundation.

7.16 Water

Access to safe, clean water is a basic human right and essential to maintaining healthy ecosystems. Water is also integral to what we do and we cannot operate without it. In FY2017, we adopted a Water Stewardship Strategy to improve our management of water, increase transparency and contribute to the resolution of shared water challenges. Our Water Stewardship Position Statement was developed in FY2019 and outlines our 2030 vision. In FY2022, we made minor updates to our Water Stewardship Position Statement and Strategy to align with the ambitions of our business and society, and developed our new 2030 healthy environment goal.

More information is available at bhp.com/water.

We recognise our responsibility to effectively manage our interactions with and prevent or minimise our adverse impacts on water resources. Effective water stewardship begins within our operations. We use water in many ways, including but not limited to:

- extracting it for ore processing and to access ore
- dust suppression
- processing mine tailings
- providing drinking water and sanitation facilities
- using marine water for desalination

We work to reduce stress on water resources from our operations and to collaborate with others on challenges and opportunities like water scarcity or high variability in water supply.

We have achieved our public sustainability target to reduce FY2022 freshwater withdrawal[1] by 15 per cent from FY2017 levels[2] across our operated assets. Our FY2022 result demonstrated a 29 per cent reduction on our adjusted FY2017 baseline. Achievement of the target is primarily due to the gradual replacement of groundwater sources with desalinated water for our Escondida operations. This resulted in the cessation of groundwater withdrawal for operational water consumption from the Salar de Punta Negra aquifer in 2017 and from the Monturaqui aquifers in FY2020. This cessation was 10 years ahead of schedule and involved an investment of around US$4 billion in large-scale desalination capability. For more information refer to bhp.com/news/case-studies/2020/09/breaking-the-water-energy-nexus.

Our global freshwater withdrawals from FY2017 to FY2022 are shown in the chart below.

While minimisation of freshwater withdrawal will remain important for us, in some of the regions where we operate it may not be the key water-related risk. In recognition of the variation of challenges and opportunities across the regions where we operate, we committed in our Water Stewardship Position Statement to developing context-based water targets (CBWTs). These CBWTs are intended to contribute more effectively to addressing the shared water challenges in our operating regions.

During FY2022, we engaged third parties to review publicly available information and engage with stakeholders to identify shared water challenges through Water Resource Situation Analyses (WRSAs). We also began development of CBWTs for each of our operated assets, which are informed by BHP's view of water-related risks in the catchments and by the shared water challenges identified in the WRSAs. The WRSAs are expected to be made publicly available to support continued collaboration between stakeholders in the shared water resources of our operating regions.

During FY2023, we intend to publicly release CBWTs for our operated assets and from FY2023 we will report publicly on progress against the CBWTs.

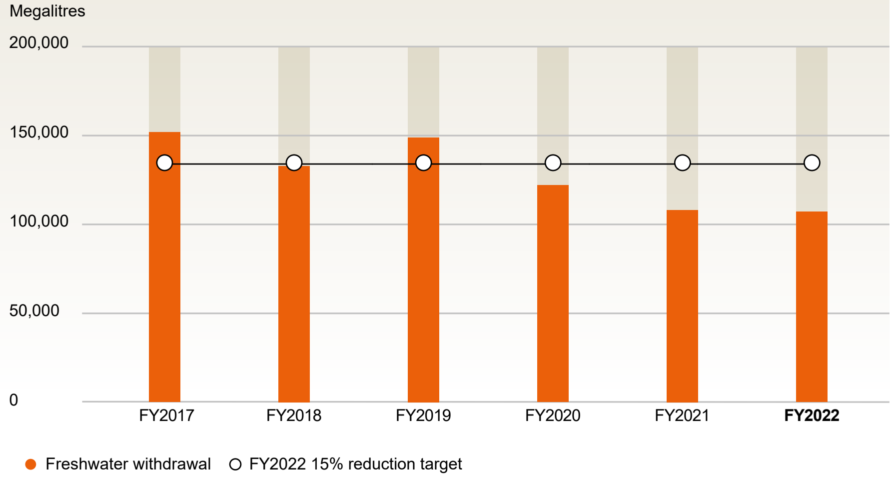
More information on the WRSAs is available at bhp.com/water.

Water accounting and reporting

We report on water metrics and on the management of water-related risks on our water webpage, in line with the ICMM's Water Reporting, Good Practice Guide (2nd Ed) (ICMM guidance) and the Minerals Council of Australia's Water Accounting Framework (WAF).

Generally, these reporting frameworks align with the reporting requirements of the GRI Standards and the CEO Water Mandate.

More information on water accounting and reporting of metrics required by the ICMM guidance is available at bhp.com/water and in our BHP ESG Standards and Databook available at bhp.com/sustainability.


Performance against freshwater withdrawal reduction target[1]

[1] The freshwater withdrawal data includes data from all operated assets under BHP ownership at the end of FY2022. In FY2022, we merged our Petroleum business with Woodside and divested our interest in BMC. Data for the Petroleum business and BMC has been excluded from the FY2017 baseline and annual performance data for our FY2018–FY2022 public sustainability targets for our withdrawal of freshwater (together with our occupational exposures and GHG emissions) to ensure ongoing comparability of performance.

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[1] Where 'withdrawal' is defined as water withdrawn and intended for use (in accordance with 'A Practical Guide to Consistent Water Reporting', ICMM (2017)). 'Fresh water' is defined as waters other than seawater, wastewater from third parties and hypersaline groundwater. Freshwater withdrawal also excludes entrained water that would not be available for other uses. These exclusions have been made to align with the target's intent to reduce the use of freshwater sources of potential value to other users or the environment.

[2] The FY2017 baseline data has been adjusted to account for: the materiality of the strike affecting water withdrawals at Escondida in FY2017 and improvements to water balance methodologies at WAIO and BMA, and exclusion of hypersaline, wastewater, entrainment, supplies from desalination and Discontinued operations (Onshore US assets and Petroleum) and the divestment of BMC.

In FY2022, we continued to report on water volumes for those operated assets classed by the World Wildlife Fund Water Risk Filter as being located in areas of high or extremely high water stress. The disclosure of water data in high-stress areas is required by several reporting frameworks, including the ICMM guidance. In FY2022, freshwater withdrawal from those operating assets in high or extremely high water stress areas made up approximately 15 per cent of our total freshwater withdrawals.

During FY2021, BHP contributed to improving mining sector water reporting through participation in the ICMM Water Working Group to strengthen the ICMM guidance and align it with the GRI requirements. The most significant change for BHP of applying the 2021 update of the ICMM guidance was that the guidance recommends (non-mandatory) reporting of the annual change in water storage volumes. We have taken the first step to implement this recommendation by including changes in water storage volumes in our asset water accounts for those operated assets where water storage changes are considered material. In FY2022, we assessed which sites may have changes in water storage volumes that were material to their water management; our coal operated assets (where changes in water storage are the most material within BHP) were a particular focus. In line with our commitment for continuous improvement of our water accounts and data, we continued to review assumptions for accounting for water storage, and other metrics, in asset water models and water balances, recognising that water modelling and balances contains a degree of uncertainty which must be understood. We have now included reporting of material water storage changes across BHP, but note the accuracy of this metric (as for other metrics that we reported for many years) is expected to continue to improve in the forthcoming years as our knowledge and understanding grows.

We continue to seek to minimise our withdrawal of high-quality water. In FY2022, seawater continued to be our largest source of water withdrawal, representing 61 per cent of total withdrawals, predominantly for desalination at Escondida. Groundwater remained our most significant non-sea water source in FY2022, at close to one-fifth of total water withdrawals. In FY2022, approximately 75 per cent of our water withdrawals consisted of water classified as low quality. The definitions for water quality types is available in section 2.2.4 of the WAF.

Stakeholder engagement and legal matters

Beyond our operational activities, we have committed to engaging across communities, government, business and civil society with the aim of catalysing actions to improve water governance, increase recognition of water's diverse values and advance sustainable solutions. We continue to collaborate with the CEO Water Mandate to support the development of catchment-scale resilience as part of our commitment to strengthen transparency and collaboration across all sectors for improved water governance. We also continue our collaboration with the University of Notre Dame (United States of America) to develop an approach to water management that considers the human rights to access water.

As reported in our Annual Report 2021, in August 2021 an individual commenced an environmental damage action against Cerro Colorado alleging that Cerro Colorado's water extraction from the Lagunillas aquifer has damaged the aquifer and a nearby lagoon and wetlands. Following a series of injunctions in February 2022, new orders were received that permit water extraction, subject to ongoing monitoring of aquifer water levels. If the conditions are complied with, the orders permit four staged and gradual increases through to the expiry of the current environment licence in FY2024. The hearing for the environmental damage action was held in April 2022 with the outcomes still pending.

In March 2022, the Chilean Environmental Regulator (SMA) sanctioned Escondida, concluding it had breached its environmental permit from 2005 until 2019, causing irreparable environmental damage due to its water extraction from the Monturaqui aquifer. Escondida's infraction was classified as 'very serious', and the SMA imposed a fine of approximately US$8.3 million. Escondida has lodged a reconsideration motion before the SMA. A decision on the reconsideration motion before the SMA is expected in the second half of 2022. Appeal rights remain an option following the decision.

An environmental damage claim was lodged by the Attorney General's Office (AGO) against Escondida, Albemarle and Compañía Minera Zaldívar (the latter two being other companies that extract water (or previously extracted) from the Monturaqui aquifer) before the First Environmental Court of Antofagasta during FY2022. The AGO alleges the defendants' extraction of water from the Monturaqui aquifer has caused environmental damage. The Peine Community (an Indigenous community) has lodged a claim against Escondida based on the same facts. Both claims have been consolidated into a single proceeding. Escondida filed its answer to the claims on 15 June 2022.

More information on our approach to water stewardship, progress against our Water Stewardship Strategy, water performance in FY2022 and case studies on activities we are undertaking to progress towards meeting our water stewardship vision is available at bhp.com/water.

7.17 Biodiversity and land

The nature of our activities means we have a significant responsibility for biodiversity and land management. As at 30 June 2022, we owned or managed more than 8 million hectares of land and sea; however, just under 2 per cent is disturbed (physical or chemical alteration that substantially disrupts the pre-existing habitats and land cover) for our operational activities. The area we own or manage has decreased by 8 per cent from FY2021, predominantly due to the merger of our Petroleum business with Woodside.

At each of our operated assets, we look to manage threats and opportunities to achieve our environmental objectives. We apply the mitigation hierarchy (avoid, mitigate, rehabilitate and, where appropriate, apply compensatory measures) to any potential or residual adverse impacts on marine or terrestrial ecosystems.

We respect legally designated protected areas and commit to avoiding areas or activities where we consider the environmental risk is outside our risk appetite. As part of our commitments:

- We do not explore or extract resources within the boundaries of World Heritage listed properties.
- We do not explore or extract resources adjacent to World Heritage listed properties, unless the proposed activity is compatible with the outstanding universal values for which the World Heritage property is listed.
- We do not explore or extract resources within or adjacent to the boundaries of the International Union for Conservation of Nature (IUCN) Protected Areas Categories I to IV, unless a plan is implemented that meets regulatory requirements, takes into account stakeholder expectations and contributes to the values for which the protected area is listed.
- We do not operate where there is a risk of direct impacts to ecosystems that could result in the extinction of an IUCN Red List Threatened Species in the wild.
- We do not dispose of mined waste rock or tailings into a river or marine environment.

Our operated assets are required to have plans and processes that reflect local biodiversity risks and regulatory requirements. We revised and formalised a global-level biodiversity strategy in FY2022 that outlines our purpose and strategic priorities, and is designed to inform operational decision-making across the full life cycle of mining operations at our operated assets. The global-level strategy provides a clear direction that aligns asset-level biodiversity and land objectives and supports delivery of the new 2030 healthy environment goal.

For more information on our 2030 goals refer to OFR 2.2 and 7.1.

In FY2022, we delivered our most recent five-year sustainability target related to biodiversity. This was to improve marine and terrestrial biodiversity outcomes by developing a framework to evaluate and verify the benefits

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[1] The CEO Water Mandate is a UN Global Compact initiative that mobilizes business leaders on water, sanitation and the Sustainable Development Goals. Endorsers of the CEO Water Mandate commit to continuous progress against six core elements of stewardship and in so doing understand and manage their own water risks. Companies that endorse the Mandate agree to continuous improvement in six core areas of their water stewardship practice: Direct Operations, Supply Chain & Watershed Management, Collective Action, Public Policy, Community Engagement and Transparency. BHP is an active signatory of the Mandate.

of our actions, in collaboration with others, which has been tested at all our operated assets, and contribute to the management of areas of national or international conservation significance exceeding our disturbed land footprint, also known as the 'area conserved' target. The application of the biodiversity framework is intended to enable us to monitor the impacts of our activities and the effect of our management responses on biodiversity in a consistent way across BHP's operated assets. The biodiversity framework was developed with the support of Conservation International and Proteus, a cross-sector partnership between the UN Environment Programme World Conservation Monitoring Centre (UNEP WCMC) and business.

For our 'area conserved' target, the total land set aside for conservation on land where we operate and other land we steward was 65,870 hectares in FY2022. In addition to these conservation areas, we made several voluntary investments over the target period, including to the Terrebonne Biodiversity Resilience Project (a coastal restoration project in Louisiana) and the Martu Living Desert Project in Australia (support for management and conservation activities on Martu Country). Under the Conservation International and BHP alliance, Conservation International supported an assessment of whether these projects could contribute towards achievement of this target and found that the area that could reasonably be claimed was 4,465,260 hectares. Given BHP's FY2022 total disturbed land footprint was 149,312 hectares, our 'area conserved' target has been achieved by our operational and voluntary conservation investments over the target period.

In addition, we signed a grant agreement in FY2022 with Conservation International to pilot a framework to improve marine and coastal protections and enhance resilience (known as the 'Seascape Approach') in Fiji, with the aim of enhancing resilience of coastal Indigenous communities and Lau's marine and coastal ecosystems. This is expected to be a significant investment in marine biodiversity conservation in Fiji's eastern islands of the Lau Province and its surrounding waters. The agreement is aligned with the longer-term goal released in FY2018 of supporting actions aligned with the UN Sustainable Development Goals 14 and 15.

More information on our approach to biodiversity and land management and current performance is available at bhp.com/biodiversity.

7.18 Tailings storage facilities

Ensuring the integrity of our tailings storage facilities (TSFs) is a primary focus across our business. Our aspiration is to achieve zero harm from tailings and we will continue to work with others and share our progress in an effort to make this a reality.

In 2015, after the tragic failure of the Fundão dam at Samarco, BHP initiated a Dam Risk Review to assess the management of major TSFs. The catastrophic failure of the Brumadinho dam at Vale's operation in Brazil in January 2019 further strengthened our resolve to reduce TSF failure risk.

For information about the Samarco tragedy and our progress with the response refer to OFR 8.

Governance and the Global Industry Standard on Tailings Management

We are committed to the 2020 Global Industry Standard on Tailings Management (GISTM) and are working to implement the requirements in line with the timelines outlined by the ICMM. Our Tailings Storage Facility Policy Statement has been published on our website, outlining our commitment to the safe management of TSFs, emergency preparedness and response, recovery in the event of a failure and transparency.

Delivery of the GISTM implementation plans was a priority in FY2022 and we made notable progress across our operated assets, which was tracked and reported to the Sustainability Committee. As part of our commitment to GISTM and continuous improvement in tailings management, we conducted a mid-implementation review that confirmed we are on track to achieve conformance in line with the ICMM timelines. We also implemented our Accountable Executive (AE) model, whereby AEs are direct reports of the BHP Chief Executive Officer and answerable to the Sustainability Committee as stipulated in GISTM's requirements. The AEs cover both direct operational accountability for BHP's TSFs as well as an AE accountable for oversight of BHP's TSF governance framework. AEs are accountable for the safety, environmental and social impacts of TSFs. Front line employees are the first line (under our three lines risk management model) and manage the day-to-day operations and safety at site, while connected via regular communication to the relevant AE.

We continued to progress work on TSF failure risk management in FY2022 with a focus on the delivery of the risk remediation plans completed in FY2021. These plans are in addition to the range of ongoing governance activities we have in place to ensure effective management of TSF failure risk, including Dam Safety Reviews, Independent Tailings Review Boards and project-specific Independent Peer Reviews. Key risk indicators (KRIs) set by management help to monitor performance of our TSFs in dam integrity and design, overtopping/flood management and emergency response planning. These KRIs have been updated to align to the GISTM.

For more information on BHP's approach to risk management including KRIs refer to OFR 9.

Strategy

Our short-term strategy continues to focus on improving KRI performance in line with defined targets. We are completing studies at our operated assets focused on reducing and mitigating potential downstream impacts particularly to populations at risk (PAR).

The studies resulted in a diverse range of options to reduce PAR exposure at our TSFs or mitigate TSF failure risk. With this information our assets optimised the design and execution of their risk remediation plans, which collectively are intended to materially reduce PAR across the portfolio in the short to medium term.

Our medium- and long-term strategies focus on the development of technologies to improve tailings management and storage, which we believe are important in our aspiration of zero harm from tailings. Asset-specific strategies have been developed for all our operated assets (including legacy assets) and seek long-term alternative tailings solutions. In addition, while our non-operated joint ventures (NOJVs) are independently controlled and have their own operating and management standards, we encourage NOJVs to consider long-term alternative tailings solutions as an option in asset planning.

Industry collaboration

As part of our commitment to achieving zero harm from tailings, we are accelerating transformative approaches and technologies through a wide range of initiatives in collaboration with external industry partners. In FY2022, Future Tails (which is an initiative focused on training, education, research and best-practice guides in the tailings management space that is supported by BHP, Rio Tinto and the University of Western Australia) established training programs tailored to executives, operators and technical tailings engineers. These have been positively received by the industry.

A consortium of industry peers was formed in FY2022, to jointly conduct focused research on tailings innovation solutions and share results and learnings. Expansion of the program is planned for the coming years to bring in additional industry partners and represents a significant opportunity for industry knowledge and capability uplift.

As part of this program, we have created partnerships with Rio Tinto and the University of Melbourne designed to both develop novel tailings dewatering technologies and mitigate the risk involved in the large-scale application of known tailings dewatering technologies. Dewatering is a sustainable approach to tailings processing that supports our public commitment to reduce water usage. The BHP Tailings Challenge received over 150 applications from 19 countries in FY2022 and following a rigorous assessment process, two finalists were selected to progress solutions for repurposing tailings into fertiliser and construction material. The program will continue through FY2023 culminating in an on-site pilot ahead of full solution development.

Transparency

We fully support the GISTM and are working towards implementation at our sites. We have prioritised and actioned a phased disclosure approach towards conformance, starting with an update to our previously published Church of England Disclosure[1]. We have contributed to improvements in tailings storage management across the mining industry, including through the ICMM Tailings Working Group. We are participants in other tailings working groups globally, including those associated with the Canadian Dam Association, Australian National Committee on Large Dams, Australasian Institute of Mining and Metallurgy, Minerals Council of Australia, Mining Association of Canada, Society for Mining, Metallurgy and Exploration, and Fundación Chile.

We have continued to participate in the Investor Mining and Tailings Safety Initiative, an investor-led engagement convening institutional investors active in extractive industries, including major asset owners and asset managers.

We continued our work to fulfil our commitment to provide detailed, transparent and integrated disclosure of TSF management in FY2022. In addition to our work with industry partners to support the development of credible and meaningful disclosure standards, we have sought to enable the consistent application of these in our own business through the development and rollout of our Sustainability Standards Portal. The portal is a data platform to integrate multiple ESG standards, simplify data management for our assets and further strengthen the process, data quality and governance improvements achieved to date.

Operated and non-operated tailings portfolio

The classifications described in this Report align to the Canadian Dam Association (CDA) classification system. The TSF classification is one element of TSF risk management, but does not represent risk itself. It reflects the modelled, hypothetical, most significant possible failure and consequences without controls. It does not reflect the current physical stability of the TSF and it is possible for TSF classifications to change over time, for example, following changes to the operating context of a dam.

The TSF classification informs the design, surveillance and review components of risk management. Therefore, TSFs with a higher-level classification will have more rigorous requirements than TSFs that have a lower level of classification.

As at 30 June 2022, there were 71 TSFs[1] at our operated assets, 28 of which are of upstream design. Of the 71 operated facilities, none are extreme and a further 20 are classified as very high. The three facilities classified as extreme in FY2021 have been reclassified to a lower-consequence classification following the completion of risk mitigation works this year. In FY2022, two TSFs were removed from the operated TSF portfolio following the divestment of our interest in BMC and one new active TSF, a low-consequence, upstream facility at Olympic Dam, has been added. A substantial portion of our inactive portfolio (56) at our assets is due largely to the number of historic tailings facilities associated with our North American legacy assets portfolio.

More information on the risk reduction work underway for high-consequence classification facilities is provided earlier in the Governance and Strategy sections and online, including in our case studies.

There are 10 TSFs at our NOJVs, which are all located in the Americas. The three active TSFs are located at Antamina in Peru, which is of downstream construction, and two TSFs at Samarco in Brazil, Alegria Sul TSF, which is co-mingled dry stack, and Alegria Sul Pit, an in-pit TSF. In addition, there are seven inactive facilities. These include two upstream facilities at Samarco (Germano) in Brazil (that are being decommissioned following the February 2019 rulings by the Brazilian Government on upstream dams); three upstream inactive facilities and one inactive modified centreline facility at Resolution Copper in the United States; and one downstream inactive facility at Bullmoose in Canada. In FY2022, two NOJV TSFs at Cerrejón in Colombia were removed from our TSF portfolio following the sale of the asset.

[1] In April 2019, the Church of England Pensions Board and the Council on Ethics Swedish National Pension Funds wrote to approximately 700 mining firms to request specific disclosures of their tailings facilities.

Classification of operated tailings storage facilities[1,2,3,4,5,6]

● Extreme	0
● Very high	20
● High	15
● Significant	15
● Low	18
● N/A	3

Types of operated tailings storage facilities[1,2,7]

● Centreline	8
● Downstream	18
● Upstream	28
● Other	17

Operational status of operated tailings storage facilities[1,2,8]

● Active	15
● Inactive	56

1 The number of tailings storage facilities (TSFs) is based on the definition agreed to by the ICMM Tailings Advisory Group at the original time of submission and expanded to align with the TSF definition established in the Global Industry Standard for Tailings Management (GISTM). We keep this definition under review.

2 In FY2022, four TSFs were removed from the BHP TSF portfolio following the sale of our interests in two assets: two TSFs at Cerrejón (NOJV) in January 2022 and two TSFs at BMC (operated joint venture) in May 2022. One new, active TSF, TSF 6 at Olympic Dam, has been included.

3 The following classifications aligned to the CDA classification system. It is important to note that the classification is based on the modelled, hypothetical, most significant failure mode and consequences possible without controls, and not on the current physical stability of the dam.

4 For the purposes of this chart, ANCOLD and other classifications have been converted to their CDA equivalent.

5 Hamburgo TSF at Escondida is an inactive facility where tailings were deposited into a natural depression. Hamburgo TSF is not considered a dam and is, therefore, not subject to CDA classification.

6 SP1/2 and SP3 TSF at New South Wales Energy Coal are inactive facilities which have been assessed to have no credible failure modes and are therefore shown as not having a CDA classification.

7 'Other' includes dams with a raising method that combines upstream, downstream and centreline or are of in-pit design.

8 'Inactive' includes facilities not in operational use, under reclamation, reclaimed, closed and/or in post-closure care and maintenance.

8 Samarco

The Fundão dam failure

On 5 November 2015, the Fundão tailings dam operated by Samarco Mineração S.A. (Samarco) failed. Samarco is a non-operated joint venture (NOJV) owned by BHP Billiton Brasil Ltda (BHP Brasil) and Vale S.A. (Vale), with each having a 50 per cent shareholding.

A significant volume of tailings (39.2 million cubic metres) resulting from the iron ore beneficiation process was released. Tragically, 19 people died – five community members and 14 people who were working on the dam. The communities of Bento Rodrigues, Paracatu de Baixo and Gesteira were flooded and other communities and the environment downstream in the Rio Doce basin were also affected.

Samarco restarted its operations at a reduced production level in December 2020.

For information on Samarco's operations refer to OFR 5.2.

Our response and support for Fundação Renova

BHP Brasil has been and remains fully committed to supporting the extensive ongoing remediation and compensation efforts of Fundação Renova in Brasil.

The Framework Agreement entered into between Samarco, Vale and BHP Brasil and the relevant Brasilian authorities in March 2016 established Fundação Renova, a not-for-profit, private foundation that is implementing 42 remediation and compensatory programs. BHP Brasil provides support to Fundação Renova, including through representation on the foundation's governance structures.

To 30 June 2022, BHP Brasil has provided US$1.8 billion to fund Framework Agreement programs when Samarco has been unable to do so.

Fundação Renova

Compensation and financial assistance

Fundação Renova continues to provide fair compensation to people impacted by the dam failure.

Compensation and financial assistance of approximately R$11.2 billion (approximately US$2.3 billion)[1] has been paid to support approximately 388,000 people affected by the dam failure up until 30 June 2022. This includes:

- More than 22,000 general damages claims (including loss of life, injury, property damage, business impacts, loss of income and moral damages) have been resolved, and more than 290,000 people have been paid a total of approximately R$305 million (approximately US$69 million)[1] for temporary water interruption as at 30 June 2022.
- Approximately R$7.1 billion (approximately US$1.4 billion)[1] has been paid to more than 66,000 people under the court-mandated simplified indemnity system (known as the 'Novel' system) as at 30 June 2022. The Novel system is designed to provide compensation for informal workers who have had difficulty proving the damages they suffered, such as cart drivers, sand miners, artisanal miners and street vendors. More than 166,000 people have applied to join the Novel system to 30 June 2022.

Updates on the progress of Fundação Renova's compensation program are available at fundacaorenova.org/en/repair-data/indemnities-and-productive-resumption

Resettlement

One of Fundação Renova's priorities is the resettlement of the communities of Bento Rodrigues, Paracatu de Baixo and Gesteira. This involves ongoing engagement and consultation with a large number of stakeholders, including the affected community members, their technical advisers, state prosecutors, municipal leaders, regulators and other interested parties.

The resettlement process for Bento Rodrigues and Paracatu de Baixo involves designing new towns on land chosen by the communities, to be as close as possible to the previous layout, attending to the wishes and needs of the families and communities, while also meeting permitting requirements.

Mandated COVID-19 workforce restrictions and suspensions of works on-site, increases to the technical scope for resettlement of the communities and permitting delays have impacted the timeline for completion. Ongoing efforts to accelerate completions continued throughout FY2022.

A total of 48 houses have been completed and 158 are under construction and mobilisation at Bento Rodrigues and Paracatu de Baixo as at 30 June 2022. Plans for families to move into their completed houses are progressing.

Infrastructure at Bento Rodrigues is complete, including roads, power, water and sewer networks. Public services are also complete, including the health and services centres, a municipal school and sewage treatment station. Infrastructure at Paracatu de Baixo is complete, including roads, power, treated water pipeline, storm water and sewer networks. Public services are under construction, including an elementary school, kindergarten, health centre, water treatment station and sewage treatment station.

At Gesteira, Fundação Renova offered the families a payment solution in which they would be able to purchase property through a 'letter of credit'. Most families of Gesteira have chosen this option, and the 12th Federal Court has ratified their agreements.

Some families have chosen not to join the resettlement of their previous community and instead resettle elsewhere. For these families, 88 houses and plots have been purchased, built and/or renovated, and 13 are under construction or renovation as at 30 June 2022. Other families have opted for a cash payment in lieu of any of the other resettlement solutions offered by Fundação Renova.

Updates on the progress of Fundação Renova's resettlement program are available at fundacaorenova.org/en/repair-data/resettlement-and-infrastructure

Other socio-economic programs

Fundação Renova continues to implement a wide range of socio-economic programs in addition to the compensation and resettlement programs. These programs cover health and infrastructure projects in the Rio Doce basin, promotion of economic development in the impacted communities and sewage treatment facilities to improve the water quality in the Rio Doce.

Environmental remediation

Since December 2019, the riverbanks and floodplains have been vegetated, river margins stabilised and in general, water quality and sediment qualities have returned to historic levels. Long-term remediation work is continuing to re-establish agriculture and native vegetation.

A ban on fishing activities along the coast of Espírito Santo and a precautionary conservation restriction preventing fishing for native fish species in the Rio Doce in Minas Gerais remain in place. Fundação Renova continues to support the recovery of habitats and aquatic ecology and engage with the authorities with the goal of lifting the restrictions.

Updates on the progress of Fundação Renova's environmental remediation programs are available at fundacaorenova.org/en/repair-data/socio-environmental-repairs

Legal proceedings

BHP Group Limited, BHP Group (UK) Ltd (formerly BHP Group Plc) and BHP Brasil are involved in legal proceedings relating to the Samarco dam failure.

For more information on the significant legal proceedings involving BHP refer to Additional Information in the Annual Report.

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[1] USD amount is calculated based on actual transactional (historical) exchange rates related to Renova funding.

9 How we manage risk

Risk management helps us to protect and create value, and is central to achieving our purpose and strategic objectives.

Our Risk Framework has four pillars: risk strategy, risk governance, risk process and risk intelligence.

Risk strategy

Risk classification

We classify all risks to which BHP is exposed using our Group Risk Architecture. This is a tool designed to identify, analyse, monitor and report risk, which provides a platform to understand and manage risks. Similar risks are considered together in groups and categories. This gives the Board and management visibility over the aggregate exposure to risks on a Group-wide basis and supports performance monitoring and reporting against BHP's risk appetite.

Risk appetite

BHP's Risk Appetite Statement is approved by the Board and is a foundational element of our Risk Framework. It provides guidance to management on the amount and type of risk we seek to take in pursuing our objectives.

Key risk indicators

Key risk indicators (KRIs) are set by management to help monitor performance against our risk appetite. They also support decision-making by providing management with information about financial and non-financial risk exposure at a Group level. Each KRI has a target, or optimal level of risk we seek to take, as well as upper and lower limits. Where either limit is exceeded, management will review potential causes to understand if BHP may be taking too little or too much risk and to identify whether further action is required.

Risk culture

Our risk management approach is underpinned by a risk culture that supports decision-making in accordance with BHP's values, objectives and risk appetite. We use a common foundation across BHP to build the tools and capabilities required to enable us to understand, monitor and manage our risk culture. These include tailored second-line cultural reviews, Group-wide risk culture dashboards and the inclusion of risk-culture assessments as part of our internal audit plan.

Strategic business decisions

Strategic business decisions and the pursuit of our strategic objectives can inform, create or affect risks to which BHP is exposed. These risks may represent opportunities as well as threats. Our Risk Appetite Statement and KRIs assist in determining whether a proposed course of action is within BHP's risk appetite.

Our focus when managing risks associated with strategic business decisions is to enable the pursuit of high-reward strategies. Therefore, as well as having controls designed to protect BHP from threats, we seek to implement controls to enable and/ or enhance opportunities.

Risk governance

Three lines model

BHP uses the 'three lines model' to define the role of different teams across the organisation in managing risk. This approach sets clear accountabilities for risk management and provides appropriate 'checks and balances' to support us in protecting and growing value.

The first line is provided by our frontline staff, operational management and people in functional roles – anyone who makes decisions, deploys resources or contributes to an outcome is responsible for identifying and managing the associated risks.

The Risk team and other second-line teams are responsible for providing expertise, support, monitoring and challenge on risk-related matters, including by defining Group-wide minimum standards.

The third line, our Internal Audit team, is responsible for providing independent and objective assurance over the control environment (governance, risk management and internal controls) to the Board and Executive Leadership Team. Additional assurance may also be provided by external providers, such as our External Auditor.

As of 1 August 2022, the Risk team and Internal Audit team were combined to form a Risk and Internal Audit sub-function, led by a Chief Risk and Audit Officer. This reflects the maturity of our Risk Framework and risk management capability across the first and second lines. The integration of these areas in one sub-function is designed to improve overall effectiveness of both teams, including through further alignment of second and third line assurance activities across BHP. The Risk team and Internal Audit team will continue to operate in the second and third lines respectively.

BHP Board and Committees

The Board reviews and monitors the effectiveness of the Group's systems of financial and non-financial risk management and internal control. The broad range of skills, experience and knowledge of the Board assists in providing a diverse view on risk management. The Risk and Audit Committee (RAC) and Sustainability Committee assist the Board by reviewing and considering BHP's material risk profile (covering operational, strategic and emerging risks) on a biannual basis.

Performance against risk appetite is monitored and reported to the RAC, as well as the Sustainability Committee for HSEC matters, supporting the Board to challenge and hold management to account.

Second line risk-based reviews are undertaken to provide greater oversight and enhance our understanding and management of the Group's most significant risks, with outcomes reported to management, the RAC and the Sustainability Committee. These outcomes may be used to develop remediation plans, adjust BHP's Risk Appetite Statement or KRIs, enhance our Risk Framework or inform strategic decisions.

Risk process

Our Risk Framework requires identification and management of risks (both threats and opportunities) to be embedded in business activities through the following process:

- Risk identification – threats and opportunities are identified and each is assigned an owner or accountable individual.
- Risk assessments – risks are assessed using appropriate and internationally recognised techniques to determine their potential impacts and likelihood, prioritise them and inform risk treatment options.
- Risk treatment – controls are implemented to prevent, minimise and/or mitigate threats, and enable and/or enhance opportunities.
- Monitoring and review – risks and controls are reviewed periodically and on an ad hoc basis (including where there are high-potential events or changes in the external environment) to evaluate performance.
- Communication – relevant information is recorded in our enterprise risk management system to support continuous improvement and share risk intelligence across the Group.

Our Risk Framework includes requirements and guidance on the tools and process to manage current and emerging risks.

Current risks

Current risks are risks that could impact BHP today or in the near future and comprise current operational risks (risks that have their origin inside BHP or occur as a result of our activities) and current strategic risks (risks that may enhance or impede the achievement of our strategic objectives).

Current risks include material and non-material risks (as defined by our Risk Framework). The materiality of a current risk is determined by estimating the maximum foreseeable loss (MFL) if that risk was to materialise. The MFL is the estimated impact to BHP in a worst-case scenario without regard to probability and assuming all risk controls, including insurance and hedging contracts, are ineffective.

Our risk factors are described in OFR 9.1.

Our focus for current risks is to prevent their occurrence or minimise their impact should they occur, but we also consider how to maximise possible benefits that might be associated with strategic risks (as described in the 'Risk strategy' section). Current material risks are required to be evaluated once a year at a minimum to determine whether our exposure to the risk is within our risk appetite.

Emerging risks

Emerging risks are newly developing or changing risks that are highly uncertain and difficult to quantify. They are generally driven by external influences and often cannot be prevented.

BHP maintains a 'watch list' of emerging themes and monitors associated signals to interpret external events and trends, providing an evolving view of the changing external environment and how it might impact our business. We use the watch list and signal monitoring to support the identification and management of emerging risks, as well as to inform and test our corporate strategy.

Once identified, our focus for emerging risks is on structured monitoring of the external environment, advocacy efforts to reduce the likelihood of the threats manifesting and identifying options to increase our resilience to these threats.

Risk intelligence

The Risk team provides the RAC, Sustainability Committee and senior management with insights on risk management across BHP. Risk reports may include trends and aggregate exposure for our most significant risks, performance against risk appetite, updates on the Risk Framework and risk management priorities, an overview of (and material changes in) BHP's material risk profile and updates on emerging risk themes and signals, and risk culture. In FY2022, risk reports were supported by an opinion from the Chief Risk Officer.

We maintain a risk insights dashboard designed to provide current, data-driven and actionable risk intelligence to our people at all levels of the business to support decision-making. This tool empowers the business to manage risks more effectively, with increased accuracy and transparency.

The Board, RAC and Sustainability Committee also receive reports from other teams to support the Board to review and monitor the effectiveness of BHP's systems of financial and non-financial risk management. These include internal audit reports, ethics and investigations reports, compliance reports and the Chief Executive Officer's report.

Our risk factors are described in OFR 9.1.

9.1 Risk factors

Our risk factors are described below and may occur as a result of our activities globally, including in connection with our operated and non-operated assets, third parties engaged by BHP or through our value chain.

These risks, individually or collectively, could threaten our viability, strategy, business model, future performance, solvency or liquidity and reputation. They could also materially and adversely affect the health and safety of our people or members of the public, the environment, the communities where we or our third-party partners operate, or the interests of our stakeholders, which could in each case, lead to litigation, regulatory investigation or enforcement action (including class actions or actions arising from contractual, legacy or other liabilities associated with divested assets), or a loss of stakeholder and/or investor confidence. References to 'financial performance' include our financial condition and liquidity, including due to decreased profitability or increased operating costs, capital spend, remediation costs or contingent liabilities. BHP is also exposed to other risks that are not described in this section.

Each risk factor may present opportunities as well as threats. We take certain risks for strategic reward in the pursuit of our strategy and purpose, including to grow our asset portfolio and develop the right capabilities for the future of our business. Potential threats and opportunities associated with each of our risk factors are described below, along with the key controls to manage them. These controls are not exhaustive and many Group-wide controls (such as *Our Code of Conduct*, Risk Framework, mandatory minimum performance requirements for risk management, health, safety and other matters, dedicated non-operated joint venture teams and our Contractor Management Framework) help to support effective and efficient management of all risks in line with our risk appetite. While we implement preventative and/or mitigating controls designed to reduce the likelihood of a threat from occurring and minimise the impacts if it does, these may not be effective.

Operational events

Risks associated with operational events in connection with our activities globally, resulting in significant adverse impacts on our people, communities, the environment or our business.

Why is this important to BHP?

We engage in activities that have the potential to cause harm to our people and assets, communities, other stakeholders and/or the environment, including serious injuries, illness and fatalities, loss of infrastructure, amenities and livelihood and damage to sites of cultural significance. An operational event at our operated or non-operated assets or through our value chain could also cause damage or disruptions to our assets and operations, impact our financial performance, result in litigation or class actions and cause long-term damage to our licence to operate and reputation.

The potential physical impacts of climate change could increase the likelihood and/or severity of risks associated with operational events. Impacts of operational events may also be amplified if we fail to respond in a way that is consistent with our corporate values and stakeholder expectations.

Examples of potential threats

- Failure of a water or tailings storage facility, such as the tragic failure of the Fundão dam at Samarco in 2015 or a failure at one of our facilities in Australia, Chile, Peru, the United States, Canada or Brazil.
- Unplanned fire events or explosions (on the surface and underground).
- Geotechnical instability events (such as failure of underground excavations, unexpected large wall instabilities in our open pit mines, or potential interaction between our mining activities and community infrastructure or natural systems), including at our underground or open pit mines in Australia, Chile, Peru, the United States, Canada or Brazil.
- Air, land (road and rail) and marine transportation events (such as aircraft crashes or vessel collisions, groundings or hydrocarbon release) that occur while transporting people, supplies or products to exploration, operation or customer locations, which include remote and environmentally sensitive areas in Australia, South America, Asia, the United States and Canada.
- Critical infrastructure or hazardous materials containment failures, other occupational or process safety events, or workplace exposures.
- Operational events experienced by third parties, which may also result in unavailability of shared critical infrastructure (such as railway lines or ports) or transportation routes (such as the Port Hedland channel in Western Australia).

Examples of potential opportunities

- Our focus on safety and the wellbeing of our people, communities and the environment may increase operational resilience and stakeholder confidence, enhancing our ability to attract and retain talent and access (or lower the cost of) capital.
- Collaborating with industry peers and relevant organisations on minimum standards (such as the internationally recognised Flight Safety Foundation's Basic Aviation Risk Standard, Global Industry Standard on Tailings Management, Large Open Pit Project guidelines on open-pit mining design and management, and the Cave Mining 2040 Consortium on deep mining design and management) supports improvements to wider industry management of operational risks and may also identify opportunities to improve our own practices.

Key management actions

- Planning, designing, constructing, operating, maintaining and monitoring surface and underground mines, water and tailings storage facilities, and other infrastructure and equipment in a manner designed to maintain structural integrity, prevent incidents and protect our people, assets, communities, the environment and other stakeholders.
- Specifying minimum requirements and technical specifications, such as for transportation (including high-occupancy vehicles, aircraft and their operators) and geotechnical (including characterisation, design, ground control and monitoring), and compliance with operating specifications, industry codes and other relevant standards, including BHP's mandatory minimum performance requirements.
- Defining key governance roles, such as a dam owner (an internal BHP individual who is accountable for maintaining effective governance and integrity of each tailings storage facility) and providing training and qualifications for our people.
- Inspections, technical reviews, audits and other assurance activities, such as independent dam safety reviews and geotechnical review boards.
- Maintaining evacuation routes, supporting equipment, crisis and emergency response plans and business continuity plans.
- Incorporating future climate projections into risks associated with operational events through ongoing assessment of potential physical climate change risks.

FY2022 insights

Our exposure to risks associated with operational events decreased in FY2022 as the divestment of our interests in Cerrejón and BMC and the merger of our Petroleum business with Woodside removed associated risks (including the risk of an offshore well blow out) from BHP's risk profile. Otherwise, our exposure to risks associated with operational events remained relatively unchanged.

For more information refer to:
- **OFR 7.4 – Safety**
- **OFR 7.18 – Tailings storage facilities**
- **OFR 8 – Samarco**
- **bhp.com/sustainability**

Accessing key markets

Risks associated with market concentration and our ability to sell and deliver products into existing and future key markets, impacting our economic efficiency.

Why is this important to BHP?

We rely on the sale and delivery of the commodities we produce to customers around the world. Changes to laws, international trade arrangements, contractual terms or other requirements and/or geopolitical developments could result in physical, logistical or other disruptions to our operations in, or the sale or delivery of our commodities to, key markets. These disruptions could affect sales volumes or prices obtained for our products, adversely impacting our financial performance, results of operations and growth prospects.

Examples of potential threats

- Government actions, including economic sanctions, tariffs or other trade restrictions, imposed by or on countries where we operate or into which we sell or deliver our products may prevent BHP from trading or make it more difficult for BHP to trade in key markets. For example, the Ukraine conflict and corresponding implementation of economic sanctions, export controls and other restrictive measures by the United States, United Kingdom, European Union and other jurisdictions against Russia contributed to increased volatility for some of the commodities we sell and some of the key supplies we buy (including diesel and ammonia).
- Physical disruptions to the delivery of our products to customers in key markets, including due to the disruption of shipping routes, closure or blockage of ports or land logistics (road or rail) or military conflict. In some cases, physical disruptions may be driven or intensified by weather, climate variability or other manifestations of climate change.
- Legal or regulatory changes (such as royalties or taxes, port or import restrictions or customs requirements, shipping/maritime regulatory changes, restrictions on movements or imposition of quarantines, or changing environmental restrictions or regulations, including measures with respect to carbon-intensive industries or imports) and commercial changes (such as changes to the standards and requirements of customers) may adversely impact our ability to sell, deliver or realise full market value for our products.
- Failure to maintain strong relationships with customers, or changes to customer demands for our products may reduce our market share or adversely impact our financial performance.
- Increasing geopolitical tensions (such as the escalation of events relating to the Ukraine conflict) may adversely affect our strategic and business planning decisions and/or increase the time it takes us to manage our access to key markets, particularly if we fail to detect or anticipate deviations in the geopolitical environment in a timely manner.

Examples of potential opportunities

- Monitoring macroeconomic, societal, geopolitical and policy developments and trends may reveal new markets or commodities, or identify opportunities to strengthen secondary markets for existing products.
- Developing strategic partnerships and strong, mutually beneficial relationships with our customers may enable us to create value.
- Building a deep understanding of geopolitical threats and opportunities and their potential impacts on global trade flows and our business could enhance our strategy, business planning and response, providing a potential competitive advantage.
- Identifying the potential for weather, climate variability or climate change to disrupt delivery of products and implementing management measures may increase the resilience of our operations and value chain.
- Signal monitoring and building relationships with and understanding the perspectives of influential stakeholders may improve our ability to understand and provide input to policy development, and to respond to and manage any impacts from policy changes (such as trade policies).

Key management actions

- Monitoring and assessing our ability to access key markets, and maintaining sales plans, product placement and business resilience strategies and relationships with relevant stakeholders.
- Maintaining response plans for various scenarios (including physical disruptions of logistics) to mitigate disruptions to our ability to access key markets.
- Monitoring geopolitical and macroeconomic developments and trends, including through signal monitoring and our enterprise-level watch list of emerging themes, to provide an early indication of events that could impact our ability to access key markets.
- Identifying weather and/or climate-related vulnerabilities and implementing controls to mitigate disruptions to our ability to physically access key markets.
- Diversifying our asset and commodity portfolio, such as our ongoing investment in potash through the Jansen Potash Project, to reduce exposure to market concentration risks.

FY2022 insights

Exposure to risks associated with our access to key markets increased in FY2022 due to changes in our external environment, over which we have limited influence. The Ukraine conflict and the corresponding international response has significantly increased volatility and uncertainty in the international trading, business and financial environment. Escalation or expansion of the conflict or the international response could cause greater disruption of global supply chains and affect macroeconomic conditions and our ability to sell to particular customers or markets. In addition, strategic competition between the United States and China continued.

Optimising growth and portfolio returns

Risks associated with our ability to position our asset portfolio to generate returns and value for shareholders, including through acquisitions, mergers and divestments.

Why is this important to BHP?

We make decisions and take actions in pursuit of our strategy to optimise our asset portfolio and to secure and create growth options in future facing commodities (such as copper, nickel and potash). These may include active portfolio changes (such as divestment of our interests in BMC and Cerrejón, and merger of our Petroleum business with Woodside), as well as maturing organic growth options across our existing portfolio.
A strategy that does not support BHP's objectives and/or ill-timed execution of our strategy (including as a result of not having sector-leading talent and capabilities) or other circumstances may lead to a loss of value that impacts our ability to deliver returns to shareholders and fund our investment and expansion opportunities.
It may also result in our asset portfolio being less resilient to movements in commodity prices, which are determined by or linked to prices in world markets. In the short term, this may reduce our cash flow, ability to access capital and our dividends. A failure to optimise our asset portfolio for structural movements in commodity prices over the long term may result in asset impairments and could adversely affect the results of our operations, financial performance and returns to investors.

Examples of potential threats

- Failure to optimise our portfolio through effective and efficient acquisitions, exploration, large project delivery, mergers, divestments or expansion of existing assets (including due to sub-optimal capital prioritisation) may adversely impact returns to investors. For example, a scarcity of growth options that align with our strategy could require us to mine deeper, lower-grade deposits, which may lead to higher operating and capital costs.
- Failure to identify potential changes in commodity attractiveness and missed entry or commodity exit opportunities may result in decreased return on capital spend for, or overpayment to acquire or invest in, new assets or projects, stranded assets or reduced divestment proceeds.
- Failure to achieve expected commercial objectives from assets or investments, such as cost savings, sales revenues or operational performance (including as a result of inaccurate commodity price assumptions or resources and reserves estimates), may result in returns that are lower than anticipated and loss of value. Impacts could be exacerbated by effects of the COVID-19 pandemic and Ukraine conflict, including supply chain disruptions (for example, disruption in the energy sector impacting our end-user markets), labour shortages, inflationary pressures on raw materials and unfavourable exchange rates, creating operational headwinds and challenging on-time and on-budget project delivery.
- Renegotiation or nullification of permits, inability to secure new permits or approvals, increased royalties, expropriation or nationalisation of our assets, or other legal, regulatory, political, judicial or fiscal or monetary policy instability or changes (for example, legislation, regulations or government policies implemented in Australia by the new federal government, which may include new rules governing the pay of contractors) may increase our costs or adversely impact our ability to achieve expected commercial objectives from assets or investments, access reserves, develop, maintain or operate our assets, enter new jurisdictions, or otherwise optimise our portfolio.
- Inability to predict long-term trends in the supply, demand and price of commodities and optimise our asset portfolio accordingly may restrict our ability to generate long-term returns from the portfolio. For example, slowing economic growth in China due to factors such as the COVID-19 pandemic, political and trade tensions or the market volatility and uncertainty resulting from the Ukraine conflict may result in lower demand and prices for our products, which would adversely impact our portfolio returns.
- Commodity prices have historically been and may continue to be subject to significant volatility, including due to global economic and geopolitical factors, industrial activity, commodity supply and demand (including inventory levels), technological change, product substitution, tariffs, interest rate movements and exchange rate fluctuations. Our usual policy and practice is to sell our products at prevailing market prices and, as such, movements in commodity prices may affect our financial performance. Long-term price volatility or sustained low prices may adversely impact our financial performance as we do not generally have the ability to offset costs through price increases.

Examples of potential opportunities

- Acquisition of new resources or acceleration of organic growth options in future facing commodities may strengthen and diversify our portfolio and protect and grow value over the long term.
- Ability to predict long-term commodity demand, supply and price trends may lead to BHP being able to identify and acquire new future facing commodities and assets ahead of our competitors or exit from declining commodities in a timely manner, strengthening our portfolio and leading to long-term, higher portfolio returns.
- BHP may be perceived as a welcome and valued or preferred partner for the development of new resource opportunities, enabling us to secure new assets or exploration opportunities to create long-term optionality in the portfolio.

Key management actions

- Strategies, processes and frameworks to grow and protect our portfolio and to assist in delivering ongoing returns to shareholders include:
  - our exploration and business development programs, which focus on replenishing our resource base and enhancing our portfolio (including creating and securing more options in future facing commodities)
  - our long-term strategic outlook and ongoing strategic processes to assess our competitive advantage and enable the identification of threats to, or opportunities for, our portfolio through forecasting and scenario modelling
  - monitoring signals to interpret external events and trends, and designing commodity strategies and price protocols that are reviewed by management and the Board
  - our Capital Allocation Framework, corporate planning processes, investment approval processes and annual reviews (including resilience testing) of portfolio valuations
  - our balance sheet and liquidity framework, which is designed to maintain a robust balance sheet with sufficient liquidity and access to diverse sources of funding
- Pursuing a considered approach to new country entry, including development of capability to operate in higher-risk jurisdictions, in order to support portfolio opportunities.
- Further developing BHP's social value proposition to position BHP as a preferred partner for the development of resource opportunities in line with the expectations of local communities, host governments and other global stakeholders.
- Managing commodity price exposure through the diversity of commodities, markets, geographies and currencies provided by our portfolio, as well as our financial risk management practices in relation to our commercial activities.

FY2022 insights

Our exposure to risks associated with optimising growth and portfolio returns increased in FY2022 as a result of volatility and uncertainty across global economies, fiscal regimes and industrial relations, licencing-regulatory uncertainty and escalating social value expectations.
The ongoing conflict in Ukraine has contributed to inflationary pressures for key inputs across our value chain (such as diesel, acid, ammonia and explosives). In FY2022, we completed the divestment of our interests in BMC and Cerrejón, and the merger of our Petroleum business with Woodside which are intended to optimise and consolidate our portfolio to align with BHP's long-term strategy.

For more Information refer to:
- **OFR 3 – Positioning for the future**
- **OFR 10 – Performance by commodity**
- **Financial Statements note 23 'Financial risk management'**

Significant social or environmental impacts

Risks associated with significant impacts of our operations on and contributions to communities and environments throughout the life cycle of our assets and across our value chain.

Why is this important to BHP?

The long-term viability of our business is closely connected to the wellbeing of the communities and environments where we have a presence. At any stage of the asset life cycle, our activities and operations may have or be seen to have significant adverse impacts on communities and environments. In these circumstances, we may fail to meet the evolving expectations of our stakeholders (including investors, governments, employees, suppliers, customers and Indigenous peoples and other community members) whose support is needed to realise our strategy and purpose.

This could lead to loss of stakeholder support or regulatory approvals, increased taxes and regulation, enforcement action, litigation or class actions, or otherwise impact our licence to operate and adversely affect our reputation, ability to attract and retain talent, ability to access capital, operational continuity and financial performance.

Examples of potential threats

- Engaging in or being associated with activities (including through non-operated joint ventures and our value chain) that have or are perceived to have individual or cumulative adverse impacts on the environment, biodiversity and land management, water access and management, human rights or cultural heritage.
- Failing to meet stakeholder expectations in connection with our legal and regulatory obligations, relationships with Indigenous peoples, community wellbeing and the way we invest in communities or our approach to environment, climate change, biodiversity and land management, water access and management, human rights or cultural heritage priorities.
- Political, regulatory and judicial developments (such as constitutional reform in Chile that could lead to adjustments to water and other resource rights) could increase uncertainty in relation to our operating environment, requiring us to adjust our business plans or strategy. For example, changes to regulations may require us to modify mine plans, limit our access to reserves and resources, delay the timing or increase costs associated with closure and rehabilitation of assets, or expose BHP to unanticipated environmental or other legacy liabilities.
- Failing to identify and manage potential physical climate change risks to communities, biodiversity and ecosystems. For example, changes to species habitat or distribution as a result of sustained higher temperatures could result in land access restrictions or litigation, or limit our access to new opportunities.

Examples of potential opportunities

- Our support for responsible stewardship of natural resources may enhance the resilience of environments and communities to potential threats (including the potential physical impacts of climate change). For example, BHP has commenced a pilot study on developing a Natural Capital Account at a restored mine site to understand how we can better incorporate nature-related threats and opportunities into our strategic planning, risk management and asset allocation decisions.
- Strong social performance, including sustainable mining and a focus on the wellbeing of communities, could generate competitive advantage in the jurisdictions where we operate. For example, BHP was recognised for our contribution to the development of female leaders in the Chilean mining sector (Inspirational Women in Mining Awards), which may enhance our attractiveness as a place to work and support talent retention.
- Our global social value strategy may improve stakeholder relations, enhance community trust and increase investor confidence and demand for our commodities.
- Greater clarity, transparency and standards associated with regulatory regimes that support and protect communities and the environment may increase requirements across our sector, generating competitive advantage for companies that have already invested in social and environmental performance.
- Building our reputation for sustainable and responsible operating practices (such as through the Copper Mark, which was awarded to three of our copper assets in FY2022) may increase demand for some of our commodities and improve our access to talent and capital.

Key management actions

- The *Our Requirements for Community* and *Our Requirements for Environment and Climate Change* standards provide requirements and practices that are designed to strengthen our social, human rights and environmental performance. Our Human Rights Policy Statement, Water Stewardship Position Statement, Climate Transition Action Plan 2021 and Indigenous Peoples Policy Statement set out our targets, goals, commitments and/or approach to these matters.
- Engaging in regular, open and transparent dialogue with stakeholders to better understand their expectations, concerns and interests, and undertaking research to better understand stakeholder perceptions.
- Building social value into our decision-making process, along with financial considerations, including through our new social value framework and 2030 People, Planet and Prosperity goals.
- Building stakeholder trust and contributing to environmental and community resilience, including through collaborating on shared challenges (such as climate change and water stewardship), enhanced external reporting of our operated assets' potential impacts on biodiversity and maximising the value of social investments through our social investment strategy.
- Conducting regular research and impact assessments for operated assets to better understand the social, environmental, human rights and economic context. This supports us to identify and analyse stakeholder, community and human rights impacts, including modern slavery risks and emerging issues. We also complete due diligence screening on suppliers through our Ethical Supply Chain and Transparency program.
- Integrating closure into our planning, decision-making and other activities through the life cycle of our operated assets, as set out in our mandatory minimum performance requirements for closure.

FY2022 insights

Our exposure to risks with potentially significant social or environmental impacts increased in FY2022 due to environmental, political and regulatory developments, and increasing societal expectations, including of regulators and other stakeholders on Indigenous peoples' rights, climate change and the potential impacts of our operations throughout the asset life cycle.

We have continued to focus on improving engagement with Indigenous peoples, including the protection of cultural heritage. The economic importance of biodiversity is increasingly at the forefront of investor considerations (particularly following the Dasgupta Review in the United Kingdom in FY2021) and is expected to be strengthened through the development of institutional frameworks, including the Taskforce on Nature-related Financial Disclosures. The opportunity for BHP in measuring and ascribing value to natural assets is to gain a better understanding of the value of environmental impacts and dependencies, and the risks they may pose to delivery of our strategy, purpose and public targets, goals and commitments.

For more Information refer to:
- **OFR 6 – People and culture**
- **OFR 7.8 – Climate change**
- **OFR 7.10 – Community**
- **OFR 7.11 – Human rights**
- **OFR 7.13 – Indigenous peoples**
- **OFR 7.14 – Social investment**
- **OFR 7.15 – Environment**
- **OFR 7.16 – Water**
- **OFR 7.17 – Biodiversity and land**
- **bhp.com/sustainability**

Inadequate business resilience

Risks associated with unanticipated or unforeseeable adverse events and a failure of planning and preparedness to respond to, manage and recover from adverse events (including potential physical impacts of climate change).

Why is this important to BHP?

In addition to the threats described in our other risk factors, our business could experience unanticipated, unforeseeable or other adverse events (internal or external) that could harm our people, disrupt our operations or value chain, or damage our assets or corporate offices, including our non-operated assets in which BHP has a non-controlling interest. A failure to identify or understand exposure, adequately prepare for these events (including maintaining business continuity plans) or build wider organisational resilience may inhibit our (or our third-party partners') ability to respond and recover in an effective and efficient manner. This could cause material adverse impacts on our business, such as reduced ability to access resources, markets and the operational or other inputs required by our business, reduced production or sales of commodities, or increased regulation, which could adversely impact our financial performance, share price or reputation, and could lead to litigation (including class actions).

Examples of potential threats

- Geopolitical, global economic, regional or local developments or adverse events, such as social unrest, strikes, work stoppages, labour disruptions, social activism, terrorism, bomb threats, economic slowdown, acts of war or other significant disruptions in areas where we operate or have interests. For example, production at Escondida in FY2022 was impacted by public road blockades associated with social unrest.
- Natural events, including earthquakes, tsunamis, hurricanes, cyclones, fires, solar flares and pandemics. For example, continued COVID-19 related absences contributed to a fall in production volumes in the March 2022 quarter for copper, iron ore, nickel and energy coal.
- Potential physical impacts of climate change, such as acute risks that are event-driven (including increased frequency and severity of extreme weather events) and chronic risks resulting from longer-term changes in climate patterns. Hazards and impacts may include changes in precipitation patterns, water shortages, rising sea levels, increased storm intensity, prolonged extreme temperatures and increased drought, fire and tidal flooding.
- Failure by suppliers, contractors or joint venture partners to perform existing contracts or obligations (including due to insolvency), such as construction of large projects or supply of key inputs to our business (for example, consumables for our mining equipment).
- Failure of our risk management or other processes (including controls) to prepare for or manage any of the risks discussed in this 'Risk factors' section may inhibit our (or our third-party partners') ability to manage any resulting adverse events and may disrupt our operations or adversely impact our financial performance or reputation.

Examples of potential opportunities

- Risk identification and management supports proactive, focused and prioritised deployment of resources to reduce exposure to adverse events. It may be used to inform priorities and strategies across BHP, supporting a proportionate and cost-effective response, which could provide a competitive advantage at a regional or global level.
- Building wider organisational resilience may enable us to maintain dividends to shareholders amid adverse external events and make growth-generating, counter-cyclical investments, as well as to help us mitigate the impacts of unforeseeable adverse events. For example, we have developed new agile and remote ways of working in response to the COVID-19 pandemic, which may also increase our resilience to other adverse events.
- Adapting to climate change across our operations and value chain could enhance the safety, productivity and climate resilience of our operated assets, position BHP as a supplier of choice and provide competitive advantage (for example, by fulfilling our commitment to security of supply). Support for climate vulnerable communities and ecosystems may also improve our social value proposition.

Key management actions

- Implementing Group-wide controls to enhance business resilience, including BHP's mandatory minimum performance requirements for security, crisis and emergency management and business continuity plans, and seeking to maintain an investment grade credit rating.
- Monitoring our current state of readiness (preparedness, redundancy and resilience), including through scenario analysis and business resilience exercises, supporting organisational capability in our operations, functions and senior management to effectively and efficiently respond to and recover from adverse events should they materialise.
- Monitoring the external environment, including political and economic factors through signal monitoring, our geopolitical monitoring and public policy frameworks and our enterprise-level watch list of emerging themes, to support early identification of policy changes or adverse events for which we may need to increase preparedness.
- Identifying security threats that could directly or indirectly impact our operations and people in countries of interest to BHP.
- Implementing our Adaptation Strategy with respect to the physical risks of climate change, including requiring operated assets and functions to identify and progressively assess potential physical climate change risks (including to our value chain) and build climate change adaptation into their plans, activities and investments.
- Sourcing quality, centralised climate data covering each of our operating locations so that our operated assets and functions have access to appropriate data to support climate studies that will inform investment decisions around enhancing our operational resilience.

FY2022 insights

Our exposure to risks associated with inadequate business resilience continued to grow in FY2022, with the external environment becoming increasingly volatile. Key emerging themes (including social activism, international criminal enterprise, global terrorism, cyber threats and war) signal heightened levels of global uncertainty and an increased likelihood of unexpected shocks or disruptions. At the same time, crisis events are increasing in frequency and scale. Some of these events directly impacted our business during FY2022, including the emergence of new COVID-19 variants and flooding in eastern and southern Australia (which flooded the road to Olympic Dam and impacted inbound critical consumables). In addition to continuing to build organisational resilience to such threats, adaptation of our business to the potential physical impacts of climate change continues to be at the forefront of our thinking, with the Intergovernmental Panel on Climate Change 6th Assessment Report noting the increased frequency and magnitude of climatic events.

For more information refer to:
- **BHP Climate Change Report 2020**
- **BHP Climate Transition Action Plan 2021**
- **OFR 7.8 – Climate change**
- **OFR 7.12 – Security services**
- **bhp.com/sustainability/safety-health/safety**

Low-carbon transition

Risks associated with the transition to a low-carbon economy.

Why is this important to BHP?

Transition risks arise from policy, regulatory, legal, technological, market and other societal responses to the challenges posed by climate change and the transition to a low-carbon economy. As a world-leading resources company, BHP is exposed to a range of transition risks that could affect the execution of our strategy or our operational efficiency, asset values and growth options, resulting in a material adverse impact on our financial performance, share price or reputation, including litigation. The complex and pervasive nature of climate change means transition risks are interconnected with and may amplify our other risk factors. Additionally, the inherent uncertainty of potential societal responses to climate change may create a systemic risk to the global economy.

Examples of potential threats

- Introduction or improvement of low-carbon technologies or changes in customer preference for products that support the transition to a low-carbon economy may decrease demand for some of our products (which may be abrupt or unanticipated), increase our costs or decrease the availability of key inputs to production. For example:
  - 'Green steel' technologies may reduce demand for our metallurgical coal or iron ore.
  - Increased scrap-based steel production may reduce demand for our metallurgical coal and iron ore by limiting production that is required globally.
  - New battery technologies that use less nickel could enter the market and reduce demand for our nickel products.
- Failure to address investor concerns on the potential impact of climate change on and from BHP's portfolio and operations may result in reduced investor confidence.
- Social concerns around climate change may result in investors divesting our securities or pressure on financial institutions not to provide financing for our fossil fuel assets, which could limit our ability to access capital markets and potentially result in reduced access to financing or increased financing costs, or otherwise adversely impact our ability to optimise our portfolio.
- Perceived or actual misalignment of BHP's climate actions (goals, targets and performance) with societal and investor expectations, or a failure to deliver our climate actions, may result in damage to our reputation, climate-related litigation (including class actions) or give rise to other adverse regulatory, legal or market responses.
- Sub-optimal selection, implementation or effectiveness of technology that is intended to contribute towards the delivery of our climate targets, goals and strategies, or unavailability of that technology (including due to a failure of external equipment manufacturers to deliver on schedule or competition for limited supply) could delay or increase costs in achieving our plans for operational decarbonisation.
- Changes in laws, regulations, policies, obligations, government actions, and our ability to anticipate and respond to such changes, including GHG emission targets, restrictive licencing, carbon taxes, carbon offset regulations, border adjustments or the addition or removal of subsidies, may give rise to adverse regulatory, legal or market responses. For example, the implementation of regulations intended to reduce GHG emissions in the steel industry in China could adversely impact demand for our metallurgical coal and/or iron ore.

Examples of potential opportunities

- Our copper, nickel, iron ore and metallurgical coal provide essential building blocks for renewable power generation and electric vehicles, and can play an important part in the transition to a low-carbon economy.
- Our potash fertiliser options can promote more efficient and profitable agriculture and alleviate the increased competition for arable land.
- Increased collaboration with customers, suppliers and original equipment manufacturers, such as BHP's partnerships with HBIS Group, China Baowu, JFE, POSCO and Tata Steel to explore technologies to reduce GHG emissions across the steel value chain, can provide opportunities for the development of new products and markets.

Key management actions

- Establishing public positions on, and mandatory minimum performance requirements for managing, climate change threats and opportunities, which are set out in our Climate Change Report 2020, our Climate Transition Action Plan 2021 and the Our Requirements for Environment and Climate Change standard.
- Using climate-related scenarios (including our Paris-aligned 1.5°C scenario), themes and signposts (such as monitoring policy, regulatory, legal, technological, market and other societal developments) to evaluate the resilience of our portfolio and inform our strategy.
- Considering transition risks (including carbon prices) when making capital expenditure decisions or allocating capital through our Capital Allocation Framework, supporting the prioritisation of capital and investment approval processes.
- Seeking to mitigate our exposure to risks arising from policy and regulation in our operating jurisdictions and markets by reducing our operational GHG emissions and taking a product stewardship approach to GHG emissions in our value chain.
- Advocating for the introduction of an effective, long-term policy framework that can deliver a measured transition to a low-carbon economy.

FY2022 insights

Our exposure to transition risks decreased in FY2022 due to portfolio changes involving the merger of our Petroleum business with Woodside and divestment of our interests in BMC and Cerrejón. However, societal pressure for change continued to increase with many governments and organisations making commitments to achieve GHG emissions targets within specified timeframes, including commitments at the United Nations Climate Change Conference (COP 26) in November 2021. Investor and other stakeholder interest in understanding how climate change might impact our strategy and portfolio continued to grow in FY2022, and stakeholder expectations of BHP regarding disclosure of climate-related information have increased accordingly.

For more information refer to:
- **BHP Climate Change Report 2020**
- **BHP Climate Transition Action Plan 2021**
- **OFR 3 – Positioning for the future**
- **OFR 7.8 – Climate change**
- **bhp.com/sustainability/climate-change**

Adopting technologies and maintaining digital security

Risks associated with adopting and implementing new technologies, and maintaining the effectiveness of our existing digital landscape (including cyber defences) across our value chain.

Why is this important to BHP?

Our business and operational processes across our value chain are increasingly dependent on the effective application and adoption of technology, which we use as a lever to deliver on our current and future operational, financial and social objectives. This exposes BHP to risks originating from adopting or implementing new technologies, or failing to take appropriate action to position BHP for the digital future, which may impact the capabilities we require, the effectiveness and efficiency of our operations and our ability to compete effectively. We may also fail to maintain the effectiveness of our existing and future digital landscape, including cyber defences, exposing us to technology availability, reliability and cybersecurity risks.

These could lead to operational events, commercial disruption (such as an inability to process or ship our products), corruption or loss of system data, misappropriation or loss of funds, unintended loss or disclosure of commercial or personal information, enforcement action or litigation. An inability to adequately maintain existing technology or implement critical new technology, or any sustained disruption to our existing technology may also adversely affect our licence to operate, reputation, results of operations and financial performance.

Examples of potential threats

- Failure to invest in appropriate technologies, or to keep pace with advancements in technology, that support the pursuit of our objectives may adversely impact the effectiveness or efficiency of our business and erode our competitive advantage. For example, a failure to implement appropriate technologies that support our assets to produce higher-grade commodities or less waste from existing resources could limit our ability to sell our commodities or reduce costs.
- Failing to identify, access and secure necessary infrastructure and key inputs (including electricity, internet bandwidth, data, software, licences or other rights in intellectual property, hardware and talent) to support new technology innovations and advanced technologies may adversely affect our ability to adopt, operate or retain access to those technologies. This includes artificial intelligence and machine learning, process automation, robotics, data analytics, cloud computing, smart devices and remote working solutions. For example, adopting new technology to reduce GHG emissions through the use of alternative energy sources may require new infrastructure, while effective implementation of new digital technologies may be heavily dependent on access to relevant data.
- Failure or outage of our information or operational technology systems.

- Cyber events or attacks on our information or operational technology systems, including on third-party partners and suppliers (such as our cloud service providers). For example, a cyber attack could result in a failure of business-critical technology systems at one or more of our assets, which may reduce operational productivity and/or adversely impact safety.

Examples of potential opportunities

- Applying digital solutions across our operations and value chain may unlock greater productivity and safety performance. For example, using predictive analytics to enable operations to identify asset condition and efficiencies may improve safety, production and equipment availability, and reduce maintenance and other costs.
- Technology solutions to reduce GHG emissions may support BHP, our suppliers and customers in achieving climate action targets. For example, BHP has become a founding partner of Komatsu's GHG Alliance in the ongoing development of zero GHG emissions haul trucks.
- Developing and applying artificial intelligence in mine planning, remote operation and advanced robotic technologies may identify or provide access to previously unknown or inaccessible deposits and development of end-to-end autonomous mining systems.
- Using digital simulations and predictive trend modelling may enable us to optimise the deployment of new technologies, such as automation and electrification, support early identification of process variances and faults, and support the marketing of our products to customers.

Key management actions

- Our assets, functions and projects are responsible for managing localised or project-specific exposure to technology and cyber risks, including risks associated with business- critical technology systems. Enterprise-level risks that are specific to technology, such as those that pose a greater threat to our wider business and strategic opportunities, are generally managed by our global Technology team and other relevant stakeholders to support delivery of our technology strategy.
- We collaborate with industry and research partners to develop technological solutions.
- Our Technology Risk Committee oversees the management and improvement of technology risks and controls, and supports the embedment of a sustainable risk culture in our Technology team.
- We employ a number of measures designed to protect against, detect and respond to cyber events or attacks, including BHP's mandatory minimum performance requirements for technology and cybersecurity, cybersecurity performance requirements for suppliers, cybersecurity resilience programs, an enterprise security framework and cybersecurity standards, cybersecurity risk and control guidance, security awareness programs and training to build capability, security assessments and continuous monitoring, restricted physical access to hardware and crisis management plans.

FY2022 insights

As we continued to leverage technology and enable digital transformation in FY2022, our exposure to associated risks increased. In particular, a continued increase in the frequency and sophistication of cyber attacks against companies, as well as on supply chains and critical infrastructure (for example, cyber attacks affecting South Africa Transfer Port Terminals and the Toronto Transit Commission) highlighted the importance of our ongoing focus to strengthen management of cybersecurity risk across the Group. We continued to adopt digital technologies where appropriate, including through the use of greater automation at our operations.

For more information refer to OFR 2.2.

Ethical misconduct

Risks associated with actual or alleged deviation from societal or business expectations of ethical behaviour (including breaches of laws or regulations) and wider or cumulative organisational cultural failings, resulting in significant reputational impacts.

Why is this important to BHP?

Actual or alleged conduct of BHP or our people or third-party partners that deviates from the standard of ethical behaviour expected of us could result in reputational damage or a breach of law or regulations. Such conduct includes fraud, corruption, anti-competitive behaviour, money laundering, breaching trade or financial sanctions, market manipulation, privacy breaches, ethical misconduct and wider organisational cultural failings. A failure to act ethically or legally may result in negative publicity, investigations, public inquiries, regulatory enforcement action, litigation or other civil or criminal proceedings, or increased regulation. It could also threaten the validity of our tenements or permits, or adversely impact our reputation, results of operations, financial performance or share price. Impacts may be amplified if our senior leaders fail to uphold BHP's values or address actual or alleged misconduct in a way that is consistent with societal and stakeholder expectations. Our workplace culture may also be eroded, adversely affecting our ability to attract and retain talent. Risks and impacts are also heightened by the complex and continuously evolving legal and regulatory frameworks that apply to the jurisdictions where we operate and potentially conflicting obligations under different national laws.

Examples of potential threats

- Failing to prevent breaches of international standards, laws, regulations or other legal, regulatory, ethical, environmental, governance or compliance obligations, such as external misstatements, inaccurate financial or operational reporting or a breach of our continuous disclosure obligations.
- Corruption (for example, due to the acquisition of early-stage options in non-OECD countries), market conduct or anti-competitive behaviour, including in relation to our joint venture operations.
- Failing to comply with trade or financial sanctions (which are complex and subject to rapid change and may potentially result in conflicting obligations), health, safety and environmental laws and regulations, native title and other land right or tax or royalty obligations.
- Failing to protect our people from harm (including to mental and physical health) due to misconduct that takes place in connection with their work, such as discrimination or sexual harassment.

Examples of potential opportunities

- Our capability to manage ethical misconduct risks may expand portfolio growth options by providing greater assurance that we can operate legally and ethically in high-risk jurisdictions.
- Managing ethical misconduct risks in line with societal and stakeholder expectations may distinguish BHP from competitors and enhance our ability to raise capital, attract and retain talent, engage with governments and communities in new jurisdictions, obtain permits, partner with external organisations or suppliers, or market our products to customers.
- Playing a leading role in the management of ethical misconduct risks, such as sexual harassment risks, may help BHP to increase ethical and behavioural standards across the resources industry.

Key management actions

- Setting the 'tone from the top' through *Our Charter,* which is central to our business and describes our purpose, values and how we measure success.
- Implementing internal policies, standards, systems and processes for governance and compliance to support an appropriate culture and prioritise respectful behaviours at BHP, including:
  - *Our Code of Conduct* and BHP's mandatory minimum performance requirements for business conduct, market disclosure and other matters
  - training on *Our Code of Conduct* and in relation to anti-corruption, market conduct and competition
  - ring fencing protocols to separate potentially competing businesses within BHP
  - governance and compliance processes, including classification of sensitive transactions, as well as accounting, procurement and other internal controls, and tailored monitoring of control effectiveness
  - oversight and engagement with high-risk areas by our Ethics and Investigations, Compliance and Internal Audit teams, and the Disclosure Committee
  - review and endorsement by our Compliance team of the highest-risk transactions, such as gifts and hospitality, engagement of third parties, community donations and sponsorships above defined thresholds
  - automated counterparty and transaction screening against lists of entities subject to trade sanctions
  - our EthicsPoint anonymous reporting service, supported by an ethics and investigations framework and central investigations team
  - our 'Together we can stop sexual harassment' campaign, launched across all our offices and sites in Australia, and 'Stop for Safety' sessions held globally by our leaders to set expectations around racism, sexual harassment and other disrespectful behaviours
- Continuing to enforce *Our Code of Conduct* via appropriate investigations and responses including disciplinary action, in addition to deployment of appropriate safety controls to prevent harm.
- Requiring anti-corruption and human rights risks to be considered as part of our new country entry approval process.

FY2022 insights

Our exposure to ethical misconduct risks increased in FY2022, including due to continued exploration of, and investment in, potential growth options in high-risk or less economically developed jurisdictions. Societal expectations regarding respectful behaviours in the workplace continued to grow. We continued to implement and improve controls designed to create a safe and respectful workplace and prevent sexual harassment from occurring. The ongoing conflict in Ukraine triggered the introduction of trade and financial sanctions by the United States, United Kingdom, European Union and other jurisdictions against Russia, underscoring the importance of continued management of associated risks across our global operations.

For more information refer to:

- *Our Charter* **and** *Our Code of Conduct*
- **OFR 7.5 – Sexual harassment**
- **OFR 7.7 – Ethics and business conduct**
- **Corporate Governance Statement**

10 Performance by commodity

Management believes the following information presented by commodity provides a meaningful indication of the underlying financial and operating performance of the assets, including equity accounted investments, of each reportable segment.

Information relating to assets that are accounted for as equity accounted investments is shown to reflect BHP's share, unless otherwise noted, to provide insight into the drivers of these assets.

For more information as to the statutory determination of our reportable segments, refer to Financial Statements note 1 'Segment reporting'.

Unit costs is one of our non-IFRS financial measures used to monitor the performance of our individual assets and is included in the analysis of each reportable segment.

For the definition and method of calculation of our non-IFRS financial measures, including Underlying EBITDA and Unit costs, refer to OFR 11.

10.1 Copper

Detailed below is financial and operating information for our Copper assets comparing FY2022 to FY2021.

Year ended 30 June **US$M**	**2022**	2021
Revenue	**16,849**	15,726
Underlying EBITDA	**8,565**	8,489
Net operating assets	**27,420**	26,928
Capital expenditure	**2,528**	2,180
Total copper production (kt)	**1,574**	1,636
Average realised prices		
Copper (US$/lb)	**4.16**	3.81

Key drivers of Copper's financial results

Price overview

Our average realised sales price for FY2022 was US$4.16 per pound (FY2021: US$3.81 per pound). Copper prices spent much of FY2022 trading around historic highs, buoyed by robust demand, low visible inventories, delays to new copper projects and Russian supply risks. However, prices fell in two stages in the June quarter. The first decline was due to the demand impact of China's COVID-19 lockdowns. The second was due to recession speculation in advanced economies. We believe mine supply and scrap collection will grow in the coming few years, covering near-term demand growth. Longer term, traditional end-use demand is expected to be solid, while broad exposure to the electrification megatrend offers attractive upside.

Production

Total Copper production for FY2022 decreased by 4 per cent to 1,574 kt.

Escondida copper production decreased by 6 per cent to 1,004 kt primarily due to concentrator feed grade decline of 4 per cent, public road blockades affecting access to site for both workers and supplies, and the impact of a reduced operational workforce from COVID-19. Despite these challenges, Escondida achieved record material mined for FY2022 and near record concentrator throughput of 367 ktpd.

Pampa Norte copper production increased by 29 per cent to 281 kt reflecting the ramp up of the Spence Growth Option (SGO), partially offset by the impact of lower cathode production as a result of a 14 per cent decline in Pampa Norte stacking feed grade.

Olympic Dam copper production decreased by 33 per cent to 138 kt as a result of the major smelter maintenance campaign (SCM21) completed in January 2022 which was delayed due to COVID-19 impacts on the availability of the workforce. Near record production in the June 2022 quarter followed the successful ramp up of the smelter to full capacity in April 2022. Average copper grade of 2.14 per cent was achieved in FY2022 as the majority of material mined is from the Southern Mine Area.

Antamina copper production increased by 4 per cent to 150 kt, reflecting higher copper head grades. Zinc production decreased by 15 per cent to 123 kt reflecting lower zinc head grades.

Financial results

Copper revenue increased by US$1.1 billion to US$16.8 billion in FY2022 due to higher average realised Copper prices offset by lower production.

Underlying EBITDA for Copper increased by US$76 million to US$8.6 billion. Price impacts, net of price-linked costs, increased Underlying EBITDA by US$1.0 billion. Lower volumes decreased Underlying EBITDA by US$652 million.

Controllable cash costs increased by US$107 million, due to higher costs at Escondida in line with record material mined and workforce bonus payments for renewal of a collective bargaining agreement, and also at Spence from a ramp up of concentrate volumes. In addition, controllable costs increased at both Escondida and Pampa Norte due to costs associated with the implementation of COVID-19 preventative measures (reported as an exceptional item in the prior year). This was partially offset by favourable inventory movements at Escondida and Spence as well as lower costs at Olympic Dam reflecting favourable inventory movements due to reduced operational activity during the major smelter maintenance campaign. In the prior year, costs benefited from a one-off gain from cancelled power contracts at Escondida and Spence.

Inflation and higher input prices for diesel, acid and consumables negatively impacted Underlying EBITDA by US$408 million and US$295 million respectively, partially offset by favourable foreign exchange rate movements of US$497 million. Equity accounted investment profits attributable to Antamina increased by US$97 million due to higher realised prices for both copper and zinc.

Escondida unit costs increased by 20 per cent to US$1.20 per pound at realised exchange rates. This reflected strong cost discipline despite higher prices for consumables, workforce bonus payments following renewal of a new collective bargaining agreement and a one-off gain recorded in the prior year due to cancelled power contracts as part of Escondida's transition to renewable electricity. Costs associated with a planned material mined increase of approximately 20 per cent, incremental costs associated with COVID-19 preventative measures and lower by-product credits also contributed to higher unit costs. These increases were partially offset by lower power prices achieved by Escondida's transition towards 100 per cent renewable electricity.

The calculation of Escondida unit costs is set out in the table below.

Escondida unit costs (US$M)	**FY2022**	FY2021
Revenue	**9,500**	9,470
Underlying EBITDA	**6,198**	6,483
Gross costs	**3,302**	2,987
Less: by-product credits	**430**	478
Less: freight	**230**	162
Net costs	**2,642**	2,347
Sales (kt)	**1,001**	1,066
Sales (Mlb)	**2,206**	2,350
Cost per pound (US$)[1,2,3]	**1.20**	1.00

1 FY2022 based on average exchange rates of USD/CLP 811.

2 FY2022 includes COVID-19 related costs of US$0.02 per pound, which was reported as an exceptional item in FY2021 (FY2021: US$0.03 per pound).

3 FY2021 includes a one off gain from the optimised outcome from renegotiation of cancelled power contracts of US$0.04 per pound.

Outlook

Total Copper production of between 1,635 and 1,825 kt is expected in FY2023. Escondida production of between 1,080 and 1,180 kt is expected in FY2023, reflecting an expected increase in concentrator feed grade compared to FY2022. Production at Pampa Norte is expected to be between 240 and 290 kt in FY2023, reflecting a forecast decline in stacking feed grade at Pampa Norte, the commencement of plant design modifications at SGO and the continued transition towards the planned closure of Cerro Colorado at the end of CY2023. At Olympic Dam, production is expected to be between 195 and 215 kt in FY2023.

Antamina Copper production is expected between 120 and 140 kt in FY2023.

Escondida unit costs in FY2023 are expected to be between US$1.25 and US$1.45 per pound (based on an exchange rate of USD/CLP 830). This largely reflects inflationary pressures, including expected further price increases for consumables, and planned higher costs to study the potential to increase optionality at Escondida longer term. In the medium term, unit cost guidance for Escondida has been revised to less than US$1.15 per pound from less than US$1.10 per pound (based on an exchange rate of USD/CLP 830), reflecting inflation, the impact of higher power consumption and increased water costs.

Medium-term production guidance for Escondida of 1.2 Mtpa on average over the next five years remains unchanged.

10.2 Iron Ore

Detailed below is financial and operating information for our Iron Ore assets comparing FY2022 to FY2021.

Year ended 30 June US$M	**2022**	2021
Revenue	**30,767**	34,475
Underlying EBITDA	**21,707**	26,278
Net operating assets	**16,823**	18,663
Capital expenditure	**1,848**	2,188
Total iron ore production (Mt)	**253**	254
Average realised prices		
Iron ore (US$/wmt, FOB)	**113.10**	130.56

Key drivers of Iron Ore's financial results

Price overview

Iron Ore's average realised sales price for FY2022 was US$113.10 per wet metric tonne (wmt) (FY2021: US$130.56 per wmt). The iron ore market was firm for much of the second half of FY2022, supported by resilient demand, constrained supply of competing scrap in China, and lower than expected seaborne supply from some low cost and swing suppliers. As a result, Chinese port stocks declined steadily for much of the period. Near the close of the year, weakening sentiment within the steel value chain fed back into lower prices for iron ore. Looking ahead, the key near-term uncertainties are the pace of steel end-use sector recovery in China, how the Chinese authorities will administer steel production cuts in the remainder of the CY2022, and the performance of seaborne supply. In the medium term, China's demand for iron ore is expected to be lower than it is today as crude steel production plateaus, and the scrap-to-steel ratio rises. In the long term, prices are expected to be determined by high-cost production, on a value-in-use adjusted basis, from Australia or Brazil. It is imperative that we continue to compete on both quality and operational effectiveness.

Production

Total Iron Ore production was in line with the prior period.

WAIO production of 249 Mt (283 Mt on a 100 per cent basis) was in line with the prior period, reflecting continued strong supply chain performance and favourable weather compared to the prior period, offset by the impacts of temporary labour constraints relating to COVID-19, planned major maintenance including the Jimblebar train load out and car dumper one. Our preventative maintenance programs continue to underpin the strength of the WAIO supply chain, delivering increased car dumper, reclaimer and ship loader availability year on year and enabling record sales volumes of 284 Mt (100 per cent basis).

South Flank ramp up to full production capacity of 80 Mtpa (100 per cent basis) is ahead of schedule with an average rate of 67Mtpa achieved in the June 2022 quarter contributing to record production from the Mining Area C hub and record lump sales.

Samarco production of 4.1 Mt (BHP share) reflected the ramp up of production to capacity, following the recommencement of iron ore pellet production at one concentrator in December 2020.

Financial results

Total Iron Ore revenue decreased by US$3.7 billion to US$30.8 billion in FY2022 reflecting lower average realised prices.

Underlying EBITDA for Iron Ore decreased by US$4.6 billion to US$21.7 billion primarily due to lower average realised prices, net of price linked costs, of US$4.0 billion and higher operating cash costs of US$431 million. The higher cash costs are primarily a result of South Flank operational ramp up spend, increased rail maintenance, incremental costs associated with COVID-19 (mainly higher demurrage costs due to delays, reported as an exceptional item in the prior year) and inventory movements to support the supply chain. Other items such as inflation and higher fuel and energy costs negatively impacted Underlying EBITDA by US$392 million. This was partially offset by favourable foreign exchange rate impacts of US$332 million.

WAIO unit costs increased by 13 per cent to US$16.81 per tonne at realised exchange rates. The increase in unit cost was mainly due to higher diesel prices, costs associated with the ramp up of South Flank, higher rail track maintenance costs, and costs associated with COVID-19 of approximately US$0.50 per tonne, which has been taken to unit costs in this period but reported as an exceptional item in the prior period. The cost increase was partially offset by the impact of favourable exchange rate movements.

The calculation of WAIO unit costs is set out in the table below.

WAIO unit costs (US$M)	**FY2022**	FY2021
Revenue	**30,632**	34,337
Underlying EBITDA	**21,788**	26,270
Gross costs	**8,844**	8,067
Less: freight[1]	**2,497**	1,755
Less: royalties	**2,134**	2,577
Net costs	**4,213**	3,735
Sales (kt, equity share)	**250,688**	252,052
Cost per tonne (US$)[2,3]	**16.81**	14.82

1 Year on year increase of freight costs driven by higher diesel prices and vessel demand increases from global supply chain pressures relating to COVID-19.

2 FY2022 based on an average realised exchange rate of AUD/USD 0.73.

3 FY2022 includes COVID-19 related costs of US$0.50 per tonne (including US$0.22 per tonne relating to operations and US$0.28 per tonne relating to demurrage). FY2021 excluded COVID-19 related costs of US$0.51 per tonne (including US$0.25 per tonne relating to operations and US$0.26 per tonne relating to demurrage) that was reported as an exceptional item. In FY2021 an additional US$0.12 per tonne relating to capital projects was also reported as an exceptional item.

Outlook

WAIO production for FY2023 is expected to increase to between 246 and 256 Mt (278 and 290 Mt on a 100 per cent basis) reflecting the tie-in of the port debottlenecking project (PDP1) and the continued ramp up of South Flank.

Samarco production of between 3 and 4 Mt (BHP share) is expected in FY2023.

Unit costs in FY2023 are expected to be between US$18 and US$19 per tonne (based on an exchange rate of AUD/USD 0.72). In the medium term, unit costs have been revised to less than US$17 per tonne reflecting updated guidance exchange rates (based on an exchange rate of AUD/USD 0.72) and inflationary pressures, and our plan to creep production to greater than 300 Mtpa.

10.3 Coal

Detailed below is financial and operating information for our Coal assets comparing FY2022 to FY2021.

Year ended 30 June US$M	**2022**	2021
Revenue	**15,549**	5,154
Underlying EBITDA	**9,504**	288
Net operating assets	**7,650**	7,512
Capital expenditure	**621**	579
Total metallurgical coal production (Mt)	**37**	41
Total energy coal production (Mt)	**18**	19
Average realised prices		
Metallurgical coal (US$/t)	**347.10**	106.64
Hard coking coal (HCC)(US$/t)	**366.82**	112.72
Weak coking coal (WCC)(US$/t)	**296.51**	89.62
Thermal coal (US$/t)	**216.78**	58.42

Key drivers of Coal's financial results

Price overview

Metallurgical coal

Our average realised sales price for FY2022 was US$366.82 per tonne for hard coking coal (HCC) (FY2021: US$112.72 per tonne) and US$296.51 per tonne for weak coking coal (WCC) (FY2021: US$89.62 per tonne). Metallurgical coal prices surged to record highs in the second half of FY2022 on firm rest of world demand, uncertainty over Russia and multi-regional, multi-causal supply disruptions. The deterioration in rest of world steelmaking profitability late in the June quarter saw prices descend from their extreme highs. The industry faces a difficult and uncertain period ahead. Natural trade flows are impaired, including uncertainty around China's import policy and Russian coal supply. The regulatory environment has also become less conducive to long-life capital investment. Long term, we believe that a wholesale shift away from blast furnace steelmaking is still decades in the future. That assessment is based on our bottom-up analysis of likely regional steel decarbonisation pathways, as discussed in our Climate Transition Action Plan. Demand for seaborne Hard Coking Coals (HCC) is expected to expand alongside the growth of the steel industry in HCC importing countries such as India.

Energy coal

Our average realised sales price for FY2022 was US$216.78 per tonne (FY2021: US$58.42 per tonne). The Newcastle 6,000 kcal/kg price reached a record high in May 2022 due to very strong demand and constrained supply. Trade flow redirection from Asia to Europe due to the Russian invasion of Ukraine, gas-to-coal switching as LNG prices spiked upwards, and hot weather in major importing regions, all contributed to the swift run-up in pricing. Longer term, total primary energy derived from coal (power and non-power) is expected to be challenged, particularly under deep decarbonisation scenarios, where demand is expected to decline in absolute terms.

Production

Metallurgical coal

Metallurgical coal production consisted of BMA production and BMC production up to 3 May 2022 when the divestment of our interest in BMC completed.

BMA production decreased by 9 per cent to 29 Mt (58 Mt on a 100 per cent basis). Record production at the Broadmeadow mine was more than offset by significant wet weather impacts across most BMA operations and labour constraints, including COVID-19 related absenteeism which impacted stripping and mine productivity.

BMC production decreased by 9 per cent to 8 Mt due to the divestment of our 80 per cent interest in BMC to Stanmore Resources Limited on 3 May 2022.

Energy coal

Energy coal production consisted of NSWEC production and Cerrejón production up to 11 January 2022 when the divestment of our interest in Cerrejón completed.

NSWEC production decreased by 4 per cent to 14 Mt, reflecting lower volumes due to an increased proportion of washed coal to capitalise on higher margins for higher-quality coals, COVID-19 related labour constraints which impacted stripping performance and mine productivity, and wet weather. Higher-quality coals made up almost 90 per cent of sales compared to approximately 60 per cent of sales in the prior year.

Cerrejón production decreased by 15 per cent to 4 Mt due to the divestment of our interest on 11 January 2022.

Financial results

Coal revenue increased by US$10.4 billion to US$15.5 billion in FY2022 mainly due to higher average realised prices.

Underlying EBITDA for Coal increased by US$9.2 billion to US$9.5 billion. Price impacts, net of price-linked costs, increased Underlying EBITDA by US$8.1 billion combined with the higher contribution of BMC of US$1.4 billion, mainly due to higher realised prices, prior to the divestment of our 80 per cent interest.

Lower volumes decreased Underlying EBITDA by US$341 million and other items such as inflation and fuel and energy costs also negatively impacted Underlying EBITDA by US$279 million. This was partially offset by favourable foreign exchange rate impacts of US$268 million.

BMA unit costs[1] increased by 8 per cent to US$89 per tonne primarily due to lower volumes following significant wet weather impacts across most BMA operations and labour constraints, including COVID-19 related absenteeism which impacted stripping and mine productivity, and higher diesel and electricity prices. This was partially offset by cost reduction initiatives and favourable exchange rate movements.

NSWEC unit costs increased by 10 per cent to US$71 per tonne reflecting lower volumes due to an increased proportion of washed coal to capitalise on higher margins for higher-quality coals and COVID-19 related labour constraints which impacted stripping performance and mine productivity combined with higher diesel and electricity prices. This was partially offset by cost reduction initiatives and favourable exchange rate movements.

Outlook

BMA coal production for FY2023 is expected to be between 29 and 32 Mt (58 and 64 Mt on a 100 per cent basis).

NSWEC production for FY2023 is expected to be between 13 and 15 Mt reflecting a continued focus on higher-quality coals.

BMA unit costs in FY2023 are expected to be between US$90 and US$100 per tonne (based on an exchange rate of AUD/USD 0.72) as a result of continued higher diesel and electricity prices. We remain focused on cost reduction and productivity initiatives, however given the ongoing uncertainty regarding restrictions on coal imports into China and the announcement of the change to the Queensland royalty regime, we are unable to provide medium-term volume and unit cost guidance. We are seeking to preserve low-cost incremental growth optionality in our portfolio with a focus on higher-quality coking coals.

NSWEC unit costs in FY2023 are expected to be between US$76 and US$86 per tonne (based on an exchange rate of AUD/USD 0.72) reflecting inflationary pressures, higher port toll charges at the NCIG coal export terminal and a continued focus on higher-quality coals, offset by mine plan optimisation, productivity improvements and cost reduction initiatives.

10.4 Other assets

Detailed below is an analysis of Other assets' financial and operating performance comparing FY2022 to FY2021.

Nickel West

Key drivers of Nickel West's financial results

Price overview

Our average realised sales price for FY2022 was US$23,275 per tonne (FY2021: US$16,250 per tonne). The nickel market was in deficit across the 2021 calendar year and early 2022. Visible inventories were drawn down steeply, putting upward pressure on prices. These tight fundamentals emerged due to a combination of strong demand from conventional end-use sectors, rapid growth in the electric vehicle value chain, uncertainty over the actual and potential loss of supply from Russia, and constrained Class-1 supply in the 2021 calendar year. These forces culminated in a dramatic spike in LME prices in March 2022. Prices have since fallen back to levels before the Russian invasion of Ukraine due to recession fears, alongside other exchange-traded metals. Longer term, we believe nickel will be a core beneficiary of the electrification mega-trend and that nickel sulphides will be particularly attractive.

Production

Nickel West production in FY2022 decreased by 14 per cent to 77 kt due to the significant impacts of COVID-19 related labour absenteeism and workforce shortages, and unplanned downtime at the oxygen plant leading to a 15-day smelter outage in the June 2022 quarter.

Financial results

Higher average realised sales prices resulted in revenue increasing by US$381 million to US$1.9 billion in FY2022.

Nickel West's Underlying EBITDA increased from US$259 million in FY2021 to US$420 million in FY2022, reflecting higher average realised prices and favourable exchange rate movements. This was partially offset by lower volumes mainly due to the significant impacts of COVID-19 related labour absenteeism and workforce shortages, unplanned downtime at the oxygen plant leading to a 15-day smelter outage in the June 2022 quarter, and the adverse impacts of the stronger nickel price on third-party concentrate purchase costs.

Outlook

Nickel West production for FY2023 is expected to be between 80 and 90 kt, weighted to the second half of the year due to planned smelter maintenance in the first half.

Potash

Potash recorded an Underlying EBITDA loss of US$147 million in FY2022, and a loss of US$167 million in FY2021.

10.5 Impact of changes to commodity prices

The prices we obtain for our products are a key driver of value for BHP. Fluctuations in these commodity prices affect our results, including cash flows and asset values. The estimated impact of changes in commodity prices in FY2022 on our key financial measures is set out below.

US$M	Impact on profit after taxation from Continuing operations (US$M)	Impact on Underlying EBITDA (US$M)
US¢1/lb on copper price	22	31
US$1/t on iron ore price	160	228
US$1/t on metallurgical coal price	16	23
US$1/t on energy coal price	9	13
US¢1/lb on nickel price	1	1

The calculation of BMA and NSWEC unit costs is set out in the table below:

	BMA unit costs[1]		NSWEC unit costs	
US$M	**FY2022**	FY2021	**FY2022**	FY2021
Revenue	**10,254**	3,537	**3,034**	839
Underlying EBITDA	**6,335**	567	**1,807**	(169)
Gross costs	**3,919**	2,970	**1,227**	1,008
Less: freight	**50**	54	**–**	–
Less: royalties	**1,282**	275	**227**	66
Net costs	**2,587**	2,641	**1,000**	942
Sales (kt, equity share)	**29,049**	31,958	**14,124**	14,626
Cost per tonne (US$)[2,3]	**89.06**	82.64	**70.80**	64.41

[1] Queensland Coal unit costs no longer reported as the divestment of BHP's 80 per cent interest in BMC to Stanmore Resources Limited was completed on 3 May 2022.

[2] FY2022 based on an average realised exchange rate of AUD/USD 0.73.

[3] FY2022 includes COVID-19 related costs of US$0.24 per tonne and US$0.57 per tonne, which was reported as an exceptional item in FY2021 (FY2021: US$0.98 and US$0.40 per tonne) relating to BMA and NSWEC respectively.

11 Non-IFRS financial information

We use various non-IFRS financial information to reflect our underlying financial performance.

Non-IFRS financial information is not defined or specified under the requirements of IFRS, but is derived from the Group's Consolidated Financial Statements prepared in accordance with IFRS. The non-IFRS financial information and the below reconciliations included in this document are unaudited. The non-IFRS financial information presented is consistent with how management review financial performance of the Group with the Board and the investment community.

Sections 1.1 and 1.2 outline why we believe non-IFRS financial information is useful and the calculation methodology. We believe non-IFRS financial information provides useful information, however should not be considered as an indication of, or as a substitute for, statutory measures as an indicator of actual operating performance (such as profit or net operating cash flow) or any other measure of financial performance or position presented in accordance with IFRS, or as a measure of a company's profitability, liquidity or financial position.

Comparative periods have been adjusted for the effects of applying IFRS 5 'Non-current Assets Held for Sale and Discontinued Operations' and discloses them on the same basis as the current period figures.

The following tables provide reconciliations between non-IFRS financial information and their nearest respective IFRS measure.

Exceptional items

To improve the comparability of underlying financial performance between reporting periods, some of our non-IFRS financial information adjusts the relevant IFRS measures for exceptional items.

For more information on exceptional items refer to Financial Statements note 3 'Exceptional items'.

Exceptional items are those gains or losses where their nature, including the expected frequency of the events giving rise to them, and impact is considered material to the Group's Consolidated Financial Statements. The exceptional items included within the Group's profit from Continuing and Discontinued operations for the financial years are detailed below.

Year ended 30 June	2022 US$M	2021 US$M Restated	2020 US$M Restated
Continuing operations			
Revenue	**–**	–	–
Other income	**840**	34	489
Expenses excluding net finance costs, depreciation, amortisation and impairments	**(494)**	(545)	(1,019)
Depreciation and amortisation	**–**	–	–
Net impairments	**–**	(2,371)	(409)
Loss from equity accounted investments, related impairments and expenses	**(676)**	(1,456)	(508)
Profit/(loss) from operations	**(330)**	(4,338)	(1,447)
Financial expenses	**(290)**	(85)	(93)
Financial income	**–**	–	–
Net finance costs	**(290)**	(85)	(93)
Profit/(loss) before taxation	**(620)**	(4,423)	(1,540)
Income tax (expense)/benefit	**(454)**	(1,057)	239
Royalty-related taxation (net of income tax benefit)	**–**	–	–
Total taxation (expense)/benefit	**(454)**	(1,057)	239
Profit/(loss) after taxation from Continuing operations	**(1,074)**	(5,480)	(1,301)
Discontinued operations			
Profit/(loss) after taxation from Discontinued operations	**8,159**	(317)	(4)
Profit/(loss) after taxation from Continuing and Discontinued operations	**7,085**	(5,797)	(1,305)
Total exceptional items attributable to non-controlling interests	**–**	(24)	(201)
Total exceptional items attributable to BHP shareholders	**7,085**	(5,773)	(1,104)
Exceptional items attributable to BHP shareholders per share (US cents)	**140.0**	(114.2)	(21.9)
Weighted basic average number of shares (Million)	**5,061**	5,057	5,057

Non-IFRS financial information derived from Consolidated Income Statement

Underlying attributable profit

Year ended 30 June	2022 US$M	2021 US$M	2020 US$M
Profit after taxation from Continuing and Discontinued operations attributable to BHP shareholders	**30,900**	11,304	7,956
Total exceptional items attributable to BHP shareholders[1]	**(7,085)**	5,773	1,104
Underlying attributable profit	**23,815**	17,077	9,060

[1] For more information refer to Financial Statements note 3 'Exceptional items'.

Underlying basic earnings per share

Year ended 30 June	2022 US cents	2021 US cents	2020 US cents
Basic earnings per ordinary share	**610.6**	223.5	157.3
Exceptional items attributable to BHP shareholders per share[1]	**(140.0)**	114.2	21.9
Underlying basic earnings per ordinary share	**470.6**	337.7	179.2

[1] For more information refer to Financial Statements note 3 'Exceptional items'.

Underlying attributable profit – Continuing operations

Year ended 30 June	2022 US$M	2021 US$M Restated	2020 US$M Restated
Profit after taxation from Continuing and Discontinued operations attributable to BHP shareholders	**30,900**	11,304	7,956
(Profit)/loss after taxation from Discontinued operations attributable to members of BHP	**(10,655)**	225	(108)
Total exceptional items attributable to BHP shareholders[1]	**(7,085)**	5,773	1,104
Total exceptional items attributable to BHP shareholders for Discontinued operations[2]	**8,159**	(317)	(4)
Underlying attributable profit – Continuing operations	**21,319**	16,985	8,948

[1] For more information refer to Financial Statements note 3 'Exceptional items'.

[2] For more information refer to Financial Statements note 27 'Discontinued operations'.

Underlying basic earnings per share – Continuing operations

Year ended 30 June	2022 US$M	2021 US$M Restated	2020 US$M Restated
Underlying attributable profit – Continuing operations	**21,319**	16,985	8,948
Weighted basic average number of shares (Million)	**5,061**	5,057	5,057
Underlying attributable earnings per ordinary share – Continuing operations (US cents)	**421.2**	335.9	176.9

Underlying EBITDA

Year ended 30 June	2022 US$M	2021 US$M Restated	2020 US$M Restated
Profit from operations	**34,106**	25,515	13,683
Exceptional items included in profit from operations[1]	**330**	4,338	1,447
Underlying EBIT	**34,436**	29,853	15,130
Depreciation and amortisation expense	**5,683**	5,084	4,667
Net impairments	**515**	2,507	482
Exceptional item included in Depreciation, amortisation and impairments[1]	**–**	(2,371)	(409)
Underlying EBITDA	**40,634**	35,073	19,870

[1] For more information refer to Financial Statements note 3 'Exceptional items'.

Underlying EBITDA – Segment

Year ended 30 June 2022 US$M	Copper	Iron Ore	Coal	Group and unallocated items/ eliminations[2]	Total Group
Profit from operations	**6,249**	**18,823**	**9,582**	**(548)**	**34,106**
Exceptional items included in profit from operations[1]	**81**	**648**	**(849)**	**450**	**330**
Depreciation and amortisation expense	**1,765**	**2,203**	**762**	**953**	**5,683**
Net impairments	**470**	**33**	**9**	**3**	**515**
Underlying EBITDA	**8,565**	**21,707**	**9,504**	**858**	**40,634**

11 Non-IFRS financial information continued

Year ended 30 June 2021 US$M Restated	Copper	Iron Ore	Coal	Group and unallocated items/ eliminations[2]	Total Group
Profit from operations	6,665	22,975	(2,144)	(1,981)	25,515
Exceptional items included in profit from operations[1]	144	1,319	1,567	1,308	4,338
Depreciation and amortisation expense	1,608	1,971	845	660	5,084
Net impairments	72	13	1,077	1,345	2,507
Exceptional item included in Depreciation, amortisation and impairments[1]	–	–	(1,057)	(1,314)	(2,371)
Underlying EBITDA	8,489	26,278	288	18	35,073

Year ended 30 June 2020 US$M Restated	Copper	Iron Ore	Coal	Group and unallocated items/ eliminations[2]	Total Group
Profit from operations	1,362	12,310	793	(782)	13,683
Exceptional items included in profit from operations[1]	1,228	614	18	(413)	1,447
Depreciation and amortisation expense	1,740	1,608	807	512	4,667
Net impairments	426	22	14	20	482
Exceptional item included in Depreciation, amortisation and impairments[1]	(409)	–	–	–	(409)
Underlying EBITDA	4,347	14,554	1,632	(663)	19,870

1 For more information refer to Financial Statements note 3 ‘Exceptional items’.

2 Group and unallocated items includes functions, other unallocated operations, including Potash, Nickel West, legacy assets, and consolidation adjustments.

Year ended 30 June 2022 US$M	**Profit from operations**	**Exceptional items included in profit from operations[1]**	**Depreciation and amortisation**	**Net impairments**	**Exceptional items included in Depreciation, amortisation and impairments[1]**	**Underlying EBITDA**
Potash	**(149)**	**–**	**2**	**–**	**–**	**(147)**
Nickel West	**327**	**–**	**91**	**2**	**–**	**420**
Corporate, legacy assets and eliminations	**(726)**	**450**	**860**	**1**	**–**	**585**
Total	**(548)**	**450**	**953**	**3**	**–**	**858**

Year ended 30 June 2021 US$M Restated	Profit from operations	Exceptional items included in profit from operations[1]	Depreciation and amortisation	Net impairments	Exceptional items included in Depreciation, amortisation and impairments[1]	Underlying EBITDA
Potash	(1,489)	1,320	2	1,314	(1,314)	(167)
Nickel West	146	3	79	31	–	259
Corporate, legacy assets and eliminations	(638)	(15)	579	–	–	(74)
Total	(1,981)	1,308	660	1,345	(1,314)	18

Year ended 30 June 2020 US$M Restated	Profit from operations	Exceptional items included in profit from operations[1]	Depreciation and amortisation	Net impairments	Exceptional items included in Depreciation, amortisation and impairments[1]	Underlying EBITDA
Potash	(130)	–	3	–	–	(127)
Nickel West	(113)	5	68	3	–	(37)
Corporate, legacy assets and eliminations	(539)	(418)	441	17	–	(499)
Total	(782)	(413)	512	20	–	(663)

1 For more information refer to Financial Statements note 3 ‘Exceptional items’.

Underlying EBITDA margin

Year ended 30 June 2022 **US$M**	**Copper**	**Iron Ore**	**Coal**	**Group and unallocated items/ eliminations[1]**	**Total Group**
Revenue – Group production	**13,946**	**30,748**	**15,549**	**1,860**	**62,103**
Revenue – Third-party products	**2,903**	**19**	**–**	**73**	**2,995**
Revenue	**16,849**	**30,767**	**15,549**	**1,933**	**65,098**
Underlying EBITDA – Group production	**8,529**	**21,707**	**9,504**	**858**	**40,598**
Underlying EBITDA – Third-party products	**36**	**–**	**–**	**–**	**36**
Underlying EBITDA[2]	**8,565**	**21,707**	**9,504**	**858**	**40,634**
Segment contribution to the Group's Underlying EBITDA[3]	**22%**	**54%**	**24%**		**100%**
Underlying EBITDA margin[4]	**61%**	**71%**	**61%**		**65%**

Year ended 30 June 2021 US$M Restated	Copper	Iron Ore	Coal	Group and unallocated items/ eliminations[1]	Total Group
Revenue – Group production	13,482	34,457	5,154	1,543	54,636
Revenue – Third-party products	2,244	18	–	23	2,285
Revenue	15,726	34,475	5,154	1,566	56,921
Underlying EBITDA – Group production	8,425	26,277	288	18	35,008
Underlying EBITDA – Third-party products	64	1	–	–	65
Underlying EBITDA[2]	8,489	26,278	288	18	35,073
Segment contribution to the Group's Underlying EBITDA[3]	24%	75%	1%		100%
Underlying EBITDA margin[4]	62%	76%	6%		64%

Year ended 30 June 2020 US$M Restated	Copper	Iron Ore	Coal	Group and unallocated items/ eliminations[1]	Total Group
Revenue – Group production	9,577	20,782	6,242	1,191	37,792
Revenue – Third-party products	1,089	15	–	28	1,132
Revenue	10,666	20,797	6,242	1,219	38,924
Underlying EBITDA – Group production	4,306	14,561	1,632	(663)	19,836
Underlying EBITDA – Third-party products	41	(7)	–	–	34
Underlying EBITDA[2]	4,347	14,554	1,632	(663)	19,870
Segment contribution to the Group's Underlying EBITDA[3]	21%	71%	8%		100%
Underlying EBITDA margin[4]	45%	70%	26%		52%

[1] Group and unallocated items includes functions, other unallocated operations, including Potash, Nickel West, legacy assets, and consolidation adjustments. Revenue not attributable to reportable segments comprises the sale of freight and fuel to third parties. Exploration and technology activities are recognised within relevant segments.

[2] We differentiate sales of our production from sales of third-party products to better measure the operational profitability of our operations as a percentage of revenue. These tables show the breakdown between our production and third-party products, which is necessary for the calculation of the Underlying EBITDA margin and margin on third-party products.

We engage in third-party trading for the following reasons:

- Production variability and occasional shortfalls from our assets means that we sometimes source third-party materials to ensure a steady supply of product to our customers.
- To optimise our supply chain outcomes, we may buy physical product from third parties.
- To support the development of liquid markets, we will sometimes source third-party physical products and manage risk through both the physical and financial markets.

[3] Percentage contribution to Group Underlying EBITDA, excluding Group and unallocated items.

[4] Underlying EBITDA margin excludes third-party products.

Effective tax rate

	2022			2021 Restated			2020 Restated		
Year ended 30 June	**Profit before taxation US$M**	**Income tax expense US$M**	**%**	Profit before taxation US$M	Income tax expense US$M	%	Profit before taxation US$M	Income tax expense US$M	%
Statutory effective tax rate	**33,137**	**(10,737)**	**32.4**	24,292	(10,616)	43.7	12,825	(4,197)	32.7
Adjusted for:									
Exchange rate movements	**–**	**(233)**		–	(33)		–	41	
Exceptional items[1]	**620**	**454**		4,423	1,057		1,540	(239)	
Adjusted effective tax rate	**33,757**	**(10,516)**	**31.2**	28,715	(9,592)	33.4	14,365	(4,395)	30.6

[1] For more information refer to Financial Statements note 3 'Exceptional items'.

Non-IFRS financial information derived from Consolidated Cash Flow Statement

Capital and exploration expenditure

Year ended 30 June	2022 US$M	2021 US$M Restated	2020 US$M Restated
Capital expenditure (purchases of property, plant and equipment)	**5,855**	5,612	5,991
Add: Exploration expenditure	**256**	192	176
Capital and exploration expenditure (cash basis) – Continuing operations	**6,111**	5,804	6,167
Capital expenditure (purchases of property, plant and equipment) – Discontinued operations	**1,050**	994	909
Add: Exploration expenditure – Discontinued operations	**384**	322	564
Capital and exploration expenditure (cash basis) – Discontinued operations	**1,434**	1,316	1,473
Capital and exploration expenditure (cash basis) – Total operations	**7,545**	7,120	7,640

Free cash flow

Year ended 30 June	2022 US$M	2021 US$M Restated	2020 US$M Restated
Net operating cash flows from Continuing operations	**29,285**	25,883	14,685
Net investing cash flows from Continuing operations	**(4,973)**	(6,325)	(6,583)
Free cash flow – Continuing operations	**24,312**	19,558	8,102
Net operating cash flows from Discontinued operations	**2,889**	1,351	1,021
Net investing cash flows from Discontinued operations	**(904)**	(1,520)	(1,033)
Net cash completion payment on merger of Petroleum with Woodside	**(683)**	–	–
Cash and cash equivalents disposed on merger of Petroleum with Woodside	**(399)**	–	–
Free cash flow – Discontinued operations	**903**	(169)	(12)
Free cash flow – Total operations	**25,215**	19,389	8,090

Non-IFRS financial information derived from Consolidated Balance Sheet

Net debt and gearing ratio

Year ended 30 June	2022 US$M	2021 US$M	2020 US$M
Interest bearing liabilities – Current	**2,622**	2,628	5,012
Interest bearing liabilities – Non current	**13,806**	18,355	22,036
Total interest bearing liabilities	**16,428**	20,983	27,048
Comprising:			
Borrowing	**13,852**	17,087	23,605
Lease liabilities	**2,576**	3,896	3,443
Less: Lease liability associated with index-linked freight contracts	**274**	1,025	1,160
Less: Cash and cash equivalents	**17,236**	15,246	13,426
Less: Net debt management related instruments[1]	**(1,688)**	557	433
Less: Net cash management related instruments[2]	**273**	34	(15)
Less: Total derivatives included in net debt	**(1,415)**	591	418
Net debt	**333**	4,121	12,044
Net assets	**48,766**	55,605	52,175
Gearing	**0.7%**	6.9%	18.8%

[1] Represents the net cross currency and interest rate swaps included within current and non-current other financial assets and liabilities.

[2] Represents the net forward exchange contracts related to cash management included within current and non-current other financial assets and liabilities.

Net debt waterfall

Year ended 30 June	2022 US$M	2021 US$M
Net debt at the beginning of the period	**(4,121)**	(12,044)
Net operating cash flows	**32,174**	27,234
Net investing cash flows	**(6,959)**	(7,845)
Net financing cash flows	**(22,767)**	(17,922)
Net increase in cash and cash equivalents from Continuing and Discontinued operations	**2,448**	1,467
Carrying value of interest bearing liability net repayments	**2,227**	7,433
Carrying value of debt related instruments settlements/(proceeds)	**–**	(167)
Carrying value of cash management related instruments (proceeds)/settlements	**(247)**	403
Fair value adjustment on debt (including debt related instruments)	**5**	58
Foreign exchange impacts on cash (including cash management related instruments)	**27**	(1)
Lease additions	**(736)**	(1,079)
Divestment and demerger of subsidiaries and operations	**492**	–
Other	**(428)**	(191)
Non-cash movements	**(640)**	(1,213)
Net debt at the end of the period	**(333)**	(4,121)

Net operating assets

The following table reconciles Net operating assets for the Group to Net assets on the Consolidated Balance Sheet.

Year ended 30 June	**2022 US$M**	2021 US$M Restated
Net assets	**48,766**	55,605
Less: Non-operating assets		
Cash and cash equivalents	**(17,236)**	(15,246)
Trade and other receivables[1]	**(72)**	(280)
Other financial assets[2]	**(1,363)**	(1,516)
Current tax assets	**(263)**	(279)
Deferred tax assets	**(56)**	(1,912)
Assets held for sale	**–**	(324)
Petroleum Discontinued operations operating assets[3]	**–**	(13,757)
Add: Non-operating liabilities		
Trade and other payables[4]	**201**	227
Interest bearing liabilities	**16,428**	20,983
Other financial liabilities[5]	**1,851**	588
Current tax payable	**3,032**	2,800
Non-current tax payable	**87**	120
Deferred tax liabilities	**3,063**	3,314
Liabilities directly associated with the assets held for sale	**–**	17
Petroleum Discontinued operations operating liabilities[3]	**–**	5,684
Net operating assets	**54,438**	56,024
Net operating assets		
Copper	**27,420**	26,928
Iron Ore	**16,823**	18,663
Coal	**7,650**	7,512
Group and unallocated items[6]	**2,545**	2,921
Total	**54,438**	56,024

[1] Represents loans to associates, external finance receivable and accrued interest receivable included within other receivables.

[2] Represents cross currency and interest rate swaps, forward exchange contracts related to cash management and investment in shares, other investments and receivables contingent on outcome of future events relating to mining and regulatory approvals.

[3] Represents the Petroleum operating assets and operating liabilities as at 30 June 2021 that were merged with Woodside on 1 June 2022.

[4] Represents accrued interest payable included within other payables.

[5] Represents cross currency and interest rate swaps and forward exchange contracts related to cash management.

[6] Group and unallocated items include functions, other unallocated operations including Potash, Nickel West, legacy assets, and consolidation adjustments.

Other non-IFRS financial information

Principal factors that affect Revenue, Profit from operations and Underlying EBITDA

The following table describes the impact of the principal factors that affected Revenue, Profit from operations and Underlying EBITDA for FY2022 and relates them back to our Consolidated Income Statement. For information on the method of calculation of the principal factors that affect Revenue, Profit from operations and Underlying EBITDA refer to OFR 11.2.

	Revenue US$M	Total expenses, Other income and Loss from equity accounted investments US$M	Profit from operations US$M	Depreciation, amortisation and impairments and Exceptional Items US$M	Underlying EBITDA US$M
Year ended 30 June 2021 (Restated)					
Revenue	**56,921**				
Other income		**380**			
Expenses excluding net finance costs		**(30,871)**			
Loss from equity accounted investments, related impairments and expenses		**(915)**			
Total other income, expenses excluding net finance costs and Loss from equity accounted investments, related impairments and expenses		**(31,406)**			
Profit from operations			**25,515**		
Depreciation, amortisation and impairments[1]				**7,591**	
Exceptional item included in Depreciation, amortisation and impairments				**(2,371)**	
Exceptional items				**4,338**	
Underlying EBITDA					**35,073**
Change in sales prices	7,267	(673)	**6,594**	–	**6,594**
Price-linked costs	–	(1,047)	**(1,047)**	–	**(1,047)**
Net price impact	7,267	(1,720)	**5,547**	–	**5,547**
Change in volumes	(1,235)	23	**(1,212)**	–	**(1,212)**
Operating cash costs	–	(473)	**(473)**	–	**(473)**
Exploration and business development	–	(67)	**(67)**	–	**(67)**
Change in controllable cash costs[2]	–	(540)	**(540)**	–	**(540)**
Exchange rates	(3)	1,183	**1,180**	–	**1,180**
Inflation on costs	–	(867)	**(867)**	–	**(867)**
Fuel, energy, and consumable price movements	–	(660)	**(660)**	–	**(660)**
Non-cash	–	(3)	**(3)**	–	**(3)**
One-off items	–	–	**–**	–	**–**
Change in other costs	(3)	(347)	**(350)**	–	**(350)**
Asset sales	–	2	**2**	–	**2**
Ceased and sold operations	1,482	186	**1,668**	–	**1,668**
Other	666	(220)	**446**	–	**446**
Depreciation, amortisation and impairments	–	(978)	**(978)**	**978**	**–**
Exceptional items	–	4,008	**4,008**	**(4,008)**	**–**
Year ended 30 June 2022					
Revenue	**65,098**				
Other income		**1,398**			
Expenses excluding net finance costs		**(32,371)**			
Loss from equity accounted investments, related impairments and expenses		**(19)**			
Total other income, expenses excluding net finance costs and Loss from equity accounted investments, related impairments and expenses		**(30,992)**			
Profit from operations			**34,106**		
Depreciation, amortisation and impairments[1]				**6,198**	
Exceptional item included in Depreciation, amortisation and impairments				**–**	
Exceptional items				**330**	
Underlying EBITDA					**40,634**

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1 Depreciation and impairments that we classify as exceptional items are excluded from depreciation, amortisation and impairments. Depreciation, amortisation and impairments includes non-exceptional impairments of US$515 million (FY2021: US$136 million).

2 Collectively, we refer to the change in operating cash costs and change in exploration and business development as Change in controllable cash costs. Operating cash costs by definition do not include non-cash costs. The change in operating cash costs also excludes the impact of exchange rates and inflation, changes in fuel, energy costs and consumable costs, changes in exploration and business development costs and one-off items. These items are excluded so as to provide a consistent measurement of changes in costs across all segments, based on the factors that are within the control and responsibility of the segment.

Underlying return on capital employed (ROCE)

Year ended 30 June	2022 US$M	2021 US$M	2020 US$M
Profit after taxation from Continuing and Discontinued operations	**33,055**	13,451	8,736
Exceptional items[1]	**(7,085)**	5,797	1,305
Subtotal	**25,970**	19,248	10,041
Adjusted for:			
Net finance costs	**1,128**	1,305	911
Exceptional items included within net finance costs[1]	**(290)**	(85)	(93)
Income tax expense on net finance costs	**(287)**	(337)	(267)
Profit after taxation excluding net finance costs and exceptional items	**26,521**	20,131	10,592
Net assets at the beginning of the period	**55,605**	52,175	51,753
Net debt at the beginning of the period	**4,121**	12,044	9,446
Capital employed at the beginning of the period	**59,726**	64,219	61,199
Net assets at the end of the period	**48,766**	55,605	52,175
Net debt at the end of the period	**333**	4,121	12,044
Capital employed at the end of the period	**49,099**	59,726	64,219
Average capital employed	**54,413**	61,973	62,709
Underlying return on capital employed	**48.7%**	32.5%	16.9%

1 For more information refer to Financial Statements note 3 'Exceptional items'.

Underlying return on capital employed (ROCE) by segment

Year ended 30 June 2022 US$M	**Copper**	**Iron Ore**	**Coal**	**Group and unallocated items/ eliminations[1]**	**Total Continuing**	**Petroleum Discontinued operations**	**Total Group**
Profit after taxation excluding net finance costs and exceptional items	**3,981**	**13,896**	**6,293**	**(256)**	**23,914**	**2,607**	**26,521**
Average capital employed	**24,310**	**15,275**	**6,893**	**3,196**	**49,674**	**4,739**	**54,413**
Underlying return on capital employed	**16%**	**91%**	**91%**	**–**	**48.1%**	**–**	**48.7%**

Year ended 30 June 2021 US$M Restated	Copper	Iron Ore	Coal	Group and unallocated items/ eliminations[1]	Total Continuing	Petroleum Discontinued operations	Total Group
Profit after taxation excluding net finance costs and exceptional items	4,191	16,640	(454)	(395)	19,982	149	20,131
Average capital employed	23,710	16,042	8,262	4,470	52,484	9,489	61,973
Underlying return on capital employed	18%	104%	(5%)	–	38.1%	1.6%	32.5%

1 Group and unallocated items includes functions, other unallocated operations including Potash, Nickel West, legacy assets and consolidation adjustments.

Underlying return on capital employed (ROCE) by asset

Year ended 30 June 2022 US$M	**Western Australia Iron Ore**	**BHP Mitsubishi Alliance**	**Antamina**	**Nickel West**	**Escondida**	**Pampa Norte**	**Olympic Dam**	**Potash**	**New South Wales Energy Coal[1]**	**Other**	**Total Continuing**	**Petroleum Discontinued operations**	**Total Group**
Profit after taxation excluding net finance costs and exceptional items	**14,051**	**4,153**	**684**	**250**	**3,346**	**81**	**(9)**	**(123)**	**1,309**	**172**	**23,914**	**2,607**	**26,521**
Average capital employed	**18,783**	**6,725**	**1,284**	**650**	**9,891**	**4,380**	**8,660**	**3,321**	**(413)**	**(3,607)**	**49,674**	**4,739**	**54,413**
Underlying return on capital employed	**75%**	**62%**	**53%**	**38%**	**34%**	**2%**	**(0)%**	**(4)%**	**–**	**–**	**48.1%**	**–**	**48.7%**

Year ended 30 June 2021 US$M Restated	Western Australia Iron Ore	BHP Mitsubishi Alliance	Antamina	Nickel West	Escondida	Pampa Norte	Olympic Dam	Potash	New South Wales Energy Coal	Other	Total Continuing	Petroleum Discontinued operations	Total Group
Profit after taxation excluding net finance costs and exceptional items	16,665	(13)	593	136	3,281	302	214	5	(203)	(998)	19,982	149	20,131
Average capital employed	18,661	6,796	1,353	295	10,353	3,760	8,021	3,710	269	(734)	52,484	9,489	61,973
Underlying return on capital employed	89%	(0%)	44%	46%	32%	8%	3%	0%	(75%)	–	38.1%	1.6%	32.5%

1 NSWEC has not been shown as ROCE is distorted by negative capital employed due to the rehabilitation provision being the primary balance remaining on Balance Sheet following previous impairments.

11.1 Definition and calculation of non-IFRS financial information

Non-IFRS financial information	Reasons why we believe the non-IFRS financial information are useful	Calculation methodology
Underlying attributable profit	Allows the comparability of underlying financial performance by excluding the impacts of exceptional items.	Profit after taxation from Continuing and Discontinued operations attributable to BHP shareholders excluding any exceptional items attributable to BHP shareholders.
Underlying attributable profit – Continuing operations	Allows the comparability of underlying financial performance by excluding the impacts of exceptional items and the contribution of Discontinued operations and is also the basis on which our dividend payout ratio policy is applied.	Underlying attributable profit from Continuing operations also excludes the contribution of Discontinued operations from the above metrics.
Underlying basic earnings per share	On a per share basis, allows the comparability of underlying financial performance by excluding the impacts of exceptional items.	Underlying attributable profit divided by the weighted basic average number of shares.
Underlying basic earnings per share – Continuing operations	On a per share basis, allows the comparability of underlying financial performance by excluding the impacts of exceptional items and the contribution of Discontinued operations.	Underlying attributable profit – Continuing operations divided by the weighted basic average number of shares.
Underlying EBITDA	Used to help assess current operational profitability excluding the impacts of sunk costs (i.e. depreciation from initial investment). Each is a measure that management uses internally to assess the performance of the Group's segments and make decisions on the allocation of resources.	Earnings before net finance costs, depreciation, amortisation and impairments, taxation expense, Discontinued operations and exceptional items. Underlying EBITDA includes BHP's share of profit/(loss) from investments accounted for using the equity method including net finance costs, depreciation, amortisation and impairments and taxation expense/(benefit).
Underlying EBITDA margin		Underlying EBITDA excluding third-party product EBITDA, divided by revenue excluding third-party product revenue.
Underlying EBIT	Used to help assess current operational profitability excluding net finance costs and taxation expense (each of which are managed at the Group level) as well as Discontinued operations and any exceptional items.	Earnings before net finance costs, taxation expense, Discontinued operations and any exceptional items. Underlying EBIT includes BHP's share of profit/(loss) from investments accounted for using the equity method including net finance costs and taxation expense/(benefit).
Profit from operations		Earnings before net finance costs, taxation expense and Discontinued operations. Profit from operations includes Revenue, Other income, Expenses excluding net finance costs and BHP's share of profit/(loss) from investments accounted for using the equity method including net finance costs and taxation expense/(benefit).
Capital and exploration expenditure	Used as part of our Capital Allocation Framework to assess efficient deployment of capital. Represents the total outflows of our operational investing expenditure.	Purchases of property, plant and equipment and exploration expenditure including the contribution of Discontinued operations.
Capital and exploration expenditure – Continuing operations	Represents the total outflows of our operational investing expenditure excluding the contribution of Discontinued operations.	Purchases of property, plant and equipment and exploration expenditure.
Free cash flow	It is a key measure used as part of our Capital Allocation Framework. Reflects our operational cash performance inclusive of investment expenditure, which helps to highlight how much cash was generated in the period to be available for the servicing of debt and distribution to shareholders.	Net operating cash flows less net investing cash flows.
Free cash flow – Continuing operations	Reflects our operational cash performance inclusive of investment expenditure, but excluding the contribution of Discontinued operations.	Net operating cash flows from Continuing operations less net investing cash flows from Continuing operations.
Net debt	Net debt shows the position of gross debt less index-linked freight contracts offset by cash immediately available to pay debt if required and any associated derivative financial instruments. Liability associated with index-linked freight contracts, which are required to be remeasured to the prevailing freight index at each reporting date, are excluded from the net debt calculation due to the short-term volatility of the index they relate to not aligning with how the Group uses net debt for decision making in relation to the Capital Allocation Framework. Net debt includes the fair value of derivative financial instruments used to hedge cash and borrowings to reflect the Group's risk management strategy of reducing the volatility of net debt caused by fluctuations in foreign exchange and interest rates. Net debt, along with the gearing ratio, is used to monitor the Group's capital management by relating net debt relative to equity from shareholders.	Interest bearing liabilities less liability associated with index-linked freight contracts less cash and cash equivalents less net cross currency and interest rate swaps less net cash management related instruments for the Group at the reporting date.
Gearing ratio		Ratio of Net debt to Net debt plus Net assets.
Net operating assets	Enables a clearer view of the assets deployed to generate earnings by highlighting the net operating assets of the business separate from the financing and tax balances. This measure helps provide an indicator of the underlying performance of our assets and enhances comparability between them.	Operating assets net of operating liabilities, including the carrying value of equity accounted investments and predominantly excludes cash balances, loans to associates, interest bearing liabilities, derivatives hedging our net debt, assets held for sale, liabilities directly associated with assets held for sale and tax balances.

Non-IFRS financial information	Reasons why we believe the non-IFRS financial information are useful	Calculation methodology
Underlying return on capital employed (ROCE)	Indicator of the Group's capital efficiency and is provided on an underlying basis to allow comparability of underlying financial performance by excluding the impacts of exceptional items.	Profit after taxation excluding exceptional items and net finance costs (after taxation) divided by average capital employed. Profit after taxation excluding exceptional items and net finance costs (after taxation) is profit after taxation from Continuing and Discontinued operations excluding exceptional items, net finance costs and the estimated taxation impact of net finance costs. These are annualised for a half year end reporting period. The estimated tax impact is calculated using a prima facie taxation rate on net finance costs (excluding any foreign exchange impact). Average capital employed is calculated as the average of net assets less net debt for the last two reporting periods.
Adjusted effective tax rate	Provides an underlying tax basis to allow comparability of underlying financial performance by excluding the impacts of exceptional items.	Total taxation expense/(benefit) excluding exceptional items and exchange rate movements included in taxation expense/(benefit) divided by Profit before taxation from Continuing operations excluding exceptional items.
Unit cost	Used to assess the controllable financial performance of the Group's assets for each unit of production. Unit costs are adjusted for site specific non controllable factors to enhance comparability between the Group's assets.	Ratio of net costs of the assets to the equity share of sales tonnage. Net costs is defined as revenue less Underlying EBITDA and excludes freight and other costs, depending on the nature of each asset. Freight is excluded as the Group believes it provides a similar basis of comparison to our peer group. Escondida unit costs exclude: – by-product credits being the favourable impact of by-products (such as gold or silver) to determine the directly attributable costs of copper production. WAIO, BMA and NSWEC unit costs exclude: – royalties as these are costs that are not deemed to be under the Group's control, and the Group believes exclusion provides a similar basis of comparison to our peer group.

11.2 Definition and calculation of principal factors

The method of calculation of the principal factors that affect the period on period movements of Revenue, Profit from operations and Underlying EBITDA are as follows:

Principal factor	Method of calculation
Change in sales prices	Change in average realised price for each operation from the prior period to the current period, multiplied by current period sales volumes.
Price-linked costs	Change in price-linked costs (mainly royalties) for each operation from the prior period to the current period, multiplied by current period sales volumes.
Change in volumes	Change in sales volumes for each operation multiplied by the prior year average realised price less variable unit cost.
Controllable cash costs	Total of operating cash costs and exploration and business development costs.
Operating cash costs	Change in total costs, other than price-linked costs, exchange rates, inflation on costs, fuel, energy, and consumable price movements, non-cash costs and one-off items as defined below for each operation from the prior period to the current period.
Exploration and business development	Exploration and business development expense in the current period minus exploration and business development expense in the prior period.
Exchange rates	Change in exchange rate multiplied by current period local currency revenue and expenses.
Inflation on costs	Change in inflation rate applied to expenses with contractual links to inflation indexes, other than depreciation and amortisation, price-linked costs, exploration and business development expenses, expenses in ceased and sold operations and expenses in new and acquired operations.
Fuel, energy, and consumable price movements	Fuel and energy expense and price differences above inflation on consumables in the current period minus fuel and energy expense in the prior period.
Non-cash	Change in net impact of capitalisation and depletion of deferred stripping from the prior period to the current period.
One-off items	Change in costs exceeding a pre-determined threshold associated with an unexpected event that had not occurred in the last two years and is not reasonably likely to occur within the next two years.
Asset sales	Profit/(loss) on the sale of assets or operations in the current period minus profit/(loss) on sale of assets or operations in the prior period.
Ceased and sold operations	Underlying EBITDA for operations that ceased or were sold in the current period minus Underlying EBITDA for operations that ceased or were sold in the prior period.
Share of profit/(loss) from equity accounted investments	Share of profit/(loss) from equity accounted investments for the current period minus share of profit/(loss) from equity accounted investments in the prior period.
Other	Variances not explained by the above factors.

12 Other information

12.1 Company details

BHP Group Limited's registered office and global headquarters are at 171 Collins Street, Melbourne, Victoria 3000, Australia. 'BHP', the 'Company', the 'Group', 'our business', 'organisation', 'we', 'us', 'our' and 'ourselves' refer to BHP Group Limited, and except where the context otherwise requires, our subsidiaries. Refer to Financial Statements note 28 'Subsidiaries' for a list of our significant subsidiaries. Those terms do not include non-operated assets.

This Report covers functions and assets (including those under exploration, projects in development or execution phases, sites and closed operations) that have been wholly owned and/or operated by BHP or that have been owned as a BHP-operated joint venture operated by BHP (referred to in this Report as 'operated assets' or 'operations') from 1 July 2021 to 30 June 2022. BHP also holds interests in assets that are owned as a joint venture but not operated by BHP (referred to in this Report as 'non-operated joint ventures' or 'non-operated assets'). Notwithstanding that this Report may include production, financial and other information from non-operated assets, non-operated assets are not included in the BHP Group and, as a result, statements regarding our operations, assets and values apply only to our operated assets unless stated otherwise.

On 31 January 2022, we unified our company structure under BHP Group Limited, with a primary listing on the Australian Securities Exchange. BHP holds a standard listing on the London Stock Exchange, a secondary listing on the Johannesburg Stock Exchange and an ADR program listed on the New York Stock Exchange.

12.2 Forward looking statements

This Report contains forward-looking statements, including: statements regarding trends in commodity prices and currency exchange rates; demand for commodities; reserves and resources and production forecasts; expectations, plans, strategies and objectives of management; climate scenarios; approval of certain projects and consummation of certain transactions; closure or divestment of certain assets, operations or facilities (including associated costs); anticipated production or construction commencement dates; capital costs and scheduling; operating costs and supply of materials and skilled employees; anticipated productive lives of projects, mines and facilities; provisions and contingent liabilities; and tax and regulatory developments.

Forward-looking statements may be identified by the use of terminology including, but not limited to, 'intend', 'aim', 'ambition', 'aspiration', 'goal', 'target', 'project', 'see', 'anticipate', 'estimate', 'plan', 'objective', 'believe', 'expect', 'commit', 'may', 'should', 'need', 'must', 'will', 'would', 'continue', 'forecast', 'guidance', 'trend' or similar words. These statements discuss future expectations concerning the results of assets or financial conditions, or provide other forward-looking information.

Examples of forward-looking statements contained in this Report include, without limitation, statements describing (i) our strategy, our values and how we define our success; (ii) our expectations regarding future demand for certain commodities, in particular copper, nickel, iron ore, metallurgical coal, steel and potash, and our intentions, commitments or expectations with respect to our supply of certain commodities, including copper, nickel, iron ore and potash; (iii) our future exploration and partnership plans and perceived benefits and opportunities, including our focus to grow our copper and nickel assets; (iv) the structure of our organisation and portfolio and perceived benefits and opportunities; (v) our outlook for long-term economic growth and other macroeconomic and industry trends; (vi) our projected and expected production and performance levels and development projects; (vii) our expectations regarding our investments, including in potential growth options and technology and innovation, and perceived benefits and opportunities; (viii) our reserves and resources; (ix) our plans for our major projects and related budget allocations; (x) our expectations, commitments and objectives with respect to sustainability, decarbonisation, natural resource management, climate change and portfolio resilience and timelines and plans to seek to achieve or implement such objectives, including our new 2030 'People, Planet and Prosperity' goals, our approach to equitable change and transitions, our Climate Transition Action Plan, Climate Change Adaptation Strategy and goals, targets and strategies to seek to reduce or support the reduction of greenhouse gas emissions, and related perceived costs, benefits and opportunities for BHP; (xi) the assumptions, beliefs and conclusions in our climate change related statements and strategies, including in our Climate Change Report 2020, for example, in respect of future temperatures, energy consumption and greenhouse gas emissions, and climate-related impacts; (xii) our commitment to social value; (xiii) our commitments to sustainability reporting, frameworks, standards and initiatives; (xiv) our commitments to improve or maintain safe tailings storage management; (xv) our commitments to achieve certain inclusion and diversity targets, aspirations and outcomes; (xvi) our commitments to achieve certain targets and outcomes with respect to Indigenous peoples and the communities in which we operate; and (xvii) our commitments to achieve certain health and safety targets and outcomes.

Forward-looking statements are based on management's current expectations and reflect judgments, assumptions, estimates and other information available as at the date of this Report and/or the date of BHP's planning or scenario analysis processes. These statements do not represent guarantees or predictions of future financial or operational performance and involve known and unknown risks, uncertainties and other factors, many of which are beyond our control and which may cause actual results to differ materially from those expressed in the statements contained in this Report. BHP cautions against reliance on any forward-looking statements or guidance, including in light of the current economic climate and the significant volatility, uncertainty and disruption arising in connection with the Ukrainian conflict and COVID-19. For example, our future revenues from our assets, projects or mines described in this Report will be based, in part, on the market price of the minerals or metals produced, which may vary significantly from current levels. These variations, if materially adverse, may affect the timing or the feasibility of the development of a particular project, the expansion of certain facilities or mines, or the continuation of existing assets.

Other factors that may affect the actual construction or production commencement dates, revenues, costs or production output and anticipated lives of assets, mines or facilities include: (i) our ability to profitably produce and transport the minerals and/or metals extracted to applicable markets; (ii) the impact of foreign currency exchange rates on the market prices of the minerals or metals we produce; (iii) activities of government authorities in the countries where we sell our products and in the countries where we are exploring or developing projects, facilities or mines, including increases in taxes; (iv) changes in environmental and other regulations; (v) the duration and severity of the COVID-19 pandemic and its impact on our business; (vi) political or geopolitical uncertainty; (viii) labour unrest; and (viii) other factors identified in the risk factors set out in Operating and Financial Review 9.1.

Except as required by applicable regulations or by law, BHP does not undertake to publicly update or review any forward-looking statements, whether as a result of new information or future events. Past performance cannot be relied on as a guide to future performance.

Emissions and energy consumption data

Due to the inherent uncertainty and limitations in measuring greenhouse gas (GHG) emissions and operational energy consumption under the calculation methodologies used in the preparation of such data, all GHG emissions and operational energy consumption data or references to GHG emissions and operational energy consumption volumes (including ratios or percentages) in this Report are estimates. There may also be differences in the manner that third parties calculate or report GHG emissions or operational energy consumption data compared to BHP, which means that third-party data may not be comparable to our data. For information on how we calculate our GHG emissions and operational energy consumption data, see our Methodology tab in our ESG Standards and Databook.

This Report is made in accordance with a resolution of the Board.

Ken MacKenzie
Chair

16 August 2022

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1 References in this Annual Report to a 'joint venture' are used for convenience to collectively describe assets that are not wholly owned by BHP. Such references are not intended to characterise the legal relationship between the owners of the asset.

Governance

Director's Report:

Remuneration Report

Directors’ Report

The information presented by the Directors in this Directors’ Report relates to BHP Group Limited and its subsidiaries. The Operating and Financial Review (OFR), the Remuneration Report, and the ‘Lead Auditor’s Independence Declaration’ are incorporated by reference into, and form part of, this Directors’ Report.

1. Review of operations, principal activities and state of affairs

A review of the operations of BHP during FY2022, the results of those operations during FY2022 and the expected results of those operations in future financial years are set out in the OFR. Information on the development of BHP and likely developments in future years also appears in this section. We have excluded certain information from the OFR, to the extent permitted by Australian law, on the basis that such information relates to impending developments or matters in the course of negotiation and disclosure would be seriously prejudicial to the interests of BHP. This is because such disclosure could be misleading due to the fact it is premature or preliminary in nature, relates to commercially sensitive contracts, would undermine confidentiality between BHP and our suppliers and clients, or would otherwise unreasonably damage BHP. The categories of information omitted include forward-looking estimates and projections prepared for internal management purposes, information regarding BHP’s assets and projects, which is developing and susceptible to change, and information relating to commercial contracts and pricing modules.

Our principal activities, including significant changes in the nature of BHP’s principal activities during FY2022, are disclosed in the OFR.

There were no significant changes in BHP’s state of affairs that occurred during FY2022 and no significant post balance date events other than as disclosed in the OFR and Financial Statements note 33 ‘Subsequent events’.

No other matter or circumstance has arisen since the end of FY2022 that has significantly affected or is expected to significantly affect the operations, the results of operations or state of affairs of BHP in future years.

2. Directors

The Directors who served at any time during FY2022 or up until the date of this Directors’ Report are listed in the Board and Board Committee attendance table in Directors’ Report 2.2. Information on the current Directors is set out in Directors’ Report 2.1.

2.1 Biographical details

Key to Committee membership

● Committee Chair
○ Committee member
(RA) Risk and Audit
(NG) Nomination and Governance
(R) Remuneration
(S) Sustainability

NG

Ken MacKenzie

BEng, FIEA, FAICD

Independent Non-executive Director since September 2016

Chair since 1 September 2017

Mr MacKenzie has extensive global and executive experience and a deeply strategic approach, with a focus on operational excellence, capital discipline and the creation of long-term shareholder value.

Ken was the Managing Director and Chief Executive Officer of Amcor Limited, a global packaging company with operations in over 40 countries, from 2005 until 2015. During his 23-year career with Amcor, Ken gained extensive experience across all of Amcor’s major business segments in developed and emerging markets in the Americas, Australia, Asia and Europe.

Ken currently sits on the Advisory Board of American Securities Capital Partners LLC (since January 2016) and is a part-time adviser at Barrenjoey (since April 2021).

Mike Henry

BSc (Chemistry)

Non-independent Director since January 2020

Chief Executive Officer since 1 January 2020

Mr Henry has over 30 years’ experience in the global mining and petroleum industry, spanning operational, commercial, safety, technology and marketing roles.

Prior to joining BHP, Mike worked in the resources industry in Canada, Japan and Australia. Mike joined BHP in 2003, initially in business development and then in marketing and trading of a range of mineral and petroleum commodities based in The Hague, where he was also accountable for BHP’s ocean freight operations. He went on to hold various positions in BHP, including President Operations Minerals Australia, President Coal, President HSE, Marketing and Technology, and Chief Marketing Officer. Mike has been a member of the Executive Leadership Team since 2011.

RA NG

Terry Bowen

BAcct, FCPA, MAICD

Independent Non-executive Director since October 2017

Mr Bowen has significant executive experience across a range of diversified industries, deep financial expertise, and extensive experience in capital allocation discipline, commodity value chains and strategy.

Terry was formerly Managing Partner and Head of Operations at BGH Capital and an Executive Director and Finance Director of Wesfarmers Limited. Prior to this, Terry held various senior executive roles within Wesfarmers, including as Finance Director of Coles, Managing Director of Industrial and Safety and Finance Director of Wesfarmers Landmark. Terry is also a former Director of Gresham Partners and past President of the National Executive of the Group of 100 Inc.

Terry is currently Chair of the Operations Group at BGH Capital (since January 2020), and a Director of Transurban Group (since February 2020), Navitas Pty Limited (since July 2019) and the West Coast Eagles Football Club (since May 2017).

Malcolm Broomhead

AO, MBA, BE, FAICD

Independent Non-executive Director since March 2010

Mr Broomhead has extensive experience at large global industrial and mining companies, bringing a broad strategic perspective and understanding of the long-term cyclical nature of the resources industry and commodity value chains, with proven health, safety and environment, and capital allocation performance.

Malcolm was Managing Director and Chief Executive Officer of Orica Limited from 2001 until 2005. Prior to joining Orica, he held a number of senior positions at North Limited, including Managing Director and Chief Executive Officer and, prior to that, held senior management positions with Halcrow (UK), MIM Holdings, Peko Wallsend and Industrial Equity.

Malcolm is currently Chair of Orica Limited (since January 2016, having served on the board since December 2015). He is also a Director of the Walter and Eliza Hall Institute of Medical Research (since July 2014).

RA

Xiaoqun Clever

Diploma in Computer Science and International Marketing, MBA

Independent Non-executive Director since October 2020

Ms Clever has over 20 years' experience in technology with a focus on software engineering, data and analytics, cybersecurity and digitalisation.

Xiaoqun was formerly Chief Technology Officer of Ringier AG and ProSiebenSat.1 Media SE. Xiaoqun previously held various roles with SAP SE from 1997 to 2013, including Chief Operating Officer of Technology and Innovation. Xiaoqun was formerly a member of the Supervisory Board of Allianz Elementar Versicherungs and Lebensversicherungs AG (from 2015 to 2020).

Xiaoqun is currently a Non-executive Director of Capgemini SE (since May 2019) and Amadeus IT Group SA (since June 2020) and on the Supervisory Board of Infineon Technologies AG (since February 2020). Xiaoqun is also the Co-Founder and Chief Executive Officer of LuxNova Suisse GmbH (since April 2018).

RA S

Ian Cockerill

MSc (Mining and Mineral Engineering), BSc (Hons.) (Geology), AMP – Oxford Templeton College

Independent Non-executive Director since April 2019

Mr Cockerill has extensive global mining operational, project and executive experience, having initially trained as a geologist.

Ian previously served as Chair of both Polymetal International plc and BlackRock World Mining Trust plc, Lead Independent Director of Ivanhoe Mines Ltd, and a Non-executive Director of Orica Limited (from July 2010 to August 2019) and Endeavour Mining Corporation (from September 2013 to March 2019). Ian also formerly held chief executive roles at Anglo American Coal and Gold Fields Limited, and senior executive roles at AngloGold Ashanti and Anglo American Group.

Ian is currently Senior Independent Director of Endeavour Mining Corporation (since May 2022), the Chair of Cornish Lithium Ltd (since April 2022) and a Non-executive Director of I-Pulse Inc (since September 2010). Ian is also a Director of the Leadership for Conservation in Africa.

NG S

Gary Goldberg

BS (Mining Engineering), MBA

Independent Non-executive Director since February 2020.

Senior Independent Director since 21 December 2020

Mr Goldberg has over 35 years' of global executive experience, including deep experience in mining, strategy, risk, commodity value chain, capital allocation discipline and public policy.

Gary served as the Chief Executive Officer of Newmont Corporation from 2013 to 2019, and prior to that, had been President and Chief Executive Officer of Rio Tinto Minerals. Gary has also previously been a non-executive director of Port Waratah Coal Services Limited and Rio Tinto Zimbabwe, and served as Vice Chair of the World Gold Council, Treasurer of the International Council on Mining and Metals, and Chair of the National Mining Association in the United States.

RA

Michelle Hinchliffe

BCom, FCA, ACA

Independent Non-executive Director since March 2022

Ms Hinchliffe has over 20 years' experience as a partner in KPMG's financial services division.

Michelle served as a member of KPMG's UK Board and as the UK Chair of Audit between 2019 and 2022. Prior to this, she was a member of the KPMG UK Executive Committee in her role as Head of Audit from 2017 to 2019. Michelle led KPMG's financial services practice in Australia between 2008 and 2013 and was a member of the KPMG Australia Board.

Michelle is currently a Non-executive Director of Macquarie Group Limited and Macquarie Bank Limited (since March 2022).

S

John Mogford

BEng

Independent Non-executive Director since October 2017

Mr Mogford has significant global executive experience, including in oil and gas, capital allocation discipline, commodity value chains and health, safety and environment.

John has held various leadership, technical and operational roles at BP Plc. He was the Managing Director and an Operating Partner of First Reserve, a global energy-focused private equity firm, from 2009 until 2015, during which he served on the boards of its investee companies. He also served as a Non-executive Director of ERM Worldwide Group Limited (from 2015 to 2021), Weir Group Plc (from 2008 to 2018), Network Rail Limited (from 2016 to 2018), and one of First Reserve's portfolio companies, DOF Subsea AS (from 2009 to 2018).

R RA NG

Christine O'Reilly

BBus

Independent Non-executive Director since October 2020

Ms O'Reilly has over 30 years' experience in the financial and infrastructure sectors, with deep financial and public policy expertise and experience in large-scale capital projects and transformational strategy.

Christine served as Chief Executive Officer of the GasNet Australia Group and Co-Head of Unlisted Infrastructure Investments at Colonial First State Global Asset Management. Christine has also served as a Non-executive Director of Medibank Private Limited (from March 2014 to November 2021), Transurban Group (from April 2012 to October 2020), CSL Limited (from February 2011 to October 2020) and Energy Australia Holdings Limited (from September 2012 to August 2018).

Christine is currently a Non-executive Director of Australia and New Zealand Banking Group (since November 2021), Stockland Limited (since August 2018), and the Baker Heart and Diabetes Institute (since June 2013).

R S

Catherine Tanna

LLB, Honorary Doctor of Business

Independent Non-executive Director since April 2022

Ms Tanna has more than 30 years' experience in the resources, oil and gas, power generation and retailing sectors.

Catherine served as Managing Director of Energy Australia between 2014 and 2021. Prior to this, she held senior executive roles with Shell and BG Group with responsibility for international operations. Catherine was also a member of the Board of the Reserve Bank of Australia from 2011 to 2021 and a Director of the Business Council of Australia from 2016 to 2021.

Catherine is currently a Senior Advisor at McKinsey & Company Inc (since April 2022) and a member of the Advisory Board of Fujitsu Australia (since February 2022).

R S

Dion Weisler

BASc (Computing), Honorary Doctor of Laws

Independent Non-executive Director since June 2020

Mr Weisler has extensive global executive experience, including transformation and commercial experience in the global information technology sector, with a focus on capital discipline, as well as perspectives on current and emerging ESG issues.

Dion served as a Director and the President and Chief Executive Officer of HP Inc. from 2015 to 2019, and continued as a Director and Senior Executive Adviser until May 2020. Dion previously held a number of senior executive roles at Lenovo Group Limited. Prior to this, Dion was General Manager Conferencing and Collaboration at Telstra Corporation, and held various positions at Acer Inc., including as Managing Director, Acer UK.

Dion is currently a Non-executive Director of Intel Corporation (since June 2020), a Non-executive Director of Thermo Fisher Scientific Inc. (since March 2017) and a Non-executive Director of Sapia & Co Ltd (since January 2022).

Stefanie Wilkinson

BA, LLB (Hons), LLM, FGIA

Group Company Secretary since March 2021

Ms Wilkinson was appointed Group Company Secretary effective March 2021. Prior to joining BHP, Stefanie was a Partner at Herbert Smith Freehills, a firm she was with for 15 years, specialising in corporate law and governance for listed companies. Earlier in her career, Stefanie was a solicitor at Allen & Overy in the Middle East. Stefanie is a fellow of the Governance Institute of Australia.

2.2 Director attendances at meetings

The Board meets as often as required. During FY2022, the Board met 15 times.

Members of the Executive Leadership Team and other members of senior management attend meetings of the Board by invitation. Each Board Committee provides a standing invitation for any Non-executive Director to attend Committee meetings (rather than just limiting attendance to Committee members). Committee agendas and papers are provided to all Directors to ensure they are aware of matters to be considered.

Board and Board Committee attendance in FY2022

	Board	Risk and Audit Committee	Nomination and Governance Committee	Remuneration Committee	Sustainability Committee
Terry Bowen	15/15	11/11	5/5	–	–
Malcolm Broomhead	15/15	–	2/2[1]	–	2/2[1]
Xiaoqun Clever	15/15	11/11	–	–	–
Ian Cockerill	15/15	11/11	–	–	5/5
Anita Frew[2]	7/7	5/5	–	2/2	–
Gary Goldberg[3]	15/15	–	5/5	5/5	5/5
Mike Henry	15/15	–	–	–	–
Michelle Hinchliffe[4]	4/4	2/2	–	–	–
Susan Kilsby[5]	7/7	–	–	2/2[5]	–
Ken MacKenzie	15/15	–	5/5	–	–
John Mogford[6]	15/15	–	5/5	–	5/5
Christine O'Reilly	15/15	11/11	5/5	5/5	–
Catherine Tanna[7]	3/3	–	–	2/2	2/2
Dion Weisler	15/15	–	–	5/5	3/3[8]

1 Malcolm Broomhead ceased being a member of the Nomination and Governance Committee and Sustainability Committee on 11 November 2021.

2 Anita Frew served as a Non-executive Director from 15 September 2015 until her retirement as a member of the Board, Risk and Audit Committee and Remuneration Committee on 11 November 2021.

3 Gary Goldberg ceased being a member of the Remuneration Committee on 17 June 2022. He became Chair of the Sustainability Committee on 18 June 2022.

4 Michelle Hinchliffe became a member of the Board and the Risk and Audit Committee on 1 March 2022.

5 Susan Kilsby served as a Non-executive Director from 1 April 2019 until her retirement as a member of the Board and the Remuneration Committee on 11 November 2021.

6 John Mogford ceased being a member of the Nomination and Governance Committee on 17 June 2022. He ceased being the Chair of the Sustainability Committee on 17 June 2022, but remains a member of this Committee.

7 Catherine Tanna became a member of the Board, Remuneration Committee and Sustainability Committee on 4 April 2022.

8 Dion Weisler became a member of the Sustainability Committee on 12 November 2021.

3. Share capital and buy-back programs

At the Annual General Meetings held in 2019, 2020 and 2021, shareholders authorised BHP Group Plc to make on-market purchases of up to 211,207,180 of its ordinary shares, representing 10 per cent of BHP Group Plc's issued share capital at that time. During FY2022, we did not make any on-market or off-market purchases of BHP Group Limited or BHP Group Plc ordinary shares under any share buy-back program. As at the date of this Directors' Report, there were no current on-market buy-backs.

BHP Group Plc (now BHP Group (UK) Limited) is no longer able to make on-market purchases of its ordinary shares as a result of its delisting in connection with the unification transaction with BHP Group Limited and as such it can no longer utilise the shareholder authorisation in relation to on-market purchases obtained at the Annual General Meeting in 2021.

Some of our executives receive rights over BHP shares as part of their remuneration arrangements. Entitlements may be satisfied by the transfer of existing shares, which are acquired on-market by the Employee Share Ownership Plan (ESOP) Trusts or, in respect of some entitlements, by the issue of shares.

The number of shares referred to in column A below were purchased to satisfy awards made under the various BHP Group employee share schemes during FY2022.

	A	B	C	D	
	Total number of shares purchased and transferred to employees to satisfy employee awards	Average price paid per share[1] US$	Total number of shares purchased as part of publicly announced plans or programs	Maximum number of shares that may yet be purchased under the plans or programs	
Period				BHP Group Limited[2]	BHP Group Plc (now BHP Group (UK) Limited)
1 Jul 2021 to 31 Jul 2021	–	–	–	–	211,207,180[3]
1 Aug 2021 to 31 Aug 2021	63,567	32.08	–	–	211,207,180[3]
1 Sep 2021 to 30 Sep 2021	–	–	–	–	211,207,180[3]
1 Oct 2021 to 31 Oct 2021	–	–	–	–	211,207,180[3]
1 Nov 2021 to 30 Nov 2021	–	–	–	–	211,207,180[3]
1 Dec 2021 to 31 Dec 2021	–	–	–	–	211,207,180[3]
1 Jan 2022 to 31 Jan 2022	–	–	–	–	211,207,180[3,4]
1 Feb 2022 to 28 Feb 2022	–	–	–	–	–
1 Mar 2022 to 31 Mar 2022	3,354,850	35.95	–	–	–
1 Apr 2022 to 30 Apr 2022	–	–	–	–	–
1 May 2022 to 31 May 2022	–	–	–	–	–
1 Jun 2022 to 30 Jun 2022	949,819	28.37	–	–	–
Total	**4,368,236**	**34.24**	**–**	–	–

1 The shares were purchased in the currency of the stock exchange on which the purchase took place and the sale price has been converted into US dollars using the average weekly exchange rate of the week that such purchases took place for purchases on the ASX, and the average monthy exchange rate of the month that such purchases took place for purchases on the LSE.

2 BHP Group Limited is able to buy-back and cancel BHP Group Limited shares within the '10/12 limit' without shareholder approval in accordance with section 257B of the Australian Corporations Act 2001. Any future on-market share buy-back program would be conducted in accordance with the Australian Corporations Act 2001 and with the ASX Listing Rules.

3 At the Annual General Meetings held during 2019, 2020 and 2021, shareholders authorised BHP Group Plc to make on-market purchases of up to 211,207,180 of its ordinary shares, representing 10 per cent of BHP Group Plc's issued capital at the time.

4 BHP Group Plc (now BHP Group (UK) Limited) is no longer able to make on-market purchases of its ordinary shares as a result of its delisting in connection with the unification transaction with BHP Group Limited and as such it can no longer utilise the shareholder authorisation in relation to on-market purchases obtained at the Annual General Meeting in 2021.

As at the date of this Directors' Report, there were 15,846,572 unvested equity awards outstanding in relation to BHP Group Limited ordinary shares held by 20,790 holders. The expiry dates of these unvested equity awards range between August 2022 and August 2026 and there is no exercise price. 4,400,000 fully paid ordinary shares in BHP Group Limited were issued as a result of the exercise of rights over unissued shares during or since the end of FY2022. No options over unissued shares or unissued interests in BHP have been granted during or since the end of FY2022 and no shares or interests were issued as a result of the exercise of an option over unissued shares or interests during or since the end of FY2022. For more information refer to Financial Statements note 25 'Employee share ownership plans'.

For information on movements in share capital during and since the end of FY2022 refer to Financial Statements note 16 'Share capital'.

4. Share interests

Directors

'Ordinary shareholdings and transactions' in the Remuneration Report 5.4 sets out the relevant interests in shares in BHP Group Limited of the Directors who held office during FY2022, at the beginning and end of FY2022. No rights or options over shares in BHP Group Limited are held by any of the Non-executive Directors. Interests held by the Executive Director under employee equity plans as at 30 June 2022 are set out in the tables showing interests in incentive plans contained in 'Equity awards' in the Remuneration Report 5.2. Except for Mike Henry, as at the date of this Directors' Report, the information pertaining to shares in BHP Group Limited and held directly, indirectly or beneficially by Directors is the same as set out in the table in 'Ordinary shareholdings and transactions' in the Remuneration Report 5.4. Where applicable, the information includes shares held in the name of a spouse, superannuation fund, nominee and/or other controlled entities.

All Directors have met the minimum shareholding requirement under their Terms of Appointment.

As at the date of this Directors' Report, Mike Henry held:

– (either directly, indirectly or beneficially) 521,592 shares in BHP Group Limited
– rights and options over 978,790 shares in BHP Group Limited

Where applicable, the above information includes shares held in the name of a spouse, superannuation fund, nominee and/or other controlled entities.

We have not made available to any Directors any interest in a registered scheme.

Executive Management Personnel

Interests held by members of the Executive KMP under employee equity plans as at 30 June 2022 are set out in the tables contained in the 'Equity awards' section in the Remuneration Report 5.2.

The table below sets out the relevant interests in shares in BHP Group Limited held directly, indirectly or beneficially, as at the date of this Directors' Report by those senior executives who were Executive Key Management Personnel (KMP) (other than the Executive Director) on that date. Where applicable, the information also includes shares held in the name of a spouse, superannuation fund, nominee and/or other controlled entities.

Executive KMP member	As at date of Directors' Report
Edgar Basto	130,038
David Lamont	6,345
Geraldine Slattery	127,232
Ragnar Udd	118,955

5. Secretaries

Stefanie Wilkinson is the Group Company Secretary. For details of her qualifications and experience refer to the Biographical details in Directors' Report 2.1. The following people also acted during FY2022 as Company Secretaries of BHP Group Limited: Geof Stapledon, BEc, LLB (Hons), DPhil, FCIS, until 7 July 2021, Prakash Kakkad, LLB, LPC, from 7 July 2021, John-Paul Santamaria, BEng (Civil) (Hons), LLB, from 7 July 2021.

Each individual has experience in a company secretariat role or other relevant fields arising from time spent in roles within BHP, other large listed companies or other relevant entities.

6. Indemnities and insurance

Rule 146 of the BHP Group Limited Constitution requires the company to indemnify, to the extent permitted by law, each Officer of BHP Group Limited against liability incurred in, or arising out of, the conduct of the business of BHP or the discharge of the duties of the Officer. The Directors named in 2.1 of the Directors' Report, the Company Secretaries and other Officers of BHP Group Limited have the benefit of this requirement, as do individuals who formerly held one of those positions.

In accordance with this requirement, BHP Group Limited has entered into Deeds of Indemnity, Access and Insurance (Deeds of Indemnity) with its Directors.

We have a policy that BHP will, as a general rule, support and hold harmless an employee, including an employee appointed as a Director of a subsidiary who, while acting in good faith, incurs personal liability to others as a result of working for BHP.

In addition, as part of the arrangements to effect the demerger of South32, we agreed to indemnify certain former Officers of BHP who transitioned to South32 from certain claims and liabilities incurred in their capacity as Directors or Officers of South32.

The terms of engagement for certain services include that we must compensate and reimburse EY for, and protect EY against, any loss, damage, expense, or liability incurred by EY in respect of third-party claims arising from a breach by BHP of any obligation under the engagement terms.

We have insured against amounts that we may be liable to pay to Directors, Company Secretaries or certain employees (including former Officers) pursuant to Rule 146 of the Constitution of BHP Group Limited or that we otherwise agree to pay by way of indemnity. The insurance policy also insures Directors, Company Secretaries and some employees (including former Officers) against certain liabilities (including legal costs) they may incur in carrying out their duties. For this Directors' and Officers' insurance, we paid premiums of US$21,772,900 excluding taxes during FY2022.

No indemnity in favour of a current or former officer of BHP Group Limited, or in favour of the External Auditor, was called on during FY2022.

7. Dividends

A final dividend of 175 US cents per share will be paid on 22 September 2022, resulting in total cash dividends determined in respect of FY2022 of 325 US cents per share.

The merger of BHP's oil and gas portfolio with Woodside Energy was completed on 1 June 2022 and BHP paid a fully franked in specie dividend of US$3.86 per share or US$19.6 billion.

For information on the dividends paid refer to Financial Statements note 16 'Share capital' and note 18 'Dividends'.

8. Auditors

A copy of the declaration given by our External Auditor to the Directors in relation to the auditors' compliance with the independence requirements of the Australian Corporations Act 2001 and the Professional Code of Conduct for External Auditors is set out in Financial Statements 3.

No current officer of BHP has held the role of director or partner of the Group's current external auditor.

9. Non-audit services

For information on the non-audit services undertaken by BHP's External Auditor, including the amounts paid for non-audit services, refer to Financial Statements note 34 'Auditor's remuneration'. All non-audit services were approved in accordance with the process set out in the Policy on Provision of Audit and Other Services by the External Auditor. No non-audit services were carried out that were specifically excluded by the Policy on Provision of Audit and Other Services by the External Auditor. Based on advice provided by the Risk and Audit Committee, the Directors have formed the view that the provision of non-audit services is compatible with the general standard of independence for auditors, and that the nature of non-audit services means that auditor independence was not compromised.

The reason for this view is that the objectivity and independence of the External Auditor are safeguarded through restrictions on the provision of these services with some services prohibited from being undertaken.

For more information about our policy in relation to the provision of non-audit services by the external auditor refer to 7.2 'External audit and financial reporting' of our Corporate Governance Statement to be released in September 2022.

10. Exploration, research and development

Companies within the Group carry out exploration and research and development necessary to support their activities.
Details are provided in OFR 5 'Our assets', OFR 10 'Performance by commodity' and Resources and Reserves in the Annual Report to be released in September 2022.

11. ASIC Instrument 2016/191

BHP Group Limited is an entity to which Australian Securities and Investments Commission (ASIC) Corporations (Rounding in Financial/Directors' Reports) Instrument 2016/191 dated 24 March 2016 applies. Amounts in this Directors' Report and the Financial Statements, except estimates of future expenditure or where otherwise indicated, have been rounded to the nearest million dollars in accordance with ASIC Instrument 2016/191.

12. Proceedings on behalf of BHP Group Limited

No proceedings have been brought on behalf of BHP Group Limited, nor has any application been made, under section 237 of the Australian Corporations Act 2001.

13. Performance in relation to environmental regulation

BHP seeks to be compliant with all applicable environmental laws and regulations relevant to its operations. We monitor compliance on a regular basis, including through external and internal means, to minimise the risk of non-compliance.

For more information on BHP's performance in relation to health, safety and the environment refer to OFR 7.4, 7.6 and 7.15.

For the purposes of section 299 (1)(f) of the Australian Corporations Act 2001, in FY2022 BHP was levied four fines in relation to environmental laws and regulations at our operated assets, the total amount payable being US$22,514.

14. Additional information

BHP Group Limited has a branch registered in the United Kingdom. The Group, through various subsidiaries, has also established branches in a number of other countries.

The Directors' Report is approved in accordance with a resolution of the Board.

Ken MacKenzie	**Mike Henry**
Chair	Chief Executive Officer

16 August 2022

In this section:

Abbreviation	Item
AGM	Annual General Meeting
CDP	Cash and Deferred Plan
CEO	Chief Executive Officer
DEP	Dividend Equivalent Payment
ELT	Executive Leadership Team
GHG	Greenhouse gas
HSEC	Health, safety, environment and community
IFRS	International Financial Reporting Standards

Abbreviation	Item
KMP	Key Management Personnel
LTIP	Long-Term Incentive Plan
MAP	Management Award Plan
MSR	Minimum shareholding requirement
ROCE	Return on Capital Employed
STIP	Short-Term Incentive Plan
TSR	Total Shareholder Return

Remuneration Report

Remuneration Committee Chair Letter to Shareholders

Christine O'Reilly
Chair, Remuneration Committee

Dear Shareholders,

I am pleased to introduce BHP's Remuneration Report for the financial year to 30 June 2022. During FY2022, the Remuneration Committee (**Committee**) continued its focus on achieving remuneration outcomes that fairly reflect the performance of BHP and the contribution of our employees, and which are aligned to the interests of shareholders and other key stakeholders.

Our approach and framework

Our Charter sets out our values upon which the Committee places great weight in the determination of performance-based remuneration outcomes for BHP executives. *Our Charter* places health and safety at the forefront of our values while setting out our purpose, our strategy and how we measure success. The Committee aims to support our executives to take a long-term approach to decision-making in order to build a sustainable and value-adding business.

The Committee is focused on a remuneration framework and approach that supports the Group's strategy and enables us to attract, retain and motivate our executives located in different geographies. This is critical to delivering the best outcomes for all BHP stakeholders. As BHP is a global organisation, the Committee is also mindful of navigating the priorities and expectations of multiple jurisdictions.

At the 2021 AGMs, we received strong support for our remuneration framework and outcomes, with over 97 per cent voting in favour of the Remuneration Report. This means that over the past five years we have received an average of approximately 96 per cent support. The Committee and the Board continue to incorporate shareholder feedback into their approach to remuneration.

FY2022 represents the third year of operation of our revised remuneration framework and we believe the framework is continuing to serve stakeholders well. The key changes to variable remuneration that took effect from 1 July 2019 for the CEO were to significantly reduce the LTIP grant size from 400 per cent of base salary (on a face value basis) to 200 per cent, and a rebalancing to a CDP award with a long-term focus. The CDP outcome is delivered one-third as a cash award, with two-thirds delivered in equity that is deferred equally for two-year and five-year periods. This structure aligns participants' incentive remuneration with performance over the short, medium and long term.

We continue to benchmark the CEO and other executives' remuneration against CEO and executive roles in other global companies of similar complexity, size, reach and industry. This detailed benchmarking ensures BHP's executive remuneration framework remains competitive to attract, motivate and retain key talented executives and is consistent with the global market.

The majority of the CEO's remuneration package continues to be delivered in BHP equity, not in cash, and the CEO's remuneration is deliberately tied to the performance of the business. In addition, the CEO is required to meet a MSR of five times pre-tax base salary and this applies for two years post-retirement. This ensures that the CEO's remuneration is aligned to the experience of BHP's shareholders. As at the date of this Report, the CEO's BHP shareholding is in excess of his MSR.

Business performance

I am pleased to say BHP's performance for FY2022 has been underpinned by safe, reliable operations and firm demand for our commodities. We completed another year fatality free and we are unwavering in our effort to improve safety, including the elimination of sexual harassment, racism and bullying.

We delivered reliable operational performance at Western Australia Iron Ore, with record sales for a third consecutive year and the South Flank project ramp up ahead of schedule. In copper, Escondida in Chile achieved record material mined and near-record concentrator throughput, while Olympic Dam in South Australia performed strongly in the fourth quarter after planned smelter maintenance. Queensland metallurgical coal ended the year with strong underlying performance in the face of significant wet weather.

We have made strong progress on actions required to meet our commitments to reduce operational GHG emissions, which are down by 15 per cent since FY2017. We have further progressed our emission reduction partnerships with three major steelmakers in China and Japan and we also entered a new partnership with a fourth steelmaker in South Korea. The combined output of these four steelmakers equates to around 12 per cent of global steel production.

Our US$5.7 billion Jansen potash project in Canada is tracking to plan and opportunities to bring forward first potash production at Jansen continue to be assessed. In addition, during FY2022, we merged our Petroleum business with Woodside, completed the sales of our interests in BMC and Cerrejón, and following a strategic review decided to retain New South Wales Energy Coal. As a consequence, we will seek approvals to continue mining until 2030. We also unified our corporate structure, and added to our global options in copper and nickel.

COVID-19 continued to impact in FY2022, particularly in the areas of labour and supply chain constraints. We remain vigilant with continued social distancing and hygiene practices, and other additional protocols as appropriate to protect our workforce and communities. Despite the challenges that the COVID-19 pandemic continues to present, in FY2022 BHP continued its approach to not furlough any employees, did not seek any government assistance, and did not raise additional equity. In addition, BHP's safe and reliable operational performance through this year, together with strong profitability, enabled the Board to announce record dividends for FY2022. This continues the delivery of strong and consistent returns to shareholders.

FY2022 CDP

The CDP scorecard used to assess Mike Henry's annual performance comprises stretching performance measures, including HSEC, financial and individual performance elements. For FY2022, the Committee has assessed the CEO's performance and determined a CDP outcome of 96 per cent against a target of 100 per cent (and 64 per cent of the maximum).

For the HSEC element, the outcome took into account BHP's strong HSEC performance during the year, with no fatalities recorded, the strong progress against our Fatality Elimination Program and delivery of our cultural heritage commitments. This year we have also made progress on the implementation of controls for sexual harassment, although there remains more to be done. We also saw strong progress against our climate change targets, and our progress in the management of priority tailings storage facilities was pleasing. The CDP outcome for the HSEC measures was 31 per cent out of a target of 25 per cent.

Our financial performance was strong, and during FY2022 shareholders have again benefitted through record dividends. However, after fully eliminating the positive impacts of commodity prices during the year, operating performance at our assets was below the challenging internal targets set at the commencement of the year. This is in part due to higher than expected unplanned costs and other impacts of the COVID-19 pandemic, which flowed through into CDP outcomes without moderation for FY2022. This is a similar approach that was applied in FY2021 and FY2020 and has the effect of reducing the remuneration outcomes for executives. The CDP outcomes for the financial measure was 40 per cent out of a target of 50 per cent.

Finally, from a personal performance perspective, the Committee considered Mike Henry's performance against his individual measures. These included projects and initiatives in respect of social value (long term growth in value and returns for all stakeholders), people (right people, right skills, coming together in the right way to support exceptional performance), performance (material improvement in the system that supports exceptional performance) and portfolio (material progress on our strategic objectives to create a portfolio that will set BHP up for the next 20 years). The Committee considered Mike's performance against his individual objectives met expectations and warranted an outcome aligned with the target of 25 per cent.

The CDP scorecard outcomes for other Executive KMP and the short-term incentive pool applicable to the majority of BHP employees below the ELT level, were, like the CEO, slightly below the 100 per cent target.

2017 LTIP award

The vesting outcome for the 2017 LTIP award was 100 per cent. The LTIP performance condition is relative TSR and BHP outperformed both the sector peer group and the MSCI World Index. This level of vesting is aligned with the projected vesting outcome that was communicated to shareholders in the Remuneration Report at the time the changes to our remuneration framework were approved by shareholders at the 2019 AGMs.

The table below outlines the level of vesting each year from 2009 to 2022, together with the vesting outcomes projected in 2019.

As shareholders will recall, one of the key elements of our revised remuneration framework was to reduce the weighting of future LTIP grants in the overall CEO remuneration package from FY2020. Pre-existing grants remained on foot and their vesting would be determined on the basis of existing service and performance conditions.

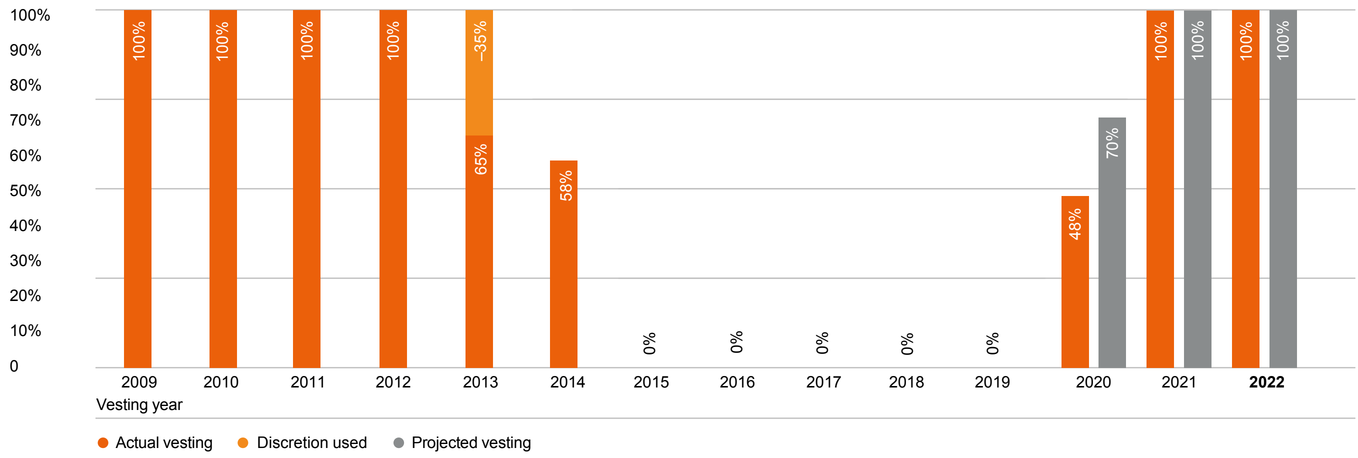
The value of the vested 2017 LTIP award is higher than the value of the award at the time it was granted due to the increase in share price during the five-year vesting period and strong dividends. In terms of value realised, 44 per cent is due to the value at the time the awards were granted and 56 per cent is due to share price appreciation and dividends. This reflects the experience of shareholders over the period.

Consistent with its normal practice, in considering vesting, the Board and Committee have also conducted a holistic review of business performance over the five years since the award was granted to ensure this level of vesting was appropriate.

More information on the 2017 LTIP vesting outcome, including the five-year holistic business review covering HSEC performance, profitability, cash flow, balance sheet health, returns to shareholders, corporate governance and conduct, is included in 3.3 LTIP performance outcomes and 3.4 Overarching discretion and vesting underpin.

More information on the overall remuneration outcomes for the CEO for the year, and how the outcomes are aligned to performance during FY2022, is provided in 3.1 FY2022 Remuneration received by the CEO.
Having considered the overall remuneration outcomes for the CEO carefully, as set out above and in 3.1, the Committee concluded it was a fair reflection of performance and the experience of shareholders, and the application of any downwards discretion was not warranted.

LTIP vesting



FY2023 remuneration

For FY2023, the Committee determined that the CEO's base salary would increase by 3 per cent, effective 1 September 2022. This was assessed as appropriate having conducted updated benchmarking and considered the external market demand for senior executive talent. The Committee considers the increase modest in this context, as well as being below the median salary increase applied for other BHP employees of approximately 4 per cent. Other components of the CEO's total target remuneration (pension contributions, benefits, CDP and LTIP) remain unchanged and, where relevant, as percentages of base salary.
A summary of the CEO's arrangements for FY2023 is set out below.

Fixed remuneration	**CDP**	**LTIP**

– Base salary US$1.750 million per annum, an increase of 3% from 1 September 2022.
– Pension contribution 10% of base salary.
	– Target cash award of 80% of base salary (maximum 120%).
	– Plus two awards of deferred shares each of equivalent value to the cash award, vesting in two and five years, respectively.
	– Three performance categories:
	  – HSEC – 25%
	  – Financial – 50%
	  – Individual – 25%
		– The LTIP grant is based on a face value of 200% of base salary.
		– Our LTIP awards have rigorous relative TSR performance hurdles measured over five years.

The Committee has also reviewed the base salaries and total target remuneration packages for other Executive KMP. The Committee determined they would also increase by 3 per cent, effective 1 September 2022. An additional increase has been determined for Ragnar Udd reflecting his performance and development in role (for more information regarding base salaries for FY2023 refer to 3.7 FY2023 remuneration for the CEO and other Executive KMP). Other aspects of other Executive KMP remuneration arrangements remain unchanged.

Remuneration outcomes for the Chair and Non-executive Directors

Fees for the Chair and Non-executive Directors are reviewed annually and are benchmarked against peer companies. No changes to the Chair's fee will be made for FY2023. The Chair fee has remained unchanged since 1 July 2017. In 2017, a decision was made to reduce the Chair's annual fee by approximately 8 per cent from US$0.960 million to US$0.880 million with effect from 1 July 2017. This followed an earlier reduction on 1 July 2015 of approximately 13 per cent from US$1.100 million to US$0.960 million.

Base fee levels for Non-executive Directors will also remain unchanged. The fees of Non-executive Directors were also reduced on 1 July 2015 by approximately 6 per cent, from US$0.170 million to US$0.160 million per annum.

In FY2022, BHP undertook a series of major transactions. As a consequence, modest fees were paid to certain Non-executive Directors for additional or extra services performed in FY2022 in connection with major transactions undertaken by the Group.

Summary

This year the COVID-19 pandemic continued to impact not only BHP, but our customers, suppliers, governments, employees, families and communities across the world. On behalf of the Committee, I would like to recognise the continued hard work, dedication and sacrifices of our employees. Through their steadfast commitment, they have enabled BHP to generate strong results for all stakeholders and continued to support their communities.

We deliberately align our executive remuneration with performance, with a significant component of possible remuneration structured as variable pay. We are confident that the outcomes this year are consistent with our long held approach of remuneration outcomes reflecting the performance of BHP and the experience of our shareholders. Given our critical need to attract, motivate and retain our executives in order to progress our strategic objectives and deliver the best outcomes for all BHP stakeholders, this is a pleasing result for all concerned.

We look forward to ongoing dialogue with and the support of BHP's shareholders. As always, we welcome your feedback and comments on any aspect of this Report.

Christine O'Reilly

Christine O'Reilly
Chair, Remuneration Committee

16 August 2022

1 Remuneration governance

Board oversight

The Board is responsible for ensuring the Group's remuneration arrangements are equitable and aligned with the long-term interests of BHP and its shareholders. In performing this function, it is critical the Board is independent of management when making decisions affecting remuneration of the CEO, other Executive KMP and the Group's employees.

The Board has established the Committee to assist it in making such decisions. The Committee is comprised solely of Non-executive Directors, all of whom are independent. The Committee has extensive access to members of senior management and regularly invites them to attend meetings to provide reports and updates. However, members of management are not present when decisions are considered or taken concerning their own remuneration. The Committee can also draw on services from a range of external sources, including independent remuneration advisers.

Remuneration Committee

The activities of the Committee are governed by its Terms of Reference which is available at bhp.com. The current members of the Committee are: Christine O'Reilly (Chair), Catherine Tanna (member from 4 April 2022) and Dion Weisler. The following present and former Non-executive Directors served as members of the Committee during the year: Gary Goldberg (member to 17 June 2022), Anita Frew (member to 11 November 2021) and Susan Kilsby (member to 11 November 2021). The role and focus of the Committee and details of meeting attendances can be found in 2.2 Directors' Report.

Key decisions and activities of the Committee during FY2022 included:

- considering and approving remuneration for members of the ELT
- setting targets for and reviewing outcomes against performance measures and conditions of relevant incentive plans, including the Committee considering its discretion over FY2022 plan outcomes
- reviewing the fee for the BHP Chair, which remains unchanged
- considering remuneration and remuneration reporting implications of unification and the merger of the Petroleum business and Woodside
- reviewing and adopting changes and improvements flowing from regulatory requirements and guidance, which in turn helps us improve our processes and approaches
- engaging with shareholders and other key stakeholders
- undertaking reviews of remuneration by gender and the annual Shareplus enrolment

Engagement of independent remuneration advisers

The Committee seeks and considers advice from independent remuneration advisers where appropriate. Remuneration consultants are engaged by and report directly to the Committee. Potential conflicts of interest are taken into account when remuneration consultants are selected and their terms of engagement regulate their level of access to, and require their independence from, BHP's management.

PwC has been appointed to act as an independent remuneration adviser and is currently the only remuneration adviser appointed by the Committee. In that capacity, they may provide remuneration recommendations in relation to KMP, however, they did not provide any remuneration recommendations in FY2022.

KMP for FY2022

This Remuneration Report describes the remuneration policies, practices, outcomes and governance for the KMP of BHP. At BHP, KMP consists of our Board (including the CEO), as well as certain members of our ELT who have authority and responsibility for planning, directing and controlling the activities of the Group directly or indirectly. After due consideration, the Committee determined the KMP for FY2022 comprised all Non-executive Directors and the following Executive KMP: the CEO, the Chief Financial Officer, the President Minerals Australia, the President Minerals Americas and the Senior Executive Officer (i.e. the President Petroleum until 31 May 2022).

The following individuals have held their positions and were KMP for the whole of FY2022, unless stated otherwise:

- Mike Henry, CEO and Executive Director
- Edgar Basto, President Minerals Australia
- David Lamont, Chief Financial Officer
- Geraldine Slattery, President Petroleum from 1 July 2021 to 31 May 2022 and Senior Executive Officer from 1 June to 30 June 2022
- Ragnar Udd, President Minerals Americas
- Non-executive Directors – for details of Non-executive Directors, including dates of appointment or cessation (where relevant), refer to 2.2 Directors' Report.

2 Remuneration framework

BHP has an overarching remuneration framework that guides the Committee's decisions and is designed to support our strategy and reinforce our culture and values.

2.1 How the remuneration framework is set

The Committee sets the remuneration framework for the Executive KMP, including the CEO. The Committee is briefed on and considers prevailing market conditions, the competitive environment and the positioning and relativities of pay and employment conditions across the wider BHP workforce. The Committee takes into account the annual base salary increases for our employee population when determining any change in the Executive KMP's base salary. The salary increases in locations where our Executive KMP are based are particularly relevant when reviewing their remuneration to ensure that their remuneration also reflects the local economic conditions.

The principles that underpin the remuneration framework for Executives are the same as those that apply to other employees, however Executive KMP arrangements have a greater emphasis on and a higher proportion of remuneration that is at risk as performance-related variable pay. The performance measures used to determine variable pay outcomes for the Executive KMP and all other employees are linked to the delivery of our strategy and behaviours that are aligned to *Our Charter* values.

As part of the Board's commitment to good governance, the Committee considers shareholder views and those of the wider community when setting the remuneration framework for the Executive KMP. We are committed to engaging and communicating with shareholders regularly and, as our shareholders are spread across the globe, we are proactive with our engagement on remuneration and governance matters with institutional shareholders and investor representative organisations. Feedback from shareholders and investors is used as input into decision-making by the Board and the Committee in relation to our remuneration framework and its application. The Committee considers that this approach provides a robust mechanism to ensure Directors are aware of matters raised, have a deep understanding of current shareholder views and can formulate frameworks and make decisions as appropriate. We encourage shareholders to make their views known to us by directly contacting our Investor Relations team (contact details available at bhp.com).

2.2 Remuneration framework operation

Our approved remuneration policy was adopted by shareholders in 2019 for a three-year period in accordance with UK requirements and following the unification of our corporate structure in early 2022 BHP is no longer required to have our policy approved by shareholders every three years. However, the following table shows the current components of our remuneration framework, which is consistent with the prior approved remuneration policy.

	Fixed remuneration	CDP	LTIP
Purpose and link to strategy	Market competitive fixed remuneration is paid in order to attract, motivate and retain high-quality and experienced executives, and provide appropriate remuneration for these important roles in the Group.	The CDP encourages and focuses executives' efforts for the relevant financial year on the delivery of the Group's strategic priorities, balancing financial and non-financial performance, to deliver short, medium and long-term success aligned to our purpose and *Our Charter*, and to motivate executives to strive to achieve stretch performance objectives.	The purpose of the LTIP is to focus executive's efforts on the achievement of sustainable long-term value creation and success of the Group (including appropriate management of business risks).

	Fixed remuneration	CDP	LTIP
Remuneration components and link to performance	Fixed remuneration comprises base salary, pension contributions and benefits. Competitive fixed remuneration is aligned to global complexity, size, reach and industry, and reflects executives' responsibilities, location, skills, performance, qualifications and experience.	Annual variable pay opportunity linked to execution of business strategy. A balanced scorecard of short, medium and long-term elements including HSEC (25% weighting), financial (50% weighting) and individual performance measures (25% weighting) are chosen on the basis that they are expected to have a significant short, medium and long-term impact on the success of the Group, with appropriate targets for each measure which will appropriately motivate Executive KMP to achieve outperformance that contributes to the long-term sustainability of the Group and shareholder wealth creation.	Annual long-term variable pay opportunity based on grants of five-year performance rights designed to align executives' reward with sustained shareholder wealth creation in excess of relevant comparator group(s), through the relative TSR performance condition. Relative TSR has been chosen as an appropriate measure as it enables an objective external assessment over a sustained period on a basis that is familiar to shareholders.

	CDP	LTIP
Assessment of performance	Achievement against each scorecard measure is assessed by the Committee and the Board, with guidance provided by other relevant Board Committees in respect of HSEC, financial and other measures, and a CDP award determined. If performance is below the threshold level for any measure, no CDP award will be provided in respect of that portion of the CDP award opportunity. In the event the Committee does not consider the outcomes that would otherwise apply to be a true reflection of the performance of the Group or should it consider that individual performance or other circumstances makes this an inappropriate outcome, it retains the discretion to not provide all or a part of any CDP award. This is an important mitigation against the risk of unintended award outcomes.	Vesting of the LTIP award is dependent on BHP's TSR relative to the TSR of relevant comparator group(s) over a five-year performance period. 25% of the award will vest where BHP's TSR is equal to the median TSR of the relevant comparator group(s), as measured over the performance period. Where TSR is below the median, awards will not vest. Vesting occurs on a sliding scale between the median TSR of the relevant comparator group(s) up to a nominated level of TSR outperformance over the relevant comparator group(s), as determined by the Committee, above which 100% of the award will vest. Where the TSR performance condition is not met, there is no retesting and awards will lapse. The Committee also retains discretion to lapse any portion or all of the award where it considers the vesting outcome is not appropriate given Group or individual performance. This is an important mitigation against the risk of unintended outcomes.
Delivery and vesting	CDP awards are provided as cash and two awards of deferred shares, each of equivalent value to the cash award, vesting in two and five years respectively. Awards of deferred shares comprise rights to receive ordinary BHP shares in the future at the end of the deferral periods. Before the awards vest (or are exercised), these rights are not ordinary shares and do not carry entitlements to ordinary dividends or other shareholder rights; however, a DEP is provided on vested awards. The Committee has a discretion to settle CDP awards in cash. Vesting of five-year deferred shares under the CDP is underpinned by a holistic review of performance at the end of the five-year vesting period, including a review of HSEC performance, profitability, cash flow, balance sheet health, returns to shareholders, corporate governance and conduct over the five-year period.	LTIP awards consist of rights to receive ordinary BHP shares in the future if the performance and service conditions are met. Before vesting (or exercise), these rights are not ordinary shares and do not carry entitlements to ordinary dividends or other shareholder rights; however, a DEP is provided on vested awards. The Committee has a discretion to settle LTIP awards in cash. Vesting of five-year performance rights under the LTIP is underpinned by a holistic review of performance at the end of the five-year performance period, including a review of HSEC performance, profitability, cash flow, balance sheet health, returns to shareholders, corporate governance and conduct over the five-year period.
Cessation of employment	On cessation of employment, a 'good leaver'[1] may receive a pro-rated cash award based on performance for that year. For a 'good leaver', their unvested CDP deferred awards generally remain on foot (wholly or in part) unless the Committee determine otherwise. If the executive is not a 'good leaver', all unvested CDP deferred awards will lapse.	On cessation of employment, for a 'good leaver'[1] their unvested LTIP awards generally remain on foot on termination and are pro-rated for the portion of the vesting period served. These awards are eligible for vesting in the ordinary course, subject to any applicable performance conditions. If the executive is not a 'good leaver', all unvested LTIP awards will lapse.
Malus and clawback	CDP awards (including cash and deferred share awards) and LTIP awards are subject to the Group's malus and clawback policy (see below).	

[1] 'Good leaver' treatment may apply where the reason for the cessation of employment with BHP is due to forced early retirement, retrenchment or redundancy, termination by mutual agreement or retirement with the agreement of the Group, or such other circumstances that do not constitute resignation or termination for cause.

Malus and clawback

As has been set out in prior Remuneration Reports, for many years we have had malus and clawback provisions in place. During FY2022, we enhanced our malus and clawback policy covering awards made from 2021 under the CDP and LTIP. This enhanced policy further clarified the circumstances in which the Committee is able to reduce or clawback awards, which include:

- an error in the Group's Financial Statements that requires a material downward restatement
- performance of a participant, or of the business or of the Group does not justify vesting or where the participant's conduct or performance has been in breach of their employment contract, any laws, rules, codes of conduct or policies applicable to them or the standards reasonably expected of a person in their position
- misstatement or misrepresentation of the performance of the company
- where any team, business area, member of the Group or profit centre in which the participant works or worked has been found guilty in connection with any regulatory investigation or has been in breach of any laws, rules, codes of conduct or policies applicable to it or the standards reasonably expected of it
- an event that has had, or may have a material adverse effect on the value or reputation of any member of the Group
- where the Committee determines there has been material damage to the Group's social licence to operate
- a catastrophic health, safety, environment or community event or events occurring in any part of the Group
- an act, omission or event occurs which constitutes a material failure of risk management or of other operational systems and controls
- a participant is found to have contributed to circumstances that give rise to a material loss for any Group Company

These malus and clawback provisions apply whether or not awards are made in the form of cash or equity, whether or not the equity has vested, and whether or not employment is ongoing.

Service contracts

The terms of employment for the CEO and Executive KMP are formalised in their employment contracts. The current contracts of the CEO and Executive KMP are not fixed term. BHP may choose to terminate a contract on up to 12 months' notice. BHP can require an executive to work through the notice period or may terminate the individual's contract immediately by paying base salary plus pension contributions in lieu of the notice period. The CEO and Executive KMP must provide up to 12 months' notice for voluntary resignation.

Approach to recruitment and promotion

For external candidates that are appointed Executive KMP, the Committee may determine that it is appropriate to provide additional cash and/or equity components to replace any remuneration forfeited or not received from a former employer. It is anticipated any foregone equity awards would be replaced by equity. The value of the replacement remuneration would not be any greater than the fair value of the awards foregone or not received (as determined by the Committee's independent adviser). The Committee would determine appropriate service conditions and performance conditions within BHP's remuneration framework, taking into account the conditions attached to the foregone awards. The Committee is mindful of limiting such payments and not providing any more compensation than is necessary. For any internal Executive KMP appointment, any entitlements provided under former arrangements will be honoured and remain on foot according to their existing terms.

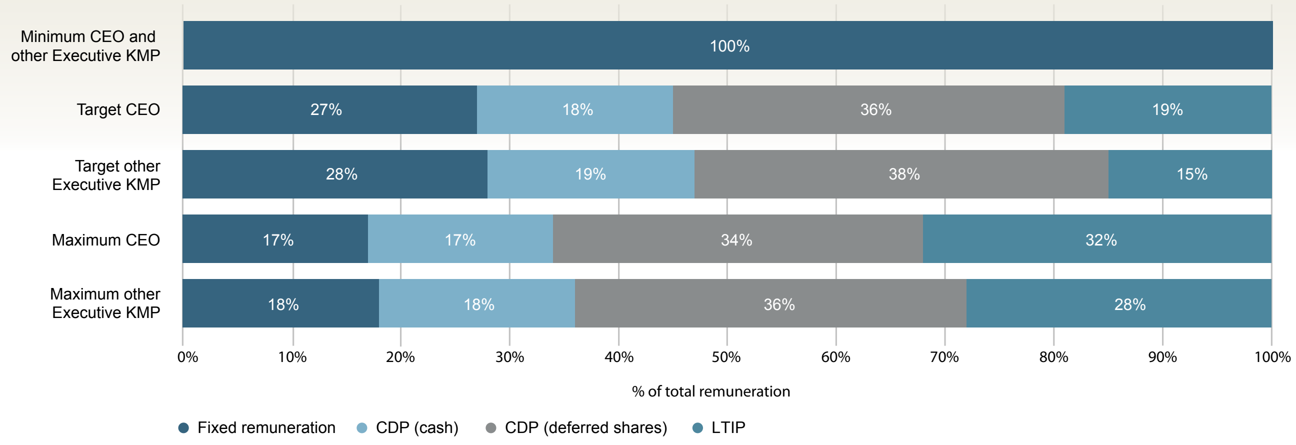
2.3 Potential remuneration outcomes

The Committee recognises market forces influence remuneration practices and it strongly believes the fundamental driver of remuneration outcomes should be performance. It also believes that overall remuneration should be fair to the individual, and remuneration levels should accurately reflect the CEO's and other Executive KMP's responsibilities and contributions, while aligning with the expectations of our shareholders and considering the positioning and relativities of pay and employment conditions across the wider BHP workforce.

The amount of remuneration actually received each year depends on the achievement of business and individual performance that generate sustained shareholder value. Before deciding on the final incentive outcomes for the CEO and other Executive KMP, the Committee first considers the achievement of pre-determined performance conditions. The Committee then applies its overarching discretion to determine what it considers to be a fair and commensurate remuneration level in order to decide if the outcome should be reduced. In this way, the Committee believes it can set a remuneration level for the CEO and other Executive KMP that is sufficient to incentivise and is also fair and commensurate with shareholder expectations and prevailing market conditions.

The diagram below provides the scenarios for the potential total remuneration of the CEO and other Executive KMP at different levels of performance.

Remuneration mix for the CEO and other Executive KMP



Minimum: consists of fixed remuneration, which comprises base salary, pension contributions (10 per cent of base salary) and other benefits (notional 10 per cent of base salary), details of which are set out in 5.1 KMP remuneration table.

Target: consists of fixed remuneration, target CDP (a cash award of 80 per cent of base salary plus two awards of deferred shares each of equivalent value to the cash award, vesting in two and five years, respectively) and target LTIP. The LTIP target value in the chart above is based on the fair value of the award, which is 41 per cent of the face value of 200 per cent of base salary for the CEO and 175 per cent for other Executive KMP. The potential impact of future share price movements is not included in the value of deferred CDP awards or LTIP awards.

Maximum: consists of fixed remuneration, maximum CDP (a cash award of 120 per cent of base salary plus two awards of deferred shares each of equivalent value to the cash award, vesting in two and five years respectively), and maximum LTIP (in the chart above based on the face value of 200 per cent of base salary for the CEO and 175 per cent for other Executive KMP). The potential impact of future share price movements is not included in the value of deferred CDP awards or LTIP awards.

The maximum opportunity represented above is the most that could potentially be paid for each remuneration component. It does not reflect any intention by the Group to award that amount. In determining the maximum remuneration opportunity, the Committee reviews relevant benchmarking data and industry practices and believes the maximum remuneration opportunity is appropriate.

3 Remuneration for the CEO and other Executive KMP

3.1 FY2022 remuneration received by the CEO

The table below is a voluntary non-statutory disclosure of the remuneration received by the CEO during FY2022 and FY2021. This table is unaudited and differs from the audited remuneration calculated in accordance with the Australian Accounting Standards (refer to 5.1 KMP remuneration table and in Financial Statements note 25 Employee share ownership plans).

The difference between the disclosure in the table below and remuneration calculated in accordance with Australian Accounting Standards relates to the CDP and LTIP. The remuneration calculated in accordance with Australian Accounting Standards require the fair value of the CDP and LTIP to be calculated at the time of grant and to be amortised over the relevant vesting periods regardless of the performance outcome. This may not reflect what the executive receives. In the table below, the CDP and LTIP values relate to the performance outcomes and actual amount received each year under the CDP (i.e. against the CDP scorecard) and the LTIP (i.e. the LTIP vesting outcome).

This table is designed to provide greater transparency for shareholders on the remuneration for the CEO during FY2022 and FY2021 as it has a stronger link to performance, with the CDP and LTIP included below representing those amounts that have been received as a consequence of satisfying performance conditions in the relevant financial year.

Details of the components of remuneration are contained in 2.2 Remuneration framework operation and the values in the table are explained further in the notes below.

US$('000)		Base salary	Benefits[1]	Pension[2]	CDP[3]	LTIP[4]	Total
Mike Henry	**FY2022**	**1,700**	**168**	**170**	**3,917**	**8,712**	**14,667**
	FY2021	1,700	120	170	4,692	7,939	14,621

[1] Benefits are non-pensionable and include net movements in leave balances, private family health insurance, spouse business-related travel, car parking, fringe benefits tax and personal tax return preparation in required countries.

[2] Mike Henry's FY2022 and FY2021 pension contributions were provided based on 10 per cent of base salary.

[3] The values shown are the full CDP value (cash and deferred equity) earned as a consequence of performance during FY2022 and FY2021. The FY2022 CDP award will be provided one-third in cash in September 2022 and two-thirds in deferred equity, with one-third due to vest in FY2025 and one-third due to vest in FY2027 (on the terms of the CDP). The FY2021 CDP award was provided one-third in cash in September 2021 and two-thirds in deferred equity, with one-third due to vest in FY2024 and one-third due to vest in FY2026 (on the terms of the CDP).

[4] Mike Henry's LTIP award values for FY2022 and FY2021 (refer below) are based on the full awards he received in 2017 and 2016 respectively when he was President Operations, Minerals Australia (prior to becoming and with no proration applied for time as CEO), and 100 per cent of the awards vesting. For FY2022 the LTIP award value is calculated on the average share price for the month of July 2022 (which will be updated for the actual share price on the vesting date in the 2023 Remuneration Report); whereas the LTIP award value for FY2021 was calculated on the actual share price on the vesting date.

A revised remuneration framework took effect from 1 July 2019 and significantly reduced the LTIP grant size for the CEO from 400 per cent of base salary (on a face value basis) to 200 per cent and a rebalancing to a CDP award with a long-term focus. As a result, the remuneration for Mike Henry reported above reflects the transition to this structure and includes the full amounts of the CDP award earned during FY2022 and FY2021 (i.e. irrespective that some elements of the CDP award are deferred) together with the full amounts of the pre-existing LTIP awards vesting at the end of FY2022 and FY2021 which were granted in 2017 and 2016, respectively (i.e. when the LTIP award size was double the current grant size).

Had the current remuneration framework been in place when Mike's 2017 and 2016 LTIP awards were granted and a reduced size awarded, the reported LTIP values would have been US$4.356 million for FY2022 and US$3.970 million for FY2021 (instead of US$8.712 million and US$7.939 million in the table above). The reported total remuneration would have therefore been US$10.311 million for FY2022 and US$10.652 million for FY2021 (instead of US$14.667 million and US$14.621 million in the table above).

CEO pay ratio

The FY2022 CEO pay ratio, calculated using the reported total fixed and variable remuneration above for the CEO, and compared to the median remuneration for all of our employees worldwide, was 123:1 (FY2021 – 130:1). The remuneration calculation for all employees is based on actual earnings for the 12 months to 31 March 2022, including annual incentive payments for employees calculated using the Group performance outcome, and vested equity received if applicable. Pension contributions are calculated as the total cost of contributions made by the Group over the 12-month period. Employees on international assignments have been excluded from the analysis as their remuneration structures are generally not consistent with the remuneration received by the CEO as noted in the table above.

The FY2022 ratio of 123:1 at the median compared to the FY2021 ratio of 130:1 reflects the proportion of the CEO's pay being more heavily weighted to variable pay, including share-based long-term incentives, than for other employees. The change from FY2021 to FY2022 is driven by a lower FY2022 CDP outcome of 96 per cent (FY2021: 115 per cent) for the CEO, a higher value of the CEO's vested LTIP award in FY2022 compared to FY2021 and an increase in the median remuneration for all of our employees worldwide.

The Group believes the median pay ratio reflects the diversity of our global business footprint and employee population. BHP's remuneration policies and practices are based on a high degree of alignment and consistency, with total remuneration at all levels providing a competitive package that enables the attraction and retention of talent while also providing at-risk remuneration based on performance.

3.2 FY2022 CDP performance outcomes

The Board and the Committee assessed the Executive KMP's CDP outcomes in light of the Group's performance in FY2022 and took into account performance against the measures in each Executive KMP's CDP scorecard. For the CEO, the Board and the Committee determined a CDP outcome for FY2022 at 96 per cent against the target of 100 per cent (which represents an outcome of 64 per cent against maximum). The Board and Committee believe this outcome is appropriately aligned with the shareholder experience and the interests of the Group's other stakeholders.

The CEO's CDP scorecard outcome for FY2022 is summarised in the following tables, including a narrative description of each performance measure and the CEO's level of achievement, as determined by the Committee and approved by the Board. The level of performance for each measure is determined based on a range of threshold (the minimum necessary to qualify for any reward outcome), target (where the performance requirements are met), and maximum (where the performance requirements are significantly exceeded).

Summary of outcomes for the CEO

Performance measure	Weighting for FY2022	Threshold		Target		Maximum	Percentage outcome
							Mike Henry
HSEC	25%				●		31%
Financial	50%		●				40%
Individual	25%			●			25%
Total	**100%**			●			**96%**

HSEC

The HSEC targets for the CEO are aligned to the Group's 2030 public sustainability goals. As it has done for several years, when assessing HSEC performance against the scorecard targets, the Committee seeks guidance from the Sustainability Committee. The Committee has taken a holistic view of Group performance in critical areas, including considering any additional matters outside the scorecard targets that the Sustainability Committee has provided and considers relevant.

The performance commentary below is provided against the HSEC scorecard targets, which were set on the basis of operated assets only.

HSEC measures	Scorecard targets	Performance against scorecard targets	Measure outcome
Significant events	No significant (actual level 4) health, safety (including fatalities), environment or community events during the year.	– There were no fatalities or other significant HSEC events during FY2022 at operated assets. – In addition, for a maximum outcome to be awarded, strong progress was required on the development and implementation of controls in relation to the Fatality Elimination Program, sexual harassment and cultural heritage, and this was achieved in relation to the Fatality Elimination Program and cultural heritage for FY2022. While we continued to make progress on the implementation of our actions to eliminate sexual harassment during FY2022, we have more to do in FY2023.	Between target and maximum.
Climate change	Reported GHG emissions in FY2022 are below the FY2017 level. A majority of planned decarbonisation projects are presented for tollgates and all asset adaptation plans are updated. Work undertaken as planned under partnerships with strategic customers in the steel sector established in FY2021, one more partnership formalised, and a review of Scope 3 goals and estimation methodologies completed.	– For FY2022, we improved on our operational GHG emissions target of 14.6Mt, with an outcome of 12.5Mt[1], which was greater than 10% below the target (i.e. required for maximum). – Each region presented 90% of GHG reduction projects schedules and adaptation plans, updated for material changes, which were incorporated in the planning process. The completion of early stage development studies that contributed to the Group's medium term target and financial and economic evaluation of physical climate change risks and adaptation measures (i.e. both required for maximum) was largely completed, with work continuing into FY2023. – During the year, we commenced Phase 1 work for each of the three strategic Memorandum of Understandings (MOUs) signed with steel customers in FY2021 (China Baowu (China), JFE Steel Corporation (Japan) and HBIS Limited (China)), including the commencement and delivery of work plans for each partnership. An additional steelmaking partnership MOU was signed with POSCO (South Korea) in October 2021, a new customer partnership was signed focussed on plant trials with Zenith Steel (China), and a review of BHP Scope 3 goals and methodology was completed. An industrial scale sinter plant emission reduction trial (i.e. required for maximum) was commenced with Zenith Steel in May 2022 relating to the optimisation stage of steel decarbonisation.	Between target and maximum.
Management of priority tailings storage facilities (TSFs)	All priority TSFs are assessed based on key risk indicator data, and are either within appetite or continued operation outside appetite is approved with remediation progressing to plan.	– All priority TSFs are within appetite based on key risk indicator data or continued operation outside appetite is approved with remediation progressing to plan. – We have continued improving our key risk indicator performance with 85% of all key risk indicators for priority TSFs rated either on target or less risk being taken than target, against a target of 85% and 90% required for maximum.	Target.

The outcome against the HSEC measure for FY2022 was 31 per cent out of the target of 25 per cent.

[1] As reported to the Sustainability Committee and Remuneration Committee meetings in early August 2022 and considered for the purposes of determining FY2022 CDP outcomes. The GHG emissions for FY2022 are subject to third-party verification.

Financial

ROCE is underlying profit after taxation (excluding after-taxation finance costs and exceptional items) divided by average capital employed. ROCE is the key financial measure against which CDP outcomes for our senior executives are measured and is, in our view, a relevant measure to assess the financial performance of the Group for this purpose. While ROCE excludes exceptional items, the Committee reviews each exceptional item to assess if it should be included in the result when determining the ROCE CDP outcome.

When we are assessing management's performance, we make adjustments to the ROCE result to allow for changes in commodity prices, foreign exchange movements and other material items (from the levels assumed in setting the targets) to ensure the assessment appropriately measures outcomes that are within the control and influence of the Group and its executives. Of these, changes in commodity prices have historically been the most material due to volatility in prices and the impact on Group revenue and ROCE. As it has done for several years, the Committee seeks guidance each year from the Risk and Audit Committee when assessing financial performance against scorecard targets.

Financial measure	Scorecard targets	Performance against scorecard targets	Measure outcome
ROCE	For FY2022, the target for ROCE was 38.1%, with a threshold of 33.5% and a maximum of 42.0%. Achievement of the ROCE target will result in a target CDP outcome. The ROCE target considers the upside opportunities and downside risks inherent in BHP's businesses, and is an outcome that the Committee believes would be a level of performance that shareholders would view positively. The maximum and threshold are an appropriate range of ROCE outcomes, given the upside opportunities and downside risks, that represent an upper limit of stretch outperformance that would represent the maximum CDP award, and a lower limit of underperformance below which no CDP award should be made. The performance range around target is subject to a greater level of downside risk than there is upside opportunity, mainly due to physical and regulatory asset constraints. Accordingly, the range between threshold and target is somewhat greater than that between target and maximum. For maximum, the Committee takes care not to create leveraged incentives that encourage executives to push for short-term performance that goes beyond our risk appetite and current operational capacity. The Committee retains, and has a track record of applying, downward discretion (but not upwards discretion) to ensure the CDP outcome is appropriately aligned with the overall performance of the Group for the year, and is fair and equitable to management and shareholders.	ROCE of 48.7% was reported by BHP for FY2022. Adjusted for the factors outlined below, ROCE is 36.3%, which is below target. The following adjustments were made to ensure the outcomes appropriately reflect the performance of management for the year: – The full elimination of the impacts of positive movements in commodities prices and exchange rates decreased ROCE by 6.9 percentage points. – Adjustments for other material items made to ensure the outcomes reflect the performance of management for the year decreased ROCE by 5.5 percentage points. This was mainly due to the elimination of the positive effect on reported ROCE outcomes of lower depreciation and lower asset values in the closing balance sheet due to the merger of the Petroleum business with Woodside and the sale of our interest in BMC. This downwards adjustment was necessary to ensure the basis of the ROCE outcome for CDP purposes was the same as the basis upon which Petroleum and our interest in BMC were included in the ROCE target for FY2022. – Having reviewed the FY2022 exceptional items (as described in Financial Statements note 3 Exceptional items), the Committee determined these should not be considered for the purposes of determining the FY2022 ROCE CDP outcome and that no further action was required in respect of exceptional items. The key drivers of the FY2022 ROCE outcome of 36.3% being below the target for FY2022 of 38.1% set at the commencement of the year were: – In Minerals Australia, production volumes were lower than expected mainly driven by labour and supply constraints across most assets associated with COVID-19, delays in the ramp up of South Flank at Western Australian Iron Ore, labour availability issues and interrupted autonomous haulage rollout at BMA, and the longer than planned duration of the smelter maintenance campaign at Olympic Dam. In addition, input prices were higher across all assets. – In Minerals Americas, in addition to unplanned maintenance and higher input prices at all assets, production volumes were impacted by lower than expected recoveries at Pampa Norte due to plant design issues related to the Spence Growth Option and higher clay content, and lower than expected copper concentrator feed grade at Escondida. – In Petroleum, despite achieving planned production, sales volumes were lower than expected due to unfavourable timing, partly offset by better than expected cost performance.	Below target.

The outcome against the ROCE measure for FY2022 was 40 per cent out of the target of 50 per cent.

Individual measures for the CEO

Individual measures for the CEO are determined at the commencement of the financial year. The application of personal measures remains an important element of effective performance management. These measures seek to provide a balance between the financial and non-financial performance requirements that maintain our position as a leader in our industry. The CEO's individual measures for FY2022 included contribution to BHP's overall performance and the management team, and the delivery of projects and initiatives within the scope of the CEO role as specified by the Board, as set out in the table below.

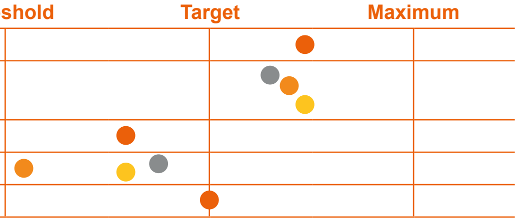
Individual measures	Individual scorecard targets	Performance against scorecard targets	Measure outcome
Social value	Deliver a successful Say on Climate outcome at the 2021 AGMs. Deliver an external update on BHP's embedment and measurement of Social Value.	– The Climate Transition Action Plan / Say on Climate was successfully approved at the 2021 AGMs with 85% of votes in favour. – A Social Value Framework (SVF) was developed and approved by the Board in October 2021 and subsequently deployed across BHP. In June 2022, the SVF was presented to our workforce as well as externally via an investor roundtable, and both internal and external engagements were received positively.	Target.
People	Increase in female participation by three percentage points. Engagement and Perception Survey (EPS) improvement survey on survey over the year and substantively improve lower performing teams.	– Female participation increased in FY2022 by 2.5 percentage points to 32.3% at 30 June 2022, compared to 29.8% at 30 June 2021. – While most of our people continue to feel safe, engaged and enabled, our EPS results declined marginally in FY2022. The EPS results of lower performing teams were, on average, similar in FY2022 compared to the prior year, even though a number of lower performing teams did show improvement.	Below target.
Performance	>90% of BHP Operating System (BOS) deployments on track, Operational Excellence Indicator (OEI) > 40 at 75% of sites at end of deployment, and > 75% improving OEI improving assessment-on-assessment for other sites. Enable the data strategy and associated value creation through transforming data accuracy, consistency and access.	– 94% of BOS deployments are on track according to plan. 88% of BOS sites at the end of deployment achieved an OEI score above the target of 40 (with an average OEI score of 43). 91% of sites already in deployment recorded an assessment-on-assessment improvement over FY2022. – The data strategy has been reinforced to enable value creation through transformation of data accuracy, consistency and cloud-native access. We have also established a data analytics operating model which retains capabilities in the assets and functions whilst enabling standards and tool replication across the Group to remove duplication, and migrated 1SAP and an additional 78 applications to the cloud to unlock enhanced performance and enhance cybersecurity.	Slightly above target.
Portfolio	Progress the strategic review activities with respect to Petroleum, our interest in BMC and New South Wales Energy Coal as approved by the Board. Additional nickel and copper search spaces captured. Continued maturation of the innovation and venture business units.	– We made strong progress on strategic review activities as approved by the Board, including the merger of our Petroleum business with Woodside (completed in June 2022), and the divestments of our interests in Cerrejón (completed in January 2022) and BMC (completed in May 2022). In June 2022, we announced that we will retain New South Wales Energy Coal and will seek approval to continue mining through to cessation of operations in FY2030. – While we secured additional investments in nickel and copper projects, the public offer made for Noront Resources (nickel) was unsuccessful. – Our pursuit of innovation has progressed, with 60 innovation concepts generated for evaluation in FY2022. Strong progress also continues across ventures, with 9 investments executed during FY2022, while ventures also supported market intelligence in our strategic evaluations of new products and processes.	Slightly above target.

Overall, it was considered the performance of the CEO against the individual measures for FY2022 had met expectations and warranted an outcome aligned to the target of 25 per cent.

The CDP performance measures for other Executive KMP for FY2022 are similar to those of the CEO outlined above. However, for the other Executive KMP, the weighting of each performance measure will vary to reflect the focus required from each Executive KMP role. As with the CEO, individual performance measures are determined at the start of the financial year. These include the other Executive KMP's contribution to the delivery of projects and initiatives within the scope of their role and the overall performance of the Group. Individual performance of other Executive KMP was reviewed against these measures by the Committee and, on average, were considered to have met expectations and warranted an outcome aligned with target.

The diagram below represents the FY2022 CDP weightings and outcomes against the original scorecard for other Executive KMP.

Performance categories		Other Executive KMP with region responsibility	Other Executive KMP without region responsibility
HSEC	Group	12.5%	25%
	Region	12.5%	0%
Financial	Group	25%	50%
	Region	25%	0%
Individual		25%	25%



● BHP ● Minerals Australia ● Minerals America ● Petroleum

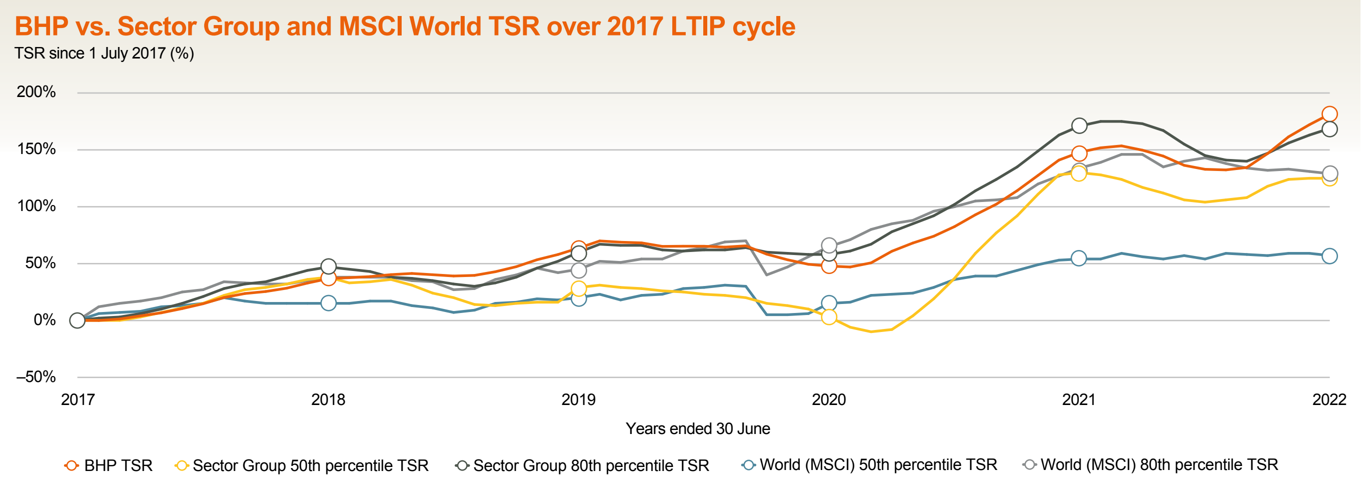
3.3 FY2022 LTIP performance outcomes

The five-year performance period for the 2017 LTIP award for relevant Executive KMP ended on 30 June 2022. Vesting is subject to achievement of the relative TSR performance conditions and any discretion applied by the Committee (refer to 3.4 Overarching discretion and vesting underpin).

For the 2017 LTIP award to vest in full, BHP's TSR over the performance period from 1 July 2017 to 30 June 2022 must be at or exceed the 80th percentile of the Sector Group TSR and the World TSR. TSR includes returns to BHP shareholders in the form of share price movements along with dividends paid and reinvested in BHP (including cash and in-specie dividends).

BHP's TSR performance was positive 181.7 per cent over the five-year period from 1 July 2017 to 30 June 2022. This is above the 80th percentile of the Sector Group TSR of positive 168.7 per cent and above the 80th percentile of the World TSR of positive 128.8 per cent over the same period. This level of performance results in 100 per cent vesting for the 2017 LTIP award. The value of the CEO's vested 2017 LTIP award has been reported in 3.1 FY2022 remuneration received by the CEO.

The graph below shows BHP's performance relative to comparator groups.



The value of the vested 2017 LTIP award is higher than the value of the award at the time it was granted. With the share price having risen appreciably during the five-year period and strong dividends, 44 per cent of the value realised is due to the value at the time the awards were granted and 56 per cent is due to share price appreciation and dividends. This value increment due to share price appreciation and dividends is consistent with the experience of shareholders over the period.

3.4 Overarching discretion and vesting underpin

The rules of the CDP and LTIP and the terms and conditions of the awards provide the Committee with an overarching discretion to reduce the number of awards that will vest, notwithstanding that the performance condition or the relevant service conditions have been met.

This overarching discretion is a holistic, qualitative judgement and is applied as an underpin test before final vesting is confirmed. It is an important risk management tool to ensure vesting is not simply driven by a formula or the passage of time that may give unexpected or unintended remuneration outcomes.

The Committee considers its discretion carefully each year ahead of the scheduled vesting of CDP and LTIP equity awards in August. It considers performance holistically over the five-year period, including a five-year 'look back' on HSEC performance, profitability, cash flow, balance sheet health, returns to shareholders, corporate governance and conduct. For the five years from FY2018 to FY2022, the Committee noted BHP's continued improvement in HSEC outcomes, strong operational performance with improving production and cost performance, and significant returns to shareholders, together with no governance or conduct issues of note.

Firstly, in respect of the vesting of CDP two-year deferred shares (granted in November 2020 in respect of performance in FY2020), the Committee chose not to exercise its discretion and allowed the CDP awards to vest in full.

Secondly, in respect of the vesting of the 2017 LTIP five-year performance shares, the formulaic outcome of the 2017 LTIP was 100 per cent vesting. Having undertaken the 'look back' review described above, the Committee concluded the vesting outcome was appropriate given Group and individual performance, and chose not to exercise its discretion and allowed 100 per cent of the LTIP awards to vest. There is no upwards discretion available to the Committee in respect of the LTIP and the overarching discretion may only reduce the number of awards that may vest.

3.5 Sign-on performance shares

David Lamont joined BHP as Chief Financial Officer on 1 December 2020. David left his former employer, CSL Limited (CSL), a major Australian company listed on the Australian Stock Exchange, on 30 October 2020. As a consequence of his resignation, certain CSL incentive awards, which were expected to have been paid or vested in 2021 and beyond, were foregone. Replacement BHP awards were provided in accordance with BHP's remuneration framework. In accordance with that policy, remuneration that David forfeited or did not receive as a consequence of leaving CSL to join BHP was partly replaced with 86,279 performance shares (i.e. 77,000 awards granted plus 9,279 additional uplift awards allocated as part of the merger of the Petroleum business with Woodside) and the Committee determined appropriate service and performance conditions.

The performance conditions were a holistic assessment of underlying financial performance of BHP and personal performance of David during the vesting period. At the time of grant, the target was 80 per cent vesting of awards, with a maximum of 100 per cent and a minimum of zero.

The service condition was satisfied and the Committee assessed the performance condition over the relevant performance period (1 December 2020 to 30 June 2022). The Committee considered BHP's TSR, the CDP finance measure outcomes and David's personal performance (with guidance on this assessment from the CEO).

In particular, the Committee considered the following information over the relevant period:

- BHP's relative TSR performance was slightly above the weighted median of BHP's sector peers
- BHP's financial performance, as measured by the CDP finance measure outcomes, was slightly below target
- the CEO's view that David had performed in line with expectations in his role

The Committee exercised its discretion and determined to vest 80 per cent or 69,023 of the performance shares. The awards which will not vest will instead lapse. A holding lock will apply to the vested shares until August 2023, at which time they will be released to David. Should David voluntarily resign or retire during the holding lock period, or be terminated for cause, the shares subject to the holding lock will be forfeited.

3.6 LTIP allocated during FY2022

Following shareholder approval at the 2021 AGMs, 107,183 LTIP awards (in the form of performance rights) were granted to the CEO on 23 November 2021. The face value of the CEO's award was 200 per cent of his base salary of US$1.700 million at the time of grant. The fair value of the awards is ordinarily calculated by multiplying the face value of the award by the fair value factor of 41 per cent (for the current plan design, as determined by the independent adviser to the Committee). The 107,183 LTIP awards for the CEO was determined based on the US$ face value of the LTIP awards of US$3.400 million and calculated using the average share price and US$/A$ exchange rate over the 12 months up to and including 30 June 2021. LTIP awards granted to other Executive KMP during FY2022 were calculated on the same basis as described above for the CEO, except that awards for other Executive KMP had a face value of 175 per cent of base salary.

In addition to the LTIP terms set out in 2.2 Remuneration framework operation, the Committee has determined the following terms for the 2021 LTIP:

Performance period	– 1 July 2021 to 30 June 2026
Performance conditions	– An averaging period of six months will be used in the TSR calculations. – BHP's TSR relative to the weighted median TSR of sector peer companies selected by the Committee (Sector Group TSR) and the MSCI World Index (World TSR) will determine the vesting of 67% and 33% of the award, respectively. – Each company in the sector peer group is weighted by market capitalisation. The maximum weighting for any one company is 25% and the minimum is set at 0.4% to reduce sensitivity to any single sector peer company. – For the whole of either portion of the award to vest, BHP's TSR must be at or exceed the weighted 80th percentile of the Sector Group TSR or the World TSR (as applicable). Threshold vesting (25% of each portion of the award) occurs where BHP's TSR equals the weighted 50th percentile (i.e. the median) of the Sector Group TSR or the World TSR (as applicable). Vesting occurs on a sliding scale between the weighted 50th and 80th percentiles.
Sector peer group companies[1]	– Resources (85%): Anglo American, Fortescue Metals, Freeport-McMoRan, Glencore, Rio Tinto, Southern Copper, Teck Resources, Vale. – Oil and gas (15%): Apache, BP, Canadian Natural Res., Chevron, ConocoPhillips, Devon Energy, EOG Resources, ExxonMobil, Occidental Petroleum, Shell, Woodside.

[1] From November 2018, CONSOL Energy was removed from the sector comparator group, as due to its internal restructuring it had become a less comparable peer.

3.7 FY2023 remuneration for the CEO and other Executive KMP

The remuneration for the CEO and other Executive KMP in FY2023 will be in accordance with 2.2 Remuneration framework operation.

Base salary review

Base salaries are reviewed annually and increases are applicable from 1 September. The CEO commenced in the role on 1 January 2020 and did not receive a base salary increase in FY2021 or FY2022. The Board and the Committee have assessed the CEO and other Executive KMP's performance and determined that, as of 1 September 2022:

- The CEO's and other Executive KMP's base salaries will increase by 3 per cent following a review by the Committee of the external market demand for senior executive talent and updated benchmarking. The Committee considers the increases modest in this context, as well as being below the median salary increase applied for other BHP employees of approximately 4 per cent.
- In addition, having reviewed Ragnar Udd's performance and development in role since appointment in November 2020, including the dynamic context and growing importance of the Americas region to the Group, the Committee provided an additional increase of 6 per cent increase in base salary (i.e. 9 per cent in total).

The CEO's and other Executive KMP's base salaries will be kept under review in future years to ensure they remain competitive.

FY2023 CDP performance measures

For FY2023, the Board and the Committee have set the following CDP scorecard performance measures for the CEO. The weighting of each performance measure and specific individual performance measures will vary for other Executive KMP to reflect the focus required from each of them in their role:

Performance categories	Weighting	Target measures
Safety and Sustainability	25%	The following Safety and Sustainability (previously HSEC) performance measures are designed to incentivise achievement of the Group's public goals. Significant events (10%): No significant (actual level 4) health, safety (including fatalities), environment or community events during the year. Achievement of sexual harassment and Fatality Implementation Program FY2023 deliverables. Climate change (10%): FY2023 GHG emissions targets met, aligned with progress towards the 2030 medium term target. A majority of planned decarbonisation projects are presented for tollgates or milestones as scheduled. Progress Memorandum of Understanding commitments with steel customers. Indigenous partnerships (5%): Achieve uplift in Indigenous, Traditional Owner and First Nations vendor procurement. Planned progress on Indigenous employment / participation targets. Release revised Global Indigenous Peoples Strategy.
Financial	50%	ROCE is underlying profit after taxation (excluding after-taxation finance costs and exceptional items) divided by average capital employed. When assessing management's performance, adjustments are made to the ROCE result to allow for changes in commodity prices, foreign exchange movements and other material items to ensure the assessment appropriately measures outcomes that are within the control and influence of the Group and its executives. For reasons of commercial sensitivity, the target for ROCE is not disclosed in advance.
Individual	25%	The CEO's individual measures for FY2023 comprise the contribution to BHP's overall performance and the management team and the delivery of projects and initiatives within the scope of the CEO role as set out by the Board. These include projects and initiatives in respect of social value, people, performance and portfolio. These performance measures are aligned with medium and long-term strategy aspirations that are intended to drive long-term value for shareholders and other stakeholders and the Board considers a 25% weighting in the CDP to be appropriate for these important elements. Individual performance measures for other Executive KMP similarly contribute to the delivery of projects and initiatives within the scope of their role and BHP's overall performance.

FY2023 LTIP award

The maximum face value of the CEO's FY2023 LTIP award under the remuneration framework is US$3.500 million, being 200 per cent of the CEO's base salary at the time of grant. The number of LTIP awards in FY2023 has been determined using the share price and US$/A$ exchange rate over the 12 months up to and including 30 June 2022 (adjusted to eliminate the value of the in-specie dividend distributed in connection with the merger of BHP's Petroleum business with Woodside from the daily BHP Group Limited share prices between 1 July 2021 to 31 May 2022). Based on this, a FY2023 grant of 118,853 LTIP awards is proposed and approval for this LTIP grant will be sought from shareholders at the 2022 AGM. If approved, the award will be granted following the AGM (i.e. in or around November 2022, subject to securities dealing considerations). The FY2023 LTIP award will use the same performance and service conditions as the FY2022 LTIP award, except that the MSCI World Metals and Mining Index will replace the sector group companies comparator group, due to the merger of the Petroleum business with Woodside. Accordingly, the FY2023 LTIP award will use the following comparator groups: the new MSCI World Metals and Mining Index and the existing MSCI World Index, which will determine the vesting of 67 per cent and 33 per cent of the award, respectively.

LTIP awards granted to other Executive KMP during FY2023 will be calculated on the same basis as described above for the CEO, except that awards for other Executive KMP will have a maximum face value of 175 per cent of base salary.

4 Remuneration for Non-executive Directors

Our remuneration framework for Non-executive Directors aligns with the Australian Securities Exchange Corporate Governance Council's Principles and Recommendations (4th Edition).

4.1 Remuneration framework

The following table shows the components for Non-executive Directors' remuneration. Non-executive Directors are not eligible to participate in any CDP or LTIP awards.

	Fees	Benefits
Purpose and link to strategy	Competitive fees are paid in order to attract and retain high-quality individuals, and to provide appropriate remuneration for the role undertaken. Fees are set at a competitive level based on benchmarks and advice provided by external advisers.	Competitive benefits are paid in order to attract and retain high-quality individuals and adequately remunerate them for the role undertaken, including the considerable travel burden.

	Fees	Benefits
Remuneration components	The Chair is paid a single fee for all responsibilities. Non-executive Directors are paid a base fee and relevant committee membership fees. Committee Chairs and the Senior Independent Director are paid an additional fee to reflect their extra responsibilities. All fee levels are reviewed annually and any changes are ordinarily effective from 1 July. Fee levels reflect the size and complexity of the Group and the geographies in which the Group operates. The economic environment and the financial performance of the Group are taken into account. Consideration is also given to salary reviews across the rest of the Group. Where the payment of pension contributions is required by law, these contributions are deducted from the Director's overall fee entitlements.	Travel allowances are paid on a per-trip basis reflecting the considerable travel burden imposed on members of the Board as a consequence of the global nature of the organisation and apply when a Director needs to travel internationally to attend a Board meeting or site visits at our multiple geographic locations. As a consequence of our prior dual listed company structure, Non-executive Directors are required to prepare personal tax returns in Australia and the UK, regardless of whether they reside in one or neither of those countries. They are accordingly reimbursed for the costs of personal tax return preparation in whichever of the UK and/or Australia is not their place of residence (including payment of the tax cost associated with the provision of the benefit).

Letters of appointment

The Board has adopted a letter of appointment that contains the terms on which Non-executive Directors will be appointed, including the basis upon which they will be indemnified by the Group. The Board has adopted a policy under which all Non-executive Directors must seek re-election at the AGM each year. As a result of requiring re-election each year, Non-executive Directors do not have a fixed term in their letter of appointment.

The maximum aggregate fees payable to Non-executive Directors (including the Chair) were approved by shareholders at the 2008 AGMs at US$3.800 million per annum. This sum includes base fees, Committee fees and pension contributions. Travel allowances and non-monetary benefits are not included in this limit.

Payments on early termination or loss of office

There are no provisions in any of the Non-executive Directors' appointment arrangements for compensation payable on early termination of their directorship. A Non-executive Director may resign on reasonable notice. No payments are made to Non-executive Directors on loss of office.

4.2 Non-executive Directors' remuneration in FY2023

In FY2023, the remuneration for the Non-executive Directors will be paid in accordance with the remuneration framework set out above. Fee levels for the Non-executive Directors and the Chair are reviewed annually. The review includes benchmarking against peer companies, with the assistance of external advisers.

From 1 July 2017, the Chair's annual fee was reduced by approximately 8 per cent from US$0.960 million to US$0.880 million and will remain at that level for FY2023. This fee reduction was in addition to the reduction of approximately 13 per cent from US$1.100 million to US$0.960 million effective 1 July 2015. Base fee levels for Non-executive Directors will remain at the reduced levels that took effect from 1 July 2015, at which time they were reduced by approximately 6 per cent from US$0.170 million to US$0.160 million per annum.

The below table sets out the annualised total remuneration and total fixed fees for FY2023, which are unchanged from FY2022.

Levels of fees and travel allowances for Non-executive Directors (in US$)	From 1 July 2022
Base annual fee	160,000
Plus additional fees for:	
Senior Independent Director	48,000
Committee Chair:	
Risk and Audit	60,000
Remuneration	45,000
Sustainability	45,000
Nomination and Governance	No additional fee
Committee membership:	
Risk and Audit	32,500
Remuneration	27,500
Sustainability	27,500
Nomination and Governance	18,000
Travel allowance:[1]	
Greater than 3 but less than 10 hours	7,000
10 hours or more	15,000
Chair's fee	880,000

[1] In relation to travel for Board business, the time thresholds relate to the flight time to travel to the meeting location (i.e. one way flight time). Only one travel allowance is paid per round trip.

5 Statutory KMP remuneration and other disclosures

5.1 KMP remuneration table

The table below has been prepared in accordance with relevant accounting standards. Remuneration data for KMP are for the periods of FY2021 and FY2022 that they were KMP. More information on the framework and operation of each element of remuneration is provided earlier in this Report.

Share-based payments

The figures included in the shaded columns of the statutory table below for share-based payments were not actually provided to the Executive KMP including the CEO during FY2022 or FY2021. These amounts are calculated in accordance with accounting standards and are the amortised IFRS fair values at grant date of equity and equity-related instruments that have been granted to the executives. For information on awards that were allocated and vested during FY2022 and FY2021, refer to 5.2 Equity awards.

		Short-term benefits				Post-employment benefits	Share-based payments		
US$('000)	**Financial year**	**Base salary/ Fees[1]**	**Annual cash incentive[2]**	**Non-monetary benefits[3]**	**Other benefits[4]**	**Retirement benefits[5]**	**Value of CDP/ STIP awards[2,6]**	**Value of LTIP awards[6]**	**Total**
Executive Director									
Mike Henry	**FY2022**	**1,700**	**1,306**	**168**	**–**	**170**	**1,890**	**2,297**	**7,531**
	FY2021	1,700	1,564	120	–	170	1,487	2,315	7,356
Other Executive KMP									
Edgar Basto	**FY2022**	**950**	**646**	**45**	**–**	**95**	**698**	**786**	**3,220**
	FY2021	950	866	60	–	95	432	839	3,242
Peter Beaven[7]	FY2021	417	400	39	–	83	876	787	2,602
David Lamont	**FY2022**	**950**	**730**	**37**	**300**	**95**	**615**	**1,754**	**4,481**
	FY2021	554	510	42	–	55	167	935	2,263
Daniel Malchuk[7]	FY2021	333	307	23	–	67	765	620	2,115
Geraldine Slattery	**FY2022**	**850**	**700**	**–**	**695**	**128**	**1,019**	**856**	**4,248**
	FY2021	800	800	25	–	160	777	930	3,492
Ragnar Udd	**FY2022**	**850**	**653**	**32**	**–**	**85**	**576**	**676**	**2,872**
	FY2021	567	521	49	420	57	190	483	2,287
Non-Executive Directors									
Terry Bowen	**FY2022**	**248**	**–**	**–**	**32**	**15**	**–**	**–**	**295**
	FY2021	219	–	–	4	12	–	–	235
Malcolm Broomhead	**FY2022**	**165**	**–**	**–**	**31**	**12**	**–**	**–**	**208**
	FY2021	195	–	–	3	10	–	–	208
Ian Cockerill	**FY2022**	**233**	**–**	**–**	**61**	**–**	**–**	**–**	**294**
	FY2021	220	–	–	–	–	–	–	220
Xiaoqun Clever[8]	**FY2022**	**193**	**–**	**–**	**18**	**–**	**–**	**–**	**211**
	FY2021	144	–	–	–	–	–	–	144
Anita Frew[9]	**FY2022**	**81**	**–**	**–**	**2**	**–**	**–**	**–**	**83**
	FY2021	220	–	–	2	–	–	–	222
Gary Goldberg	**FY2022**	**301**	**–**	**–**	**71**	**–**	**–**	**–**	**372**
	FY2021	246	–	–	2	–	–	–	248
Michelle Hinchliffe[8]	**FY2022**	**64**	**–**	**–**	**30**	**–**	**–**	**–**	**94**
Susan Kilsby[9]	**FY2022**	**69**	**–**	**–**	**16**	**–**	**–**	**–**	**85**
	FY2021	220	–	–	1	–	–	–	221
Ken MacKenzie	**FY2022**	**863**	**–**	**–**	**32**	**17**	**–**	**–**	**912**
	FY2021	864	–	–	4	16	–	–	884
Lindsay Maxsted[9]	FY2021	33	–	–	3	2	–	–	38
John Mogford	**FY2022**	**234**	**–**	**–**	**17**	**–**	**–**	**–**	**251**
	FY2021	215	–	–	2	–	–	–	217
Christine O'Reilly[8]	**FY2022**	**276**	**–**	**–**	**32**	**–**	**–**	**–**	**308**
	FY2021	162	–	–	–	9	–	–	171
Catherine Tanna[8]	**FY2022**	**49**	**–**	**–**	**30**	**4**	**–**	**–**	**83**
Shriti Vadera[9]	FY2021	74	–	–	1	–	–	–	75
Dion Weisler	**FY2022**	**191**	**–**	**–**	**32**	**14**	**–**	**–**	**237**
	FY2021	178	–	–	1	9	–	–	188

1 Base salaries and fees shown in this table reflect the amounts paid over the 12-month period from 1 July 2021 to 30 June 2022 for each Executive KMP and Non-Executive Director. There were no changes to Executive KMP base salaries during FY2022. The following Non-Executive Directors have received special exertion fees for additional or extra services they performed in FY2022 in connection with major transactions undertaken by the Group: in connection with the unification of BHP's dual listed structure – Gary Goldberg received an additional fee of US$20,000 as Chair of the Transaction Committee and Ian Cockerill and Terry Bowen received US$12,500 each as members of the Transaction Committee; and in connection with the merger of the Petroleum business with Woodside – Christine O'Reilly received an additional fee of US$20,000 as Chair of the Transaction Committee and Terry Bowen and John Mogford received US$12,500 each as members of the Transaction Committee.

2 Annual cash incentive in this table is the cash portion of CDP awards earned in respect of performance during each financial year for each executive. CDP is provided one-third in cash and two-thirds in deferred equity (which are included in the Share-based payments columns of the table). The cash portion of CDP awards is paid to Executive KMP in September of the year following the relevant financial year. The minimum possible value awarded to each individual is nil and the maximum is 360 per cent of base salary (120 per cent in cash and 240 per cent in deferred equity). For FY2022, Executive KMP earned the following CDP awards as a percentage of the maximum (the remaining portion has been forfeited): Mike Henry 64 per cent, Edgar Basto 57 per cent, David Lamont 64 per cent, Geraldine Slattery 69 per cent, and Ragnar Udd 64 per cent. Peter Beaven's and Daniel Malchuk's FY2021 CDP was paid in cash and prorated to reflect the period served until they ceased to be KMP on 30 November 2020 and 31 October 2020 respectively.

3 Non-monetary benefits are non-pensionable and include items such as net leave accruals, private family health insurance, spouse business-related travel, car parking, fringe benefits tax and personal tax return preparation in required countries.

4 Other benefits are non-pensionable and for FY2022 include a sign-on cash award on commencement of employment for David Lamont representing compensation for remuneration that David forfeited or did not receive as a consequence of leaving CSL to join BHP in 2020; an encashment of annual leave entitlements under the US

Annual Leave policy for Geraldine Slattery, together with a retention award for Geraldine to ensure her services were retained by BHP after the August 2021 announcement of the merger of the Petroleum business with Woodside; and in FY2021, a one-off relocation allowance (with no trailing entitlements) provided to Ragnar Udd relating to his international relocation from Australia to Chile. The majority of the amounts disclosed for benefits for Non-executive Directors are usually travel allowances (amounts of between US$ nil and US$70,000 for FY2022) however, the COVID-19 pandemic restricted Non-executive Director travel during FY2021 and FY2022. For FY2022, amounts of between US$ nil and US$4,000 are included in respect of tax return preparation; and amounts of between US$ nil and US$1,500 are included in respect of the reimbursement of the tax cost associated with the provision of taxable benefits.

5 Retirement benefits for each Executive KMP in FY2021 and FY2022 were 10 per cent of base salary as per the remuneration framework, with the exception of the retirement benefits reported for Geraldine Slattery of 15 per cent of base salary for FY2022 and the retirement benefits reported for Peter Beaven, Daniel Malchuk and Geraldine Slattery of 20 per cent of base salary for FY2021 in accordance with prior remuneration framework. Non-Executive Director fees are inclusive of minimum superannuation contributions of up to 10 per cent of remuneration for FY2022 in accordance with Australian superannuation legislation. No other pension contributions were paid.

6 The IFRS fair value of CDP and LTIP awards is estimated at grant date. Refer to Financial Statements note 25 Employee share ownership plans.

7 The remuneration reported for Peter Beaven and Daniel Malchuk reflects service as Executive KMP up to 30 November 2020 and 31 October 2020, respectively.

8 The FY2021 remuneration for Xiaoqun Clever and Christine O'Reilly relates to part of the year only, as they joined the Board on 1 October 2020 and 12 October 2020 respectively. The FY2022 remuneration for Michelle Hinchliffe and Catherine Tanna relates to part of the year only, as they joined the Board on 1 March 2022 and 4 April 2022 respectively.

9 The FY2022 remuneration for Anita Frew and Susan Kilsby relates to part of the year only, as they retired from the Board on 11 November 2021. The FY2021 remuneration for Lindsay Maxsted and Shriti Vadera relates to part of the year only, as they retired from the Board on 4 September 2020 and 15 October 2020 respectively.

5.2 Equity awards

The interests held by Executive KMP under the Group's employee equity plans are set out in the table below. Each equity award is a right to acquire one ordinary share in BHP Group Limited upon satisfaction of the vesting conditions. Our mandatory minimum performance requirements for securities dealing governs and restricts dealing arrangements and the provision of shares on vesting or exercise of awards. No interests under the Group's employee equity plans are held by related parties of Executive KMP.

Approval from BHP's shareholders for the issue of equity awards to the CEO under the CDP and LTIP was obtained under ASX Listing Rule 10.14 at the 2021 AGM.

DEP applies to awards provided to Executive KMP under the CDP and LTIP as detailed in 2.2 Remuneration framework operation. No DEP is payable on MAP awards previously provided to Executive KMP.

Executive KMP received or will receive awards under the CDP, STIP and LTIP. The terms and conditions of CDP and LTIP awards, including the performance conditions, are described in 2.2 Remuneration framework operation.

BHP senior management who are not KMP receive awards under the MAP. While no MAP awards were granted to Executive KMP after becoming KMP, Edgar Basto, Geraldine Slattery and Ragnar Udd still hold MAP awards that were allocated to them prior to commencing their Executive KMP service.

Award type	Date of grant	At 1 July 2021	Granted	Uplift[1]	Vested	Lapsed	At 30 June 2022	Award vesting date[2]	Market price on date of:		Gain on awards ('000)[5]	DEP on awards ('000)
									Grant[3]	Vesting[4]		
Mike Henry												
CDP	23-Nov-21	–	49,304	–	–	–	49,304	Aug 26	A$38.05	–	–	–
CDP	23-Nov-21	–	49,304	–	–	–	49,304	Aug 23	A$38.05	–	–	–
CDP	20-Oct-20	44,348	–	–	–	–	44,348	Aug 25	A$35.90	–	–	–
CDP	20-Oct-20	44,348	–	–	–	–	44,348	Aug 22	A$35.90	–	–	–
STIP	20-Nov-19	17,420	–	–	17,420	–	–	18 Aug 21	A$37.24	A$47.70	A$831	A$66
LTIP	23-Nov-21	–	107,183	–	–	–	107,183	Aug 26	A$38.05	–	–	–
LTIP	20-Oct-20	140,239	–	–	–	–	140,239	Aug 25	A$35.90	–	–	–
LTIP	20-Nov-19	153,631	–	–	–	–	153,631	Aug 24	A$37.24	–	–	–
LTIP	18-Dec-18	172,413	–	–	–	–	172,413	Aug 23	A$33.50	–	–	–
LTIP	24-Nov-17	218,020	–	–	–	–	218,020	Aug 22	A$27.97	–	–	–
LTIP	9-Dec-16	192,360	–	–	192,360	–	–	18 Aug 21	A$25.98	A$47.70	A$9,176	A$1,634
Edgar Basto												
CDP	23-Nov-21	–	27,312	3,292	–	–	30,604	Aug 26	A$38.05	–	–	–
CDP	23-Nov-21	–	27,312	3,292	–	–	30,604	Aug 23	A$38.05	–	–	–
LTIP	23-Nov-21	–	52,409	6,316	–	–	58,725	Aug 26	A$38.05	–	–	–
LTIP	20-Oct-20	68,572	–	8,263	–	–	76,835	Aug 25	A$35.90	–	–	–
MAP	19-May-20	28,245	–	3,404	–	–	31,649	Aug 24	A$35.05	–	–	–
MAP	19-May-20	28,245	–	3,404	–	–	31,649	Aug 23	A$35.05	–	–	–
MAP	25-Sep-19	28,245	–	3,404	–	–	31,649	Aug 22	A$36.53	–	–	–
MAP	24-Sep-18	27,651	–	–	27,651	–	–	18 Aug 21	A$33.83	A$47.70	A$1,319	–
David Lamont												
Performance shares	1-Dec-20	77,000	–	9,279	–	–	86,279	Aug 22	A$38.56	–	–	–
CDP	23-Nov-21	–	16,072	1,937	–	–	18,009	Aug 26	A$38.05	–	–	–
CDP	23-Nov-21	–	16,072	1,937	–	–	18,009	Aug 23	A$38.05	–	–	–
LTIP	23-Nov-21	–	52,409	6,316	–	–	58,725	Aug 26	A$38.05	–	–	–
LTIP	1-Dec-20	68,572	–	8,263	–	–	76,835	Aug 25	A$38.56	–	–	–
Geraldine Slattery												
CDP	23-Nov-21	–	25,219	3,039	–	–	28,258	Aug 26	A$38.05	–	–	–
CDP	23-Nov-21	–	25,219	3,039	–	–	28,258	Aug 23	A$38.05	–	–	–
CDP	20-Oct-20	25,490	–	3,072	–	–	28,562	Aug 25	A$35.90	–	–	–
CDP	20-Oct-20	25,490	–	3,072	–	–	28,562	Aug 22	A$35.90	–	–	–
STIP	20-Nov-19	6,628	–	–	6,628	–	–	18 Aug 21	A$37.24	A$47.70	A$316	A$25
LTIP	23-Nov-21	–	46,892	5,651	–	–	52,543	Aug 26	A$38.05	–	–	–
LTIP	20-Oct-20	54,136	–	6,524	–	–	60,660	Aug 25	A$35.90	–	–	–
LTIP	20-Nov-19	104,748	–	12,623	–	–	117,371	Aug 24	A$37.24	–	–	–
MAP	21-Feb-19	28,527	–	3,438	–	–	31,965	Aug 23	A$34.83	–	–	–
MAP	21-Feb-19	28,527	–	3,438	–	–	31,965	Aug 22	A$34.83	–	–	–
MAP	24-Sep-18	28,527	–	–	28,527	–	–	18 Aug 21	A$33.83	A$47.70	A$1,361	–

Award type	Date of grant	At 1 July 2021	Granted	Uplift[1]	Vested	Lapsed	At 30 June 2022	Award vesting date[2]	Market price on date of: Grant[3]	Market price on date of: Vesting[4]	Gain on awards ('000)[5]	DEP on awards ('000)
Ragnar Udd												
CDP	23-Nov-21	–	16,434	1,981	–	–	18,415	Aug 26	A$38.05	–	–	–
CDP	23-Nov-21	–	16,434	1,981	–	–	18,415	Aug 23	A$38.05	–	–	–
LTIP	23-Nov-21	–	46,892	5,651	–	–	52,543	Aug 26	A$38.05	–	–	–
LTIP	2-Nov-20	61,354	–	7,394	–	–	68,748	Aug 25	A$33.81	–	–	–
MAP	21-Aug-20	21,231	–	2,559	–	–	23,790	Aug 24	A$38.36	–	–	–
MAP	21-Aug-20	21,231	–	2,559	–	–	23,790	Aug 23	A$38.36	–	–	–
MAP	25-Sep-19	21,231	–	2,559	–	–	23,790	Aug 22	A$36.53	–	–	–
MAP	24-Sep-18	25,565	–	–	25,565	–	–	18 Aug 21	A$33.83	A$47.70	A$1,219	–

1 Uplift awards granted as a consequence of the merger of the Petroleum business with Woodside. For the CEO shareholder approval for these awards will be sought at the 2022 AGM and following approval these would be granted in or around November 2022. Uplift awards for other Executive KMP were granted on 17 June 2022.

2 Where the vesting date is not yet known, the estimated vesting month is shown. Where awards lapse, the lapse date is shown. If the vesting conditions are met, awards will vest on or as soon as practicable after the first non-prohibited period date occurring after 30 June of the preceding year of vest. The year of vesting is the second (STIP and CDP two-year awards), third (MAP), fourth (MAP) or fifth (MAP, CDP five-year awards and LTIP) financial year after grant. All awards are conditional awards and have no exercise period, exercise price or expiry date; instead ordinary fully paid shares are automatically delivered upon the vesting conditions being met. Where vesting conditions are not met, the conditional awards will immediately lapse.

3 The market price shown is the closing price of BHP shares on the relevant date of grant. No price is payable by the individual to receive a grant of awards. The IFRS fair value of the CDP and LTIP awards granted in FY2022 at the grant date of 23 November 2021 are as follows: CDP – A$38.05 and LTIP – A$18.92.

4 The market price shown is the closing price of BHP shares on the relevant date of vest.

5 The gain on awards is calculated using the market price on date of vesting or exercise (as applicable) less any exercise price payable. The amounts that vested and were lapsed for the awards during FY2022 are as follows: CDP – 100 per cent vested; LTIP – 100 per cent vested; MAP – 100 per cent vested.

5.3 Estimated value range of equity awards

The current face value (and estimate of the maximum possible total value) of equity awards allocated during FY2022 and yet to vest are the awards as set out in the previous table multiplied by the current share price of BHP Group Limited. The minimum possible total value of the awards is nil. The actual value that may be received by participants in the future cannot be determined as it is dependent on and therefore fluctuates with the share prices of BHP Group Limited at the date that any particular award vests or is exercised.

Five-year share price, dividend and earnings history

The table below provides the five-year share price history for BHP Group Limited, history of dividends paid and the Group's earnings.

BHP Group Limited	FY2022	FY2021	FY2020	FY2019	FY2018
Share price at beginning of year	**A$48.22**	A$35.82	A$41.68	A$33.60	A$23.23
Share price at end of year	**A$41.25**	A$48.57	A$35.82	A$41.16	A$33.91
Dividends paid	**A$10.18**[1]	A$2.07	A$2.13	A$3.08[2]	A$1.24
Attributable profit (US$ million, as reported)	**30,900**	11,304	7,956	8,306	3,705

1 The FY2022 dividends paid includes A$5.38 in respect of the in-specie dividend associated with the merger of the Petroleum business with Woodside.

2 The FY2019 dividends paid includes A$1.41 in respect of the special dividend associated with the divestment of Onshore US.

The highest and lowest closing share price during FY2022 were A$54.06 and A$35.56 respectively.

5.4 Ordinary share holdings and transactions

The number of ordinary shares in BHP Group Limited held directly, indirectly or beneficially, by each individual (including shares held in the name of all close members of the Director's or Executive KMP's family and entities over which either the Director or Executive KMP or the family member has, directly or indirectly, control, joint control or significant influence) are shown below. No shares are held nominally by any KMP or their related parties. These are ordinary shares held without performance conditions or restrictions and are included in MSR calculations for each individual.

	Held at 1 July 2021[1]	Purchased	Received as remuneration[2]	Sold	Held at 30 June 2022
Mike Henry	395,241	–	245,423	119,072	521,592
Edgar Basto	134,889	–	27,651	32,502	130,038
David Lamont	6,345	–	–	–	6,345
Geraldine Slattery[3,4]	100,917	–	35,681	9,366	127,232
Ragnar Udd[3]	105,816	–	25,565	12,426	118,955
Terry Bowen	11,000	–	–	–	11,000
Malcolm Broomhead	19,000	–	–	–	19,000
Xiaoqun Clever	7,000	1,000	–	–	8,000
Ian Cockerill[3]	13,188	1,111	–	–	14,299
Anita Frew[6]	15,000	–	–	–	15,000
Gary Goldberg[4]	10,000	2,000	–	–	12,000
Michelle Hinchliffe[5]	–	8,508	–	–	8,508
Susan Kilsby[6]	6,900	–	–	–	6,900
Ken MacKenzie	52,351	–	–	–	52,351
John Mogford	13,938	–	–	–	13,938
Christine O'Reilly[3]	7,420	2,000	–	–	9,420
Catherine Tanna[5]	10,400	–	–	–	10,400
Dion Weisler	1,544	6,000	–	–	7,544

1 Includes shares in BHP Group Plc held directly, indirectly or beneficially, by each individual (including shares held in the name of all close members of the Director's or Executive KMP's family and entities over which either the Director or Executive KMP or the family member has, directly or indirectly, control, joint control or significant influence) prior to unification.

2 Includes DEP in the form of shares on equity awards vesting, where applicable, as disclosed in 5.2 Equity awards.

3 The opening balances for Ian Cockerill, Christine O'Reilly, Geraldine Slattery and Ragnar Udd have been adjusted to include an additional 929 shares, 420 shares, 3,592 shares and 398 shares, respectively.

4 The following BHP Group Limited shares were held in the form of American Depositary Shares: 1,892 for Geraldine Slattery and 6,000 for Gary Goldberg.

5 The opening balances for Michelle Hinchliffe and Catherine Tanna reflect their shareholdings on the date that each became Non-executive Directors being 1 March 2022 and 4 April 2022, respectively.

6 Shares shown as held by Anita Frew and Susan Kilsby at 30 June 2022 are their balances at the date of their retirement from the Board on 11 November 2021.

5.5 Prohibition on hedging of BHP shares and equity instruments

The Executive KMP may not use unvested BHP equity awards as collateral or protect the value of any unvested BHP equity awards or the value of shares and securities held as part of meeting the MSR.

Any securities that have vested and are no longer subject to restrictions, or not held as part of meeting the MSR, may be subject to hedging arrangements or used as collateral, provided that prior consent is obtained.

5.6 Share ownership guidelines and the MSR

The share ownership guidelines and the MSR help to ensure the interests of Directors, executives and shareholders remain aligned.

The CEO and other Executive KMP are expected to grow their holdings to the MSR from the scheduled vesting of their employee awards over time. The MSR is tested at the time that shares are to be sold. Shares may be sold to satisfy tax obligations arising from the granting, holding, vesting, exercise or sale of the employee awards or the underlying shares whether the MSR is satisfied at that time or not.

For FY2022:

- The MSR for the CEO was five times annual pre-tax base salary. At the end of FY2022, the CEO met the MSR.
- The MSR for other Executive KMP was three times annual pre-tax base salary. At the end of FY2022, the other Executive KMP met the MSR, except for David Lamont, as he was appointed as Executive KMP on 1 December 2020.
- No Executive KMP sold or purchased shares during FY2022, other than sales to satisfy taxation obligations, apart from Edgar Basto, who sold shares in order to fund the purchase of a residential dwelling.

Effective 1 July 2020, a two-year post-retirement shareholding requirement for the CEO applies from the date of retirement, which will be the lower of the CEO's MSR or the CEO's actual shareholding at the date of retirement.

Subject to securities dealing constraints, Non-executive Directors have agreed to apply at least 25 per cent of their remuneration (base fees plus Committee fees) to the purchase of BHP shares until they achieve an MSR equivalent in value to one year of remuneration (base fees plus Committee fees). Thereafter, they must maintain at least that level of shareholding throughout their tenure. At the end of FY2022, each Non-executive Director met the MSR.

5.7 Transactions with KMP

During the financial year, there were no transactions between the Group and its subsidiaries and KMP (including their related parties) (2021: US$ nil; 2020: US$ nil). There were no amounts payable by or loans with KMP (including their related parties) at 30 June 2022 (2021: US$ nil).

A number of KMP hold or have held positions in other companies (i.e. personally related entities) where it is considered they control or significantly influence the financial or operating policies of those entities. There have been no transactions with those entities and no amounts were owed by the Group to personally related entities or any other related parties (2021: US$ nil; 2020: US$ nil).

This Remuneration Report was approved by the Board on 16 August 2022 and signed on its behalf by:

Christine O'Reilly

Christine O'Reilly
Chair, Remuneration Committee

16 August 2022

Financial Statements

In this section:

Notes to the Financial Statements

About these Financial Statements

Reporting entity

BHP Group Limited, an incorporated Australian-listed company, and BHP Group Plc, an incorporated UK-listed company, formed a Dual Listed Company (DLC) until 31 January 2022. Under the DLC structure BHP Group Limited, BHP Group Plc and their subsidiaries operated together as a single for-profit economic entity with a common Board of Directors, unified management structure and joint objectives. On 31 January 2022, BHP unified its corporate structure under BHP Group Limited, and subsequently BHP Group Plc changed its name to BHP Group (UK) Ltd. Throughout the Consolidated Financial Statements (the Financial Statements), the collective contributions of the aforementioned entities are referred to as 'BHP' or 'the Group', regardless of the DLC or unified corporate structure.

Group and related party information is presented in note 31 'Related party transactions' to the Financial Statements. This details transactions between the Group's subsidiaries, associates, joint arrangements and other related parties. The nature of the operations and principal activities of the Group are described in the segment information (refer to note 1 'Segment reporting' to the Financial Statements).

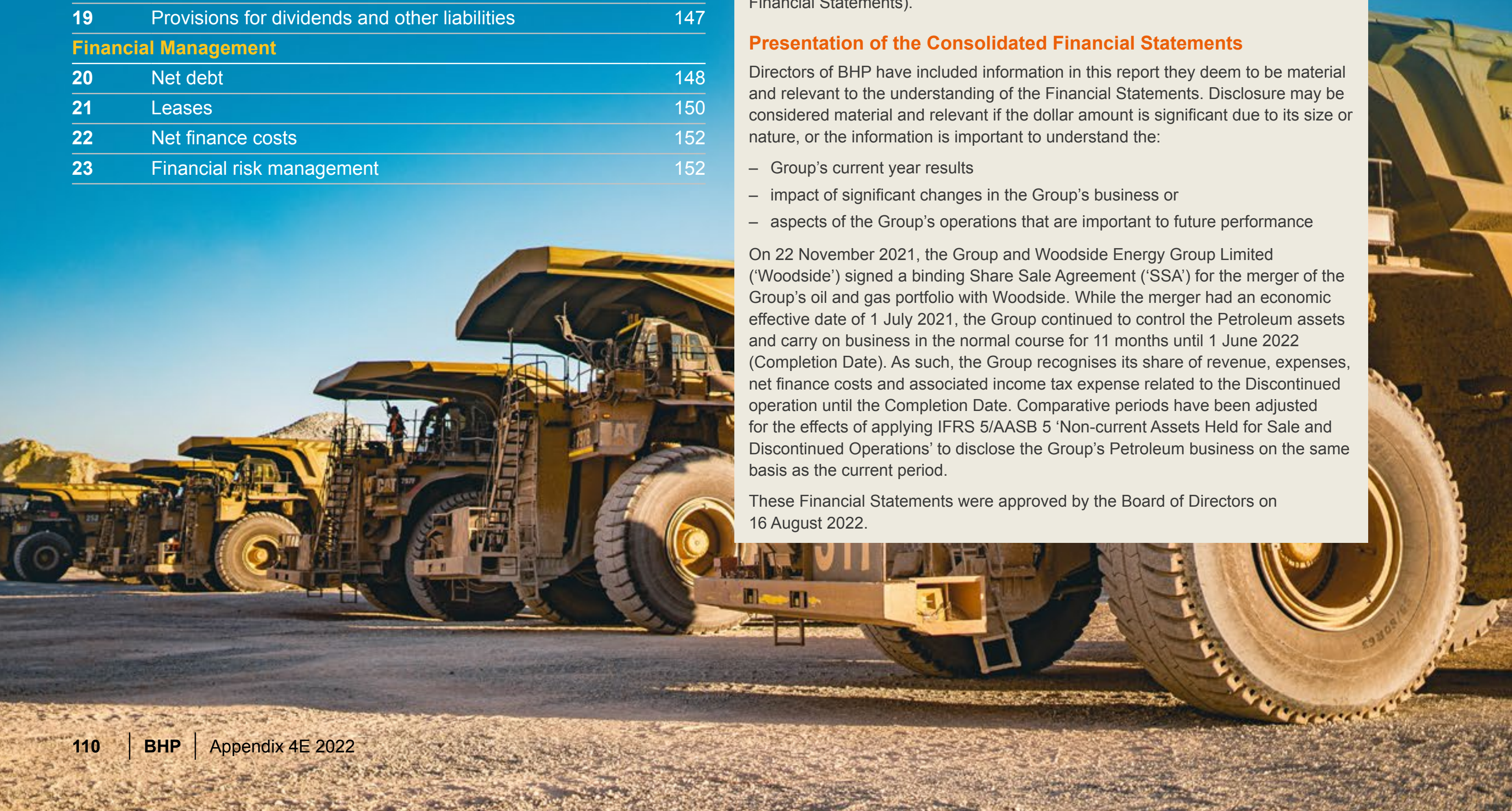
Presentation of the Consolidated Financial Statements

Directors of BHP have included information in this report they deem to be material and relevant to the understanding of the Financial Statements. Disclosure may be considered material and relevant if the dollar amount is significant due to its size or nature, or the information is important to understand the:

- Group's current year results
- impact of significant changes in the Group's business or
- aspects of the Group's operations that are important to future performance

On 22 November 2021, the Group and Woodside Energy Group Limited ('Woodside') signed a binding Share Sale Agreement ('SSA') for the merger of the Group's oil and gas portfolio with Woodside. While the merger had an economic effective date of 1 July 2021, the Group continued to control the Petroleum assets and carry on business in the normal course for 11 months until 1 June 2022 (Completion Date). As such, the Group recognises its share of revenue, expenses, net finance costs and associated income tax expense related to the Discontinued operation until the Completion Date. Comparative periods have been adjusted for the effects of applying IFRS 5/AASB 5 'Non-current Assets Held for Sale and Discontinued Operations' to disclose the Group's Petroleum business on the same basis as the current period.

These Financial Statements were approved by the Board of Directors on 16 August 2022.



1 Consolidated Financial Statements

1.1 Consolidated Income Statement

for the year ended 30 June 2022

	Notes	**2022 US$M**	2021 US$M Restated	2020 US$M Restated
Continuing operations				
Revenue	2	**65,098**	56,921	38,924
Other income	5	**1,398**	380	720
Expenses excluding net finance costs	5	**(32,371)**	(30,871)	(25,453)
Loss from equity accounted investments, related impairments and expenses	29	**(19)**	(915)	(508)
Profit from operations		**34,106**	25,515	13,683
Financial expenses		**(1,050)**	(1,290)	(1,192)
Financial income		**81**	67	334
Net finance costs	22	**(969)**	(1,223)	(858)
Profit before taxation		**33,137**	24,292	12,825
Income tax expense		**(10,430)**	(10,376)	(4,216)
Royalty-related taxation (net of income tax benefit)		**(307)**	(240)	19
Total taxation expense	6	**(10,737)**	(10,616)	(4,197)
Profit after taxation from Continuing operations		**22,400**	13,676	8,628
Discontinued operations				
Profit/(loss) after taxation from Discontinued operations	27	**10,655**	(225)	108
Profit after taxation from Continuing and Discontinued operations		**33,055**	13,451	8,736
Attributable to non-controlling interests		**2,155**	2,147	780
Attributable to BHP shareholders		**30,900**	11,304	7,956
Basic earnings per ordinary share (cents)	7	**610.6**	223.5	157.3
Diluted earnings per ordinary share (cents)	7	**609.3**	223.0	157.0
Basic earnings from Continuing operations per ordinary share (cents)	7	**400.0**	228.0	155.2
Diluted earnings from Continuing operations per ordinary share (cents)	7	**399.2**	227.5	154.8

The accompanying notes form part of these Financial Statements.

1.2 Consolidated Statement of Comprehensive Income

for the year ended 30 June 2022

	Notes	**2022 US$M**	2021 US$M	2020 US$M
Profit after taxation from Continuing and Discontinued operations		**33,055**	13,451	8,736
Other comprehensive income				
Items that may be reclassified subsequently to the income statement:				
Hedges:				
(Losses)/gains taken to equity		**(914)**	863	(315)
Losses/(gains) transferred to the income statement		**881**	(837)	297
Exchange fluctuations on translation of foreign operations taken to equity		**(5)**	5	1
Exchange fluctuations on translation of foreign operations transferred to income statement		**(54)**	–	–
Tax recognised within other comprehensive income	6	**10**	(8)	5
Total items that may be reclassified subsequently to the income statement		**(82)**	23	(12)
Items that will not be reclassified to the income statement:				
Re-measurement gains/(losses) on pension and medical schemes		**24**	58	(81)
Equity investments held at fair value		**(8)**	(2)	(2)
Tax recognised within other comprehensive income	6	**(9)**	(20)	26
Total items that will not be reclassified to the income statement		**7**	36	(57)
Total other comprehensive (loss)/income		**(75)**	59	(69)
Total comprehensive income		**32,980**	13,510	8,667
Attributable to non-controlling interests		**2,160**	2,158	769
Attributable to BHP shareholders		**30,820**	11,352	7,898

The accompanying notes form part of these Financial Statements.

1.3 Consolidated Balance Sheet

as at 30 June 2022

	Notes	2022 US$M	2021 US$M
ASSETS			
Current assets			
Cash and cash equivalents	20	**17,236**	15,246
Trade and other receivables	8	**5,426**	6,059
Other financial assets	23	**629**	230
Inventories	10	**4,935**	4,426
Assets held for sale		**–**	324
Current tax assets		**263**	279
Other		**175**	129
Total current assets		**28,664**	26,693
Non-current assets			
Trade and other receivables	8	**153**	337
Other financial assets	23	**802**	1,610
Inventories	10	**1,315**	1,358
Property, plant and equipment	11	**61,295**	73,813
Intangible assets	12	**1,369**	1,437
Investments accounted for using the equity method	29	**1,420**	1,742
Deferred tax assets	14	**56**	1,912
Other		**92**	25
Total non-current assets		**66,502**	82,234
Total assets		**95,166**	108,927
LIABILITIES			
Current liabilities			
Trade and other payables	9	**6,687**	7,027
Interest bearing liabilities	20	**2,622**	2,628
Liabilities directly associated with the assets held for sale		**–**	17
Other financial liabilities	23	**579**	130
Current tax payable		**3,032**	2,800
Provisions	4,15,19,26	**3,965**	3,696
Deferred income		**34**	105
Total current liabilities		**16,919**	16,403
Non-current liabilities			
Interest bearing liabilities	20	**13,806**	18,355
Other financial liabilities	23	**1,997**	1,146
Non-current tax payable		**87**	120
Deferred tax liabilities	14	**3,063**	3,314
Provisions	4,15,19,26	**10,478**	13,799
Deferred income		**50**	185
Total non-current liabilities		**29,481**	36,919
Total liabilities		**46,400**	53,322
Net assets		**48,766**	55,605
EQUITY			
Share capital – BHP Group Limited		**4,638**	1,111
Share capital – BHP Group Plc		**–**	1,057
Treasury shares		**(31)**	(33)
Reserves	17	**12**	2,350
Retained earnings		**40,338**	46,779
Total equity attributable to BHP shareholders		**44,957**	51,264
Non-controlling interests	17	**3,809**	4,341
Total equity		**48,766**	55,605

The accompanying notes form part of these Financial Statements.

The Financial Statements were approved by the Board of Directors on 16 August 2022 and signed on its behalf by:

Ken MacKenzie
Chair

Mike Henry
Chief Executive Officer

1.4 Consolidated Cash Flow Statement

for the year ended 30 June 2022

	Notes	2022 US$M	2021 US$M Restated	2020 US$M Restated
Operating activities				
Profit before taxation from Continuing operations		**33,137**	24,292	12,825
Adjustments for:				
Depreciation and amortisation expense		**5,683**	5,084	4,667
Impairments of property, plant and equipment, financial assets and intangibles		**515**	2,507	482
Net finance costs		**969**	1,223	858
Loss from equity accounted investments, related impairments and expenses		**19**	915	508
Other		**(350)**	573	896
Changes in assets and liabilities:				
Trade and other receivables		**(703)**	(2,389)	128
Inventories		**(865)**	(405)	(714)
Trade and other payables		**727**	1,149	(589)
Provisions and other assets and liabilities		**(248)**	486	1,350
Cash generated from operations		**38,884**	33,435	20,411
Dividends received		**1,018**	728	117
Interest received		**58**	97	368
Interest paid		**(657)**	(766)	(1,213)
Proceeds/(settlements) of cash management related instruments		**378**	(401)	85
Net income tax and royalty-related taxation refunded		**105**	222	47
Net income tax and royalty-related taxation paid		**(10,501)**	(7,432)	(5,130)
Net operating cash flows from Continuing operations		**29,285**	25,883	14,685
Net operating cash flows from Discontinued operations	27	**2,889**	1,351	1,021
Net operating cash flows		**32,174**	27,234	15,706
Investing activities				
Purchases of property, plant and equipment		**(5,855)**	(5,612)	(5,991)
Exploration expenditure		**(256)**	(192)	(176)
Exploration expenditure expensed and included in operating cash flows		**199**	134	123
Net investment and funding of equity accounted investments		**(266)**	(553)	(596)
Proceeds from sale of assets		**221**	158	187
Proceeds/(settlements) from sale of subsidiaries, operations and joint operations net of their cash		**1,255**	(3)	–
Other investing		**(271)**	(257)	(130)
Net investing cash flows from Continuing operations		**(4,973)**	(6,325)	(6,583)
Net investing cash flows from Discontinued operations	27	**(904)**	(1,520)	(1,033)
Net cash completion payment on merger of Petroleum with Woodside	27	**(683)**	–	–
Cash and cash equivalents disposed on merger of Petroleum with Woodside	27	**(399)**	–	–
Net investing cash flows		**(6,959)**	(7,845)	(7,616)
Financing activities				
Proceeds from interest bearing liabilities		**1,164**	568	514
Proceeds/(settlements) of debt related instruments		**–**	167	(157)
Repayment of interest bearing liabilities		**(3,358)**	(8,357)	(2,008)
Purchase of shares by Employee Share Ownership Plan (ESOP) Trusts		**(149)**	(234)	(143)
Dividends paid		**(17,851)**	(7,901)	(6,876)
Dividends paid to non-controlling interests		**(2,540)**	(2,127)	(1,043)
Net financing cash flows from Continuing operations		**(22,734)**	(17,884)	(9,713)
Net financing cash flows from Discontinued operations	27	**(33)**	(38)	(39)
Net financing cash flows		**(22,767)**	(17,922)	(9,752)
Net increase/(decrease) in cash and cash equivalents from Continuing operations		**1,578**	1,674	(1,611)
Net increase/(decrease) in cash and cash equivalents from Discontinued operations		**1,952**	(207)	(51)
Net cash completion payment on merger of Petroleum with Woodside		**(683)**	–	–
Cash and cash equivalents disposed on merger of Petroleum with Woodside		**(399)**	–	–
Cash and cash equivalents, net of overdrafts, at the beginning of the financial year		**15,246**	13,426	15,593
Foreign currency exchange rate changes on cash and cash equivalents		**(458)**	353	(505)
Cash and cash equivalents, net of overdrafts, at the end of the financial year	20	**17,236**	15,246	13,426

The accompanying notes form part of these Financial Statements.

1.5 Consolidated Statement of Changes in Equity

for the year ended 30 June 2022

	Attributable to BHP shareholders								
	Share capital		Treasury shares						
US$M	BHP Group Limited	BHP Group Plc	BHP Group Limited	BHP Group Plc	Reserves	Retained earnings	Total equity attributable to BHP shareholders	Non-controlling interests	Total equity
Balance as at 1 July 2021	1,111	1,057	(32)	(1)	2,350	46,779	51,264	4,341	55,605
Total comprehensive income	–	–	–	–	(90)	30,910	30,820	2,160	32,980
Transactions with owners:									
BHP Group Limited shares issued	172	–	(172)	–	–	–	–	–	–
Purchase of shares by ESOP Trusts	–	–	(148)	(1)	–	–	(149)	–	(149)
Employee share awards exercised net of employee contributions net of tax	–	–	321	2	(207)	(116)	–	–	–
Vested employee share awards that have lapsed, been cancelled or forfeited	–	–	–	–	(30)	30	–	–	–
Accrued employee entitlement for unexercised awards net of tax	–	–	–	–	143	–	143	–	143
Corporate structure unification	3,355	(1,057)	–	–	(2,298)	–	–	–	–
Dividends	–	–	–	–	–	(17,720)	(17,720)	(2,540)	(20,260)
In specie dividend on merger of Petroleum with Woodside	–	–	–	–	–	(19,559)	(19,559)	–	(19,559)
Divestment of subsidiaries, operations and joint operations	–	–	–	–	–	–	–	(157)	(157)
Transfers within equity on divestment of subsidiaries, operations and joint operations	–	–	–	–	(14)	14	–	–	–
Equity contributed net of tax	–	–	–	–	158	–	158	5	163
Balance as at 30 June 2022	4,638	–	(31)	–	12	40,338	44,957	3,809	48,766
Balance as at 1 July 2020	1,111	1,057	(5)	–	2,306	43,396	47,865	4,310	52,175
Total comprehensive income	–	–	–	–	22	11,330	11,352	2,158	13,510
Transactions with owners:									
Purchase of shares by ESOP Trusts	–	–	(229)	(5)	–	–	(234)	–	(234)
Employee share awards exercised net of employee contributions net of tax	–	–	202	4	(149)	(57)	–	–	–
Vested employee share awards that have lapsed, been cancelled or forfeited	–	–	–	–	(4)	4	–	–	–
Accrued employee entitlement for unexercised awards net of tax	–	–	–	–	175	–	175	–	175
Dividends	–	–	–	–	–	(7,894)	(7,894)	(2,127)	(10,021)
Balance as at 30 June 2021	1,111	1,057	(32)	(1)	2,350	46,779	51,264	4,341	55,605
Balance as at 1 July 2019	1,111	1,057	(32)	–	2,285	42,748	47,169	4,584	51,753
Total comprehensive income	–	–	–	–	(12)	7,910	7,898	769	8,667
Transactions with owners:									
Purchase of shares by ESOP Trusts	–	–	(139)	(4)	–	–	(143)	–	(143)
Employee share awards exercised net of employee contributions net of tax	–	–	166	4	(132)	(38)	–	–	–
Vested employee share awards that have lapsed, been cancelled or forfeited	–	–	–	–	(10)	10	–	–	–
Accrued employee entitlement for unexercised awards net of tax	–	–	–	–	175	–	175	–	175
Dividends	–	–	–	–	–	(7,234)	(7,234)	(1,043)	(8,277)
Balance as at 30 June 2020	1,111	1,057	(5)	–	2,306	43,396	47,865	4,310	52,175

The accompanying notes form part of these Financial Statements.

Basis of preparation

The Group's Financial Statements as at and for the year ended 30 June 2022:

- are a consolidated general purpose financial report
- have been prepared in accordance with the requirements of:
  - the Australian Corporations Act 2001 (Corporations Act 2001)
  - Australian Accounting Standards and other authoritative pronouncements of the Australian Accounting Standards Board (AASB) and International Financial Reporting Standards as issued by the International Accounting Standards Board (IASB) (collectively referred to as IFRS)
- are prepared on a going concern basis as the Directors:
  - have made an assessment of the Group's ability to continue as a going concern for the 12 months from the date of this report
  - consider it appropriate to adopt the going concern basis of accounting in preparing the Group's Financial Statements
- measure items on the basis of historical cost principles, except for the following items:
  - derivative financial instruments and certain other financial assets and liabilities, which are carried at fair value
  - non-current assets or disposal groups that are classified as held-for-sale or held-for-distribution, which are measured at the lower of carrying amount and fair value less costs to sell
- include significant accounting policies in the notes to the Financial Statements that summarise the recognition and measurement basis used and are relevant to an understanding of the Financial Statements
- apply a presentation currency of US dollars, consistent with the predominant functional currency of the Group's operations. Amounts are rounded to the nearest million dollars, unless otherwise stated, in accordance with ASIC (Rounding in Financial/Directors' Reports) Instrument 2016/191
- present reclassified comparative information where required for consistency with the current year's presentation
- adopt all new and amended standards and interpretations under IFRS, that are mandatory for application in periods beginning on 1 July 2021. None had a significant impact on the Financial Statements. Refer note 37 'New and amended accounting standards and interpretations and changes to accounting policies' for details
- have not early adopted any standards and interpretations that have been issued or amended but are not yet effective. Refer note 37 'New and amended accounting standards and interpretations and changes to accounting policies' for details

The accounting policies are consistently applied by all entities included in the Financial Statements.

Following unification of the Group's corporate structure under BHP Group Limited, which was completed in January 2022, the Group Financial Statements are no longer required to be prepared in accordance with:

- the UK Companies Act 2006
- International Accounting Standards in conformity with the requirements of the UK Companies Act 2006 and International Financial Reporting Standards adopted pursuant to Regulation (EC) No. 1606/2002 as it applies in the European Union (EU)
- International Accounting Standards adopted for use within the UK

In assessing the appropriateness of the going concern assumption over the going concern period, management have stress tested BHP's most recent financial projections to incorporate a range of potential future outcomes by considering BHP's principal risks. The Group's financial forecasts, including downside commodity price and production scenarios, demonstrate that the Group believes that it has sufficient financial resources to meet its obligations as they fall due throughout the going concern period. As such, the Financial Statements continue to be prepared on the going concern basis.

Principles of consolidation

In preparing the Financial Statements, the effects of all intragroup balances and transactions have been eliminated.

A list of significant entities in the Group, including subsidiaries, joint arrangements and associates at year-end is contained in note 28 'Subsidiaries', note 29 'Investments accounted for using the equity method' and note 30 'Interests in joint operations'.

Subsidiaries: The Financial Statements of the Group include the consolidation of BHP Group Limited (the Company or parent entity) and its subsidiaries, being the entities controlled by the parent entity during the year and BHP Group Plc and its subsidiaries whilst the DLC was in effect. Control exists where the Group:

- has power over the investee
- is exposed to, or has rights to, variable returns from its involvement with the entity
- has the ability to affect those returns through its power to direct the activities of the entity

The ability to approve the operating and capital budget of a subsidiary and the ability to appoint key management personnel are decisions that demonstrate that the Group has the existing rights to direct the relevant activities of a subsidiary.

Consolidation of a subsidiary begins when the Company obtains control over the subsidiary and ceases when the Company loses control of the subsidiary. Specifically, the results of subsidiaries acquired or disposed of during the year are included in profit or loss from the date the Company gains control until the date when the Company ceases to control the subsidiary.

Where the Group's interest is less than 100 per cent, the interest attributable to outside shareholders is reflected in non-controlling interests.

Changes in the Group's interests in subsidiaries that do not result in a loss of control are accounted for as equity transactions. The carrying amount of the Group's interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognised directly in equity and attributed to the owners of the Company.

When the Group loses control of a subsidiary, the gain or loss on disposal is recognised in profit or loss.

The Financial Statements of subsidiaries are prepared for the same reporting period as the Group. The acquisition method of accounting is used to account for the Group's business combinations.

Joint arrangements: The Group undertakes a number of business activities through joint arrangements, which exist when two or more parties have joint control. Joint arrangements are classified as either joint operations or joint ventures, based on the contractual rights and obligations between the parties to the arrangement:

- *Joint operations:* A joint operation is an arrangement in which the Group shares joint control, primarily via contractual arrangements with other parties. In a joint operation, the Group has rights to the underlying assets and obligations for the liabilities relating to the arrangement. This includes situations where the parties benefit from the joint activity through a share of the output, rather than by receiving a share of the results of trading. In relation to the Group's interest in a joint operation, the Group recognises: its assets and liabilities, including its share of any assets and liabilities held or incurred jointly; revenue from the sale of its share of the output and its share of any revenue generated from the sale of the output by the joint operation; and its expenses including its share of expenses incurred jointly. All such amounts are allocated in accordance with the terms of the arrangement, which is usually in proportion to the Group's interest in the joint operation.

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

- *Joint ventures:* A joint venture is a joint arrangement in which the parties that share joint control have rights to the net assets of the arrangement. A separate vehicle, not the parties, will have the rights to the assets and obligations for the liabilities relating to the arrangement. More than an insignificant share of output from a joint venture is sold to third parties, which indicates the joint venture is not dependent on the parties to the arrangement for funding, nor do the parties have an obligation for the liabilities of the arrangement. Joint ventures are accounted for using the equity method as outlined below.

Associates: The Group accounts for investments in associates using the equity method as outlined below. An entity is considered an associate where the Group is deemed to have significant influence but not control or joint control. Significant influence is presumed to exist where the Group:

- has over 20 per cent but less than 50 per cent of the voting rights of an entity, unless it can be clearly demonstrated that this is not the case or
- holds less than 20 per cent of the voting rights of an entity; however, has the power to participate in the financial and operating policy decisions affecting the entity

The Group uses the term 'equity accounted investments' to refer to joint ventures and associates collectively.

Under the equity method, an investment in an associate or a joint venture is recognised initially at cost and adjusted thereafter to recognise the Group's share of the profit or loss and other comprehensive income of the associate or joint venture. When the Group's share of losses of an associate or a joint venture exceeds the Group's interest in that associate or joint venture, the Group discontinues recognising its share of further losses. Additional losses are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

Foreign currencies

Transactions related to the Group's worldwide operations are conducted in a number of foreign currencies. The majority of the subsidiaries, joint arrangements and associates within each of the operations have assessed US dollars as the functional currency, however, some subsidiaries, joint arrangements and associates have functional currencies other than US dollars.

Transactions and monetary items denominated in foreign currencies are translated into US dollars as follows:

Foreign currency item	Applicable exchange rate
Transactions	Date of underlying transaction
Monetary assets and liabilities	Period-end rate

Foreign exchange gains and losses resulting from translation are recognised in the income statement, except for qualifying cash flow hedges (which are deferred to equity) and foreign exchange gains or losses on foreign currency provisions for site closure and rehabilitation costs (which are capitalised in property, plant and equipment for operating sites).

On consolidation, the assets, liabilities, income and expenses of foreign operations with non-US dollar functional currencies are translated into US dollars using the following applicable exchange rates:

Foreign currency amount	Applicable exchange rate
Income and expenses	Date of underlying transaction
Assets and liabilities	Period-end rate
Equity	Historical rate
Reserves	Historical rate

Foreign exchange differences resulting from translation are initially recognised in the foreign currency translation reserve and subsequently transferred to the income statement on disposal of a foreign operation.

Significant accounting policies, judgements and estimates

The Group's accounting policies require the use of judgement, estimates and assumptions. All judgements, estimates and assumptions are based on the most current facts and circumstances and are reassessed on an ongoing basis. Actual results in future reporting periods may differ for these estimates under different assumptions and conditions.

Further information regarding the Group's significant judgements and key estimates and assumptions, being those where changes may materially affect financial results and the carrying amount of assets and liabilities to be reported in the next reporting period, are embedded within the following notes:

Note	
4	Significant events – Samarco dam failure
6	Taxation
11	Overburden removal costs
11	Depreciation of property, plant and equipment
13	Impairments of non-current assets
15	Closure and rehabilitation provisions
21	Leases

Additional information including sensitivity analysis, where appropriate, has been provided in the relevant notes to enhance an understanding of the impact of key estimates and assumptions on the Group's financial position and performance.

Reserve estimates

Reserves are estimates of the amount of product that can be demonstrated to be able to be economically and legally extracted from the Group's properties. In order to estimate reserves, assumptions are required about a range of technical and economic factors, including quantities, qualities, production techniques, recovery efficiency, production and transport costs, commodity supply and demand, commodity and carbon prices and exchange rates.

Estimating the quantity and/or quality of reserves requires the size, shape and depth of ore bodies to be determined by analysing geological data, such as drilling samples and geophysical survey interpretations. Economic assumptions used to estimate reserves change from period-to-period as additional technical and operational data is generated. This process may require complex and difficult geological judgements to interpret the data.

Reserve impact on financial reporting

Estimates of reserves may change from period-to-period as the economic assumptions used to estimate reserves change and additional geological data is generated during the course of operations. Changes in reserves may affect the Group's financial results and financial position in a number of ways, including:

- asset carrying values may be affected due to changes in estimated future production levels
- depreciation, depletion and amortisation charged to the income statement may change where such charges are determined on the units of production basis, or where the useful economic lives of assets change
- overburden removal costs recorded on the balance sheet or charged to the income statement may change due to changes in stripping ratios or the units of production basis of depreciation
- closure and rehabilitation provisions may change where changes in estimated reserves affect expectations about the timing or cost of these activities
- the carrying amount of deferred tax assets may change due to changes in estimates of the likely recovery of the tax benefits

Climate change

The Group continues to develop its assessment of the potential impacts of climate change and the transition to a low carbon economy. The Group's current climate change strategy focuses on reducing operational greenhouse gas (GHG) emissions, investing in low emissions technologies, supporting emissions reductions in our value chain and promoting product stewardship, managing climate-related risk and opportunity, and working with others to enhance the global policy and market response. Future changes to the Group's climate change strategy or global decarbonisation signposts may impact the Group's significant judgements and key estimates and result in material changes to financial results and the carrying values of certain assets and liabilities in future reporting periods.

During FY2022, the Group completed the merger of the Group's Petroleum business with Woodside and the divestments of the Group's interests in BHP Mitsui Coal Pty Ltd (BMC) and the Cerrejón non-operated energy coal joint venture. In addition, the Group announced that it will retain New South Wales Energy Coal (NSWEC) in its portfolio, seek approvals to continue mining at NSWEC beyond its current mining consent that expires in 2026, and intends to proceed with a managed process to cease mining at the asset by the end of FY2030. While climate change and the transition to a low carbon economy remain key considerations in the Group's significant judgements and estimates, the portfolio updates during FY2022 have reduced the Group's exposure to fossil fuels. Following the updates, the potential risk to the carrying value of the Group's assets and liabilities from long-term price estimates for oil, gas and energy coal is largely limited to the impact of those commodities on the Group's supply chain.

The Group's current climate change strategy is reflected in the Group's significant judgements and key estimates, and therefore the Financial Statements, as follows:

Transition risks

The Group's targets and goals

As part of its response to the Paris Agreement goals, the Group has set a target to reduce its operational GHG emissions (Scope 1 and Scope 2 from our operated assets) by at least 30 per cent from FY2020 levels by FY2030 and a goal to achieve net zero operational GHG emissions by 2050. For the FY2030 target, the FY2020 baseline has been adjusted to reflect the divestment of the Group's Petroleum and BMC operations and will be adjusted for any material future acquisitions and divestments. Approved emissions reduction projects aimed at contributing to the achievement of the Group's operational GHG emissions target and goal have been incorporated into the forecast cash flows of the Group's assets. The use of carbon offsets will be governed by the Group's approach to carbon offsetting, with the Group's offset strategy currently being managed at a consolidated Group level and therefore not currently incorporated into the forecast cash flows of individual assets. Any change to the Group's climate change strategy could impact these forecasts and the Group's significant judgements and key estimates.

The Group continues to invest, including in partnership with others, in emissions reduction projects and technology innovation and development in its value chain to support reductions to its total reported Scope 3 GHG emissions inventory, with a particular focus on steelmaking and maritime emissions. However, while we seek to influence, Scope 3 emissions occur outside of our direct control. Reduction pathways are dependent on the development, and upstream or downstream deployment of solutions and/or supportive policy. Where possible, the financial impact of the Group's activities in support of Scope 3 reduction pathways is reflected in the financial statements, for example the Group's chartering of LNG-fuelled vessels. It is however currently not possible to reliably estimate or measure the full potential financial statement impacts of the Group's pursuit of its Scope 3 goals and targets.

The Climate Investment Program (CIP), as announced by the Group in July 2019, aims to invest at least US$400 million over the CIP's five-year life in emissions reduction projects across the Group's operated assets and value chain. Spend under the CIP, along with capital expenditure in support of operational decarbonisation at our operated assets, is recognised in the relevant year of spend.

Global transition signposts

In addition to the Group's targets and goals, significant judgements and key estimates are also impacted by the Group's current assessment of the range of economic and climate related conditions that could exist in transitioning to a low carbon economy, considering the current trajectory of society and the global economy as a whole. Signposts do not yet indicate that the appropriate measures are in place to drive decarbonisation at the pace or scale required for the Group to assess achieving the aims of the Paris Agreement as the most likely future outcome. However, as governments, institutions, companies and society increasingly focus on addressing climate change, the potential for a non-linear and/or more rapid transition and the subsequent impact on threats and opportunities increases.

The BHP Climate Transition Action Plan 2021 references the Group's divergent climate scenarios across a range of temperature outcomes. The Group currently uses two of those scenarios, being the Central Energy View and Lower Carbon View[1] as inputs to the Group's operational planning cases. The use of these two scenarios reflects the Group's current estimates of the most likely range of future states for the global economy and associated sub-systems. These operational planning cases inform updates to the Group's supply, demand and price outlooks, capital allocation and portfolio decisions.

Given the complexity of climate modelling, these scenarios are reviewed periodically to reflect new information, with developments in the periods between scenario updates being reflected in updated internal long-term price outlooks.

Investment decisions and asset valuations also incorporate carbon price assumptions for major Group operational, competitor and customer countries. In determining the Group's forecast, factors such as a country's current and announced climate policies and targets and societal factors such as public acceptance and demographics are considered, with the Group forecasting the global range of regional carbon prices to reach between US$0-175/t$CO_2$e in FY2030 and US$10-250/tCO_2e in FY2050, and US$10-175/t$CO_2$-e in FY2030 and US$100-250/tCO_2-e in FY2050 in BHP's current major operational and market countries.

The operational planning cases, price outlooks and cost of carbon assumptions, impact certain significant judgements and key estimates, including the determination of the valuation of assets and potential impairment charges (notes 11 'Property, plant and equipment' and 13 'Impairment of non-current assets'), the estimation of the remaining useful economic life of assets for depreciation purposes (note 11 'Property, plant and equipment') and the timing of closure and rehabilitation activities (note 15 'Closure and rehabilitation provisions').

In addition to the operational planning cases, the Group utilises a range of scenarios, including its 1.5°C Paris-aligned scenario[2], when testing the resilience of its portfolio, forming strategy and making investment decisions. While a 1.5ºC Paris-aligned scenario does not currently represent one of the inputs to the Group's operational planning cases, the Group has, during FY2022, systematically integrated the Group's 1.5ºC Paris-aligned scenario into the Group's strategy and capital allocation process to test the extent to which its capital allocation is aligned with a rapidly decarbonising global economy. Specifically, the Group applies the Group's 1.5°C Paris-aligned scenario to assess whether future demand for the Group's products under that scenario supports ongoing capital investment. The internal allocation of capital under the Group's Capital Allocation Framework and all major investment decisions now require an assessment of investment viability under the Group's 1.5°C Paris-aligned scenario.

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[1] Central Energy View reflects, and is periodically updated to respond to, existing policy trends and commitments. Lower Carbon View accelerates decarbonisation trends and policies, particularly in easier-to-abate sectors such as power generation and light duty vehicles. BHP's Climate Change Report 2020 describes these scenarios in more detail.

[2] This scenario aligns with the aims of the Paris Agreement and requires steep global annual emissions reduction, sustained for decades, to stay within a 1.5°C carbon budget. 1.5°C is above pre-industrial levels. BHP's Climate Change Report 2020 describes this scenario, including its assumptions, outputs and limitations, in more detail.

The Group continues to monitor global decarbonisation signposts and update its operational planning cases, price outlooks, and cost of carbon assumptions and assessments relating to strategy and capital allocation accordingly. Where such signposts indicate the appropriate measures are in place for achievement of a 1.5ºC Paris-aligned scenario, this will be reflected in the Group's operational planning cases.

Sensitivity to demand for the Group's commodities

The Group acknowledges that there are a range of possible energy transition scenarios, including those that are aligned with the aims of the Paris Agreement, that may indicate different outcomes for individual commodities. The resilience of the Group's portfolio to a 1.5°C Paris-aligned scenario (the Group's 1.5°C Paris-aligned scenario) continues to be considered, including the impact of Paris-aligned commodity price estimates under that scenario on the Group's latest asset plans.

There are inherent limitations with scenario analysis and it is difficult to predict which, if any, of the scenarios might eventuate and none of the scenarios considered constitutes a definitive outcome for the Group.

However, the long-term commodity price estimates under the Group's 1.5°C Paris-aligned scenario reflect the world needing around twice as much steel, copper and potash and four times as much nickel in the next 30 years as in the last 30. In addition, the Group's portfolio is transitioning towards higher quality iron ore and metallurgical coal that enable steelmakers to be more efficient and operate with a lower emissions intensity.

As such, although all potential financial reporting consequences under the Group's 1.5°C Paris-aligned scenario are currently impracticable to fully assess, the long-term commodity price outlooks under this scenario for iron ore, copper, metallurgical coal, nickel and potash are either largely consistent with or favourable to the price outlooks in the Group's current operational planning cases.

Given the positive long-term price outlooks for these commodities, the Group currently considers that a material adverse change is not expected to the valuation, and remaining useful life, of assets and discounting of closure and rehabilitation provisions for assets relating to these commodities under its 1.5°C Paris-aligned scenario.

While energy coal long-term commodity price outlooks under the Group's 1.5°C Paris-aligned scenario are unfavourable when compared to the price outlooks in the Group's current operational planning cases, following impairments recognised in FY2021, the carrying value of assets at the Group's remaining energy coal operations at NSWEC is no longer material.

Further, the Group's closure provision for NSWEC reflects the announcement in FY2022 of the Group's plans to seek approvals to continue mining at NSWEC beyond its current mining consent that expires in 2026 and intention to proceed with a managed process to cease mining at NSWEC by the end of FY2030. While the closure provision remains subject to estimation and assumptions, the timing of closure is no longer considered materially susceptible to the long-term impacts of climate change.

Physical risks

The Group is progressing work to assess the potential impact of physical risks of climate change in line with the Group's Risk Management Framework. In FY2022, the Group conducted a physical risk identification process that prioritised key potential climate hazards for more detailed analysis including, for example, risks associated with higher sea levels disrupting port operations and extreme rainfall impacting the stability of tailings storage facilities. Given the ongoing nature of the Group's physical risk assessment process, inclusion of adaptation risk in the Group's operating plans, and associated asset valuations, is currently limited.
As the Group progresses its adaptation strategy, including risk evaluations planned for FY2023, the identification of additional risks or the detailed development of the Group's response may result in material changes to financial results and the carrying values of assets and liabilities in future reporting periods.

1.6 Notes to the Financial Statements

Performance

1 Segment reporting

Reportable segments

The Group operated three reportable segments during FY2022, which are aligned with the commodities that are extracted and marketed and reflect the structure used by the Group's management to assess the performance of the Group.

Reportable segment	**Principal activities**
Copper	Mining of copper, silver, zinc, molybdenum, uranium and gold
Iron Ore	Mining of iron ore
Coal	Mining of metallurgical coal and energy coal

On 22 November 2021, the Group signed a binding SSA for the merger of the Group's oil and gas portfolio with Woodside. Following that announcement, the Group's Petroleum business no longer meets the reporting segment recognition criteria as outlined in IFRS 8/AASB 8 'Operating segments' and therefore does not form part of the reportable segments. Comparative periods have been adjusted for the effects of applying IFRS 5/AASB 5 'Non-current Assets Held for Sale and Discontinued Operations' to disclose the Group's Petroleum business on the same basis as the current period.

Group and unallocated items includes functions, other unallocated operations including Potash, Nickel West and legacy assets, and consolidation adjustments. Revenue not attributable to reportable segments comprises the sale of freight and fuel to third parties, as well as revenues from unallocated operations. Exploration and technology activities are recognised within relevant segments.

Year ended 30 June 2022 US$M	**Copper**	**Iron Ore**	**Coal**	**Group and unallocated items/ eliminations**	**Group total**
Revenue	**16,849**	**30,767**	**15,549**	**1,933**	**65,098**
Inter-segment revenue	**–**	**–**	**–**	**–**	**–**
Total revenue	**16,849**	**30,767**	**15,549**	**1,933**	**65,098**
Underlying EBITDA	**8,565**	**21,707**	**9,504**	**858**	**40,634**
Depreciation and amortisation	**(1,765)**	**(2,203)**	**(762)**	**(953)**	**(5,683)**
Impairment losses[1]	**(470)**	**(33)**	**(9)**	**(3)**	**(515)**
Underlying EBIT	**6,330**	**19,471**	**8,733**	**(98)**	**34,436**
Exceptional items[2]	**(81)**	**(648)**	**849**	**(450)**	**(330)**
Net finance costs					**(969)**
Profit before taxation					**33,137**
Capital expenditure (cash basis)	**2,528**	**1,848**	**621**	**858**	**5,855**
Profit/(loss) from equity accounted investments, related impairments and expenses	**577**	**(595)**	**–**	**(1)**	**(19)**
Investments accounted for using the equity method	**1,415**	**–**	**–**	**5**	**1,420**
Total assets[3]	**32,762**	**24,613**	**11,524**	**26,267**	**95,166**
Total liabilities[3]	**5,342**	**7,790**	**3,874**	**29,394**	**46,400**

Year ended 30 June 2021 US$M Restated	Copper	Iron Ore	Coal	Group and unallocated items/ eliminations	Group total
Revenue	15,726	34,475	5,154	1,566	56,921
Inter-segment revenue	–	–	–	–	–
Total revenue	15,726	34,475	5,154	1,566	56,921
Underlying EBITDA	8,489	26,278	288	18	35,073
Depreciation and amortisation	(1,608)	(1,971)	(845)	(660)	(5,084)
Impairment losses[1]	(72)	(13)	(20)	(31)	(136)
Underlying EBIT	6,809	24,294	(577)	(673)	29,853
Exceptional items[2]	(144)	(1,319)	(1,567)	(1,308)	(4,338)
Net finance costs					(1,223)
Profit before taxation					24,292
Capital expenditure (cash basis)	2,180	2,188	579	665	5,612
Profit/(loss) from equity accounted investments, related impairments and expenses	692	(1,126)	(480)	(1)	(915)
Investments accounted for using the equity method	1,482	–	–	260	1,742
Total assets[3]	31,517	26,171	11,030	40,209	108,927
Total liabilities[3]	4,589	7,508	3,518	37,707	53,322

1 Segment reporting continued

Year ended 30 June 2020 US$M Restated	Copper	Iron Ore	Coal	Group and unallocated items/ eliminations	Group total
Revenue	10,666	20,797	6,241	1,220	38,924
Inter-segment revenue	–	–	1	(1)	–
Total revenue	10,666	20,797	6,242	1,219	38,924
Underlying EBITDA	4,347	14,554	1,632	(663)	19,870
Depreciation and amortisation	(1,740)	(1,608)	(807)	(512)	(4,667)
Impairment losses[1]	(17)	(22)	(14)	(20)	(73)
Underlying EBIT	2,590	12,924	811	(1,195)	15,130
Exceptional items[2]	(1,228)	(614)	(18)	413	(1,447)
Net finance costs					(858)
Profit before taxation					12,825
Capital expenditure (cash basis)	2,434	2,328	603	626	5,991
Profit/(loss) from equity accounted investments, related impairments and expenses	67	(508)	(68)	1	(508)
Investments accounted for using the equity method	1,558	–	776	251	2,585
Total assets[3]	28,892	23,841	12,110	40,890	105,733
Total liabilities[3]	3,535	5,441	2,601	41,981	53,558

1 Impairment losses exclude exceptional items of US$ nil (2021: US$2,371 million; 2020: US$409 million).

2 Exceptional items reported in Group and unallocated include Samarco dam failure costs of US$(13) million (2021: US$(14) million; 2020: US$(32) million) and Samarco related other income of US$ nil (2021: US$34 million; 2020: US$489 million). Refer to note 3 'Exceptional items' for further information.

3 Group and unallocated comparative periods total assets and total liabilities include Petroleum assets and liabilities that were previously disclosed as part of the Petroleum segment.

Geographical information

	Revenue by location of customer		
	2022 US$M	2021 US$M Restated	2020 US$M Restated
Australia	**1,649**	1,871	1,212
Europe	**2,129**	886	963
China	**36,618**	39,653	26,503
Japan	**8,401**	4,387	3,314
India	**5,215**	2,189	1,475
South Korea	**4,786**	3,420	2,666
Rest of Asia	**4,303**	2,934	1,730
North America	**1,282**	1,147	719
South America	**715**	426	315
Rest of world	**–**	8	27
	65,098	56,921	38,924

	Non-current assets by location of assets		
	2022 US$M	2021 US$M	2020 US$M
Australia	**43,250**	48,612	48,236
North America	**3,964**	9,701	9,682
South America	**18,280**	18,548	18,179
Rest of world	**150**	1,851	1,955
Unallocated assets[1]	**858**	3,522	6,210
	66,502	82,234	84,262

1 Unallocated assets comprise deferred tax assets and other financial assets.

Underlying EBITDA

Underlying EBITDA is earnings before net finance costs, depreciation, amortisation and impairments, taxation expense, Discontinued operations and any exceptional items. Underlying EBITDA includes BHP's share of profit/(loss) from investments accounted for using the equity method including net finance costs, depreciation, amortisation and impairments and taxation expense/(benefit).

Exceptional items are excluded from Underlying EBITDA in order to enhance the comparability of such measures from period-to-period and provide investors with further clarity in order to assess the performance of the Group's operations. Management monitors exceptional items separately. Refer to note 3 'Exceptional items' for additional detail.

Segment assets and liabilities

Total segment assets and liabilities of reportable segments represents operating assets and operating liabilities, including the carrying amount of equity accounted investments and predominantly excludes cash balances, loans to associates, interest bearing liabilities and deferred tax balances. The carrying value of investments accounted for using the equity method represents the balance of the Group's investment in equity accounted investments, with no adjustment for any cash balances, interest bearing liabilities or deferred tax balances of the equity accounted investment.

2 Revenue

Revenue by segment and asset

	2022 US$M	2021 US$M Restated	2020 US$M Restated
Escondida	**9,500**	9,470	6,719
Pampa Norte	**2,670**	1,801	1,395
Olympic Dam	**1,776**	2,211	1,463
Third-party products	**2,903**	2,244	1,089
Total Copper[1]	**16,849**	15,726	10,666
Western Australia Iron Ore	**30,632**	34,337	20,663
Third-party products	**19**	18	15
Other	**116**	120	119
Total Iron Ore	**30,767**	34,475	20,797
BHP Mitsubishi Alliance	**10,254**	3,537	4,422
New South Wales Energy Coal	**3,035**	839	885
Other[2]	**2,260**	778	935
Total Coal[3]	**15,549**	5,154	6,242
Group and unallocated items[4]	**1,933**	1,566	1,220
Inter-segment adjustment	**–**	–	(1)
Total revenue	**65,098**	56,921	38,924

1 Total Copper revenue includes: copper US$15,992 million (2021: US$14,812 million; 2020: US$10,044 million) and other US$857 million (2021: US$914 million; 2020: US$622 million). Other consists of silver, zinc, molybdenum, uranium and gold.

2 Includes revenue related to BHP Mitsui Coal (BMC) divested in May 2022.

3 Total Coal revenue includes: metallurgical coal US$11,990 million (2021: US$4,260 million; 2020: US$5,311 million) and energy coal US$3,559 million (2021: US$894 million; 2020: US$931 million).

4 Group and unallocated items revenue includes: Nickel West US$1,926 million (2021: US$1,545 million; 2020: US$1,189 million) and other revenue US$7 million (2021: US$21 million; 2020: US$31 million).

Revenue consists of revenue from contracts with customers of US$65,504 million (2021: US$55,562 million; 2020: US$38,917 million) and other revenue predominantly relating to provisionally priced sales of US$(406) million (2021: US$1,359 million; 2020: US$7 million).

Recognition and measurement

The Group generates revenue from the production and sale of commodities. Revenue is recognised when or as control of the promised goods or services passes to the customer. In most instances, control passes when the goods are delivered to a destination specified by the customer, typically on board the customer's appointed vessel. Revenue from the provision of services is recognised over time as the services are provided, but does not represent a significant proportion of total revenue and is aggregated with the respective asset and product revenue for disclosure purposes.

The amount of revenue recognised reflects the consideration to which the Group expects to be entitled in exchange for transferring goods or services.

Where the Group's sales are provisionally priced, the final price depends on future index prices. The amount of revenue initially recognised is based on the relevant forward market price. Adjustments between the provisional and final price are accounted for under IFRS 9/AASB 9 'Financial Instruments' (IFRS 9), separately recorded as other revenue and presented as part of the total revenue of each asset. The period between provisional pricing and final invoicing is typically between 60 and 120 days.

Revenue from the sale of significant by-products is included within revenue. Where a by-product is not significant, revenue is credited against costs.

The Group applies the practical expedient to not adjust the expected consideration for the effects of the time value of money if the period between the delivery and when the customer pays for the promised good or service is one year or less.

The Group applies the practical expedient not to disclose information relating to unfulfilled performance obligations, either due to the expected duration of the contract term being one year or less, or for longer term contracts, because the entity has a right to consideration (and can recognise revenue) for goods delivered.

3 Exceptional items

Exceptional items are those gains or losses where their nature, including the expected frequency of the events giving rise to them, and impact is considered material to the Financial Statements. Such items included within the Group's profit from Continuing operations for the year are detailed below. Exceptional items attributable to Discontinued operations are detailed in note 27 'Discontinued operations'.

Year ended 30 June 2022	Gross US$M	Tax US$M	Net US$M
Exceptional items by category			
Samarco dam failure	**(1,032)**	**(31)**	**(1,063)**
Impairment of US deferred tax assets	**–**	**(423)**	**(423)**
Corporate structure unification costs	**(428)**	**–**	**(428)**
BHP Mitsui Coal (BMC) gain on disposal	**840**	**–**	**840**
Total	**(620)**	**(454)**	**(1,074)**
Attributable to non-controlling interests	**–**	**–**	**–**
Attributable to BHP shareholders	**(620)**	**(454)**	**(1,074)**

Samarco Mineração S.A. (Samarco) dam failure

The FY2022 exceptional loss of US$1,063 million (after tax) related to the Samarco dam failure in November 2015 comprises the following:

Year ended 30 June 2022	US$M
Other income	**–**
Expenses excluding net finance costs:	
Costs incurred directly by BHP Brasil and other BHP entities in relation to the Samarco dam failure	**(66)**
Loss from equity accounted investments, related impairments and expenses:	
Samarco impairment expense	**–**
Samarco Germano dam decommissioning	**68**
Samarco dam failure provision	**(663)**
Fair value change on forward exchange derivatives	**(81)**
Net finance costs	**(290)**
Income tax expense	**(31)**
Total[1]	**(1,063)**

[1] Refer to note 4 'Significant events – Samarco dam failure' for further information.

Impairment of US deferred tax assets

The Group recognised an impairment charge of US$423 million (after tax) in relation to deferred tax assets where the recoverability has historically been reliant on Petroleum earnings in the same tax group. While these tax assets remained with the Group following the merger of the Group's oil and gas portfolio with Woodside, the impairment charge reflects the extent of other currently forecast future earnings against which the assets can be recovered.

Corporate structure unification costs

The Group incurred transaction costs associated with the unification of the Group corporate structure under its existing Australian parent company, BHP Group Limited, which was completed on 31 January 2022. Refer note 16 'Share capital' for further information.

BHP Mitsui Coal (BMC) gain on disposal

On 3 May 2022 the Group sold its 80 per cent interest in BHP Mitsui Coal Pty Ltd (BMC) to Stanmore SMC Holdings Pty Ltd, a wholly owned subsidiary of Stanmore Resources Limited (Stanmore Resources).

Stanmore Resources paid US$1.1 billion cash consideration at completion plus a preliminary completion adjustment of US$218 million for working capital. US$100 million in cash remains payable in six months on 3 November 2022 with potential for an additional amount of up to US$150 million (US$122 million discounted) in a price-linked earnout payable in the 2024 calendar year.

3 Exceptional items continued

Details of the gain on disposal is as follows:

	US$M
Assets	
Cash and cash equivalents	63
Trade and other receivables	360
Other financial assets	26
Inventories	92
Property, plant and equipment	1,214
Total assets	1,755
Liabilities	
Trade and other payables	253
Interest bearing liabilities	249
Tax payables	9
Provisions	425
Deferred tax liabilities	31
Total liabilities	967
Net assets disposed	788
Less non-controlling interest share of net assets disposed	157
BHP share of net assets disposed	631
Gross consideration	1,318
Transaction and other directly applicable costs	(69)
Income tax expense	–
Deferred consideration	222
Gain on disposal	840

The exceptional items relating to the year ended 30 June 2021 and the year ended 30 June 2020 are detailed below.

30 June 2021

Year ended 30 June 2021 Restated	Gross US$M	Tax US$M	Net US$M
Exceptional items by category			
Samarco dam failure	(1,087)	(71)	(1,158)
COVID-19 related costs	(499)	138	(361)
Impairment of Energy coal assets	(1,523)	(651)	(2,174)
Impairment of Potash assets	(1,314)	(473)	(1,787)
Total	(4,423)	(1,057)	(5,480)
Attributable to non-controlling interests	(34)	10	(24)
Attributable to BHP shareholders	(4,389)	(1,067)	(5,456)

Samarco Mineração S.A. (Samarco) dam failure

The FY2021 exceptional loss of US$1,158 million related to the Samarco dam failure in November 2015 comprises the following:

Year ended 30 June 2021	US$M
Other income	34
Expenses excluding net finance costs:	
Costs incurred directly by BHP Brasil and other BHP entities in relation to the Samarco dam failure	(46)
Loss from equity accounted investments, related impairments and expenses:	
Samarco impairment expense	(111)
Samarco Germano dam decommissioning	(15)
Samarco dam failure provision	(1,000)
Fair value change on forward exchange derivatives	136
Net finance costs	(85)
Income tax expense	(71)
Total[1]	(1,158)

[1] Refer to note 4 'Significant events – Samarco dam failure' for further information.

COVID-19 related costs

The exceptional item reflects the directly attributable COVID-19 pandemic related additional costs for the Group for FY2021, including costs associated with the increased provision of health and hygiene services, the impacts of maintaining social distancing requirements and demurrage and other standby charges related to delays caused by COVID-19. At the time, COVID-19 was considered a single protracted globally pervasive event.

However, as the pandemic has continued to evolve, certain impacts that were initially considered to be potentially short-term in nature are now expected to continue over a number of reporting periods. These activities are now considered to be part of business as usual operations and, as such, for FY2022, the incremental costs have not been classified as an exceptional item.

Impairment of Energy coal assets

The Group recognised an impairment charge of US$1,704 million (after tax) in relation to New South Wales Energy Coal (NSWEC) reflecting the status of the divestment process and current market conditions for thermal coal, the strengthening Australian dollar and changes to the mine plan. In addition, the Group recognised an impairment charge of US$470 million (after tax) for Cerrejón, reflecting the expected net sales proceeds.

3 Exceptional items continued

Impairment of Potash assets

The Group recognised an impairment charge of US$1,787 million (after tax) in relation to Potash. The impairment charge reflected an analysis of market perspectives and the value that we expected a market participant to attribute to our investments to date.

30 June 2020

Year ended 30 June 2020 Restated	Gross US$M	Tax US$M	Net US$M
Exceptional items by category			
Samarco dam failure	(176)	–	(176)
Cancellation of power contracts	(778)	271	(507)
COVID-19 related costs	(177)	51	(126)
Cerro Colorado impairment	(409)	(83)	(492)
Total	(1,540)	239	(1,301)
Attributable to non-controlling interests	(291)	90	(201)
Attributable to BHP shareholders	(1,249)	149	(1,100)

Samarco Mineração S.A. (Samarco) dam failure

The FY2020 exceptional loss of US$176 million related to the Samarco dam failure in November 2015 comprises the following:

Year ended 30 June 2020	US$M
Other income	489
Expenses excluding net finance costs:	
Costs incurred directly by BHP Brasil and other BHP entities in relation to the Samarco dam failure	(64)
Loss from equity accounted investments, related impairments and expenses:	
Samarco impairment expense	(95)
Samarco Germano dam decommissioning	46
Samarco dam failure provision	(459)
Net finance costs	(93)
Total[1]	(176)

[1] Refer to note 4 'Significant events – Samarco dam failure' for further information.

Cancellation of power contracts

Reflects an onerous contract provision in relation to the cancellation of power contracts at the Group's Escondida and Spence operations, as part of the shift towards 100 per cent renewable energy supply contracts.

COVID-19 related costs

The exceptional item reflects the directly attributable COVID-19 pandemic related additional costs for the Group for FY2020, including costs associated with the increased provision of health and hygiene services, the impacts of maintaining social distancing requirements and other standby charges related to delays caused by COVID-19. At the time, COVID-19 was considered a single protracted globally pervasive event.

However, as the pandemic has continued to evolve, certain impacts that were initially considered to be potentially short-term in nature are now expected to continue over a number of reporting periods. These activities are now considered to be part of business as usual operations and, as such, for FY2022, the incremental costs have not been classified as an exceptional item.

Cerro Colorado impairment

The Group recognised an impairment charge of US$492 million (after tax) in relation to Cerro Colorado. This reflects the decision taken by the Group to reduce Cerro Colorado's throughput for the remaining period of its current environmental licence, which expires at the end of CY2023.

4 Significant events – Samarco dam failure

On 5 November 2015, the Samarco Mineração S.A. (Samarco) iron ore operation in Minas Gerais, Brazil, experienced a tailings dam failure that resulted in a release of mine tailings, flooding the communities of Bento Rodrigues, Gesteira and Paracatu and impacting other communities downstream (the Samarco dam failure). Refer to section on 'Samarco' in the Operating and Financial Review.

Samarco is jointly owned by BHP Billiton Brasil Ltda (BHP Brasil) and Vale S.A. (Vale). BHP Brasil's 50 per cent interest is accounted for as an equity accounted joint venture investment. BHP Brasil does not separately recognise its share of the underlying assets and liabilities of Samarco, but instead records the investment as one line on the balance sheet. Each period, BHP Brasil recognised its 50 per cent share of Samarco's profit or loss and adjusted the carrying value of the investment in Samarco accordingly. Such adjustment continued until the investment carrying value was reduced to US$ nil, with any additional share of Samarco losses only recognised to the extent that BHP Brasil has an obligation to fund the losses. After applying equity accounting, any remaining carrying value of the investment is tested for impairment.

Any charges relating to the Samarco dam failure incurred directly by BHP Brasil or other BHP entities are recognised 100 per cent in the Group's results.

4 Significant events – Samarco dam failure continued

The financial impacts of the Samarco dam failure on the Group's income statement, balance sheet and cash flow statement for the year ended 30 June 2022 are shown in the tables below and have been treated as an exceptional item.

Financial impacts of Samarco dam failure	**2022 US$M**	2021 US$M	2020 US$M
Income statement			
Other income[1]	**–**	34	489
Expenses excluding net finance costs:			
Costs incurred directly by BHP Brasil and other BHP entities in relation to the Samarco dam failure[2]	**(66)**	(46)	(64)
Loss from equity accounted investments, related impairments and expenses:			
Samarco impairment expense[3]	**–**	(111)	(95)
Samarco Germano dam decommissioning[4]	**68**	(15)	46
Samarco dam failure provision[5]	**(663)**	(1,000)	(459)
Fair value change on forward exchange derivatives[6]	**(81)**	136	–
Loss from operations	**(742)**	(1,002)	(83)
Net finance costs[7]	**(290)**	(85)	(93)
Loss before taxation	**(1,032)**	(1,087)	(176)
Income tax expense[8]	**(31)**	(71)	–
Loss after taxation	**(1,063)**	(1,158)	(176)
Balance sheet movement			
Trade and other payables	**(1)**	(5)	(5)
Derivatives	**(160)**	136	–
Tax liabilities	**(31)**	(71)	–
Provisions	**(629)**	(741)	(137)
Net liabilities	**(821)**	(681)	(142)

		2022 US$M		2021 US$M		2020 US$M
Cash flow statement						
Loss before taxation		**(1,032)**		(1,087)		(176)
Adjustments for:						
Samarco impairment expense[3]	**–**		111		95	
Samarco Germano dam decommissioning[4]	**(68)**		15		(46)	
Samarco dam failure provision[5]	**663**		1,000		459	
Fair value change on forward exchange derivatives[6]	**81**		(136)		–	
Proceeds of cash management related instruments	**79**		–		–	
Net finance costs[7]	**290**		85		93	
Changes in assets and liabilities:						
Trade and other payables	**1**		5		5	
Net operating cash flows		**14**		(7)		430
Net investment and funding of equity accounted investments[9]		**(256)**		(470)		(464)
Net investing cash flows		**(256)**		(470)		(464)
Net decrease in cash and cash equivalents		**(242)**		(477)		(34)

[1] Proceeds from insurance settlements.

[2] Includes legal and advisor costs incurred.

[3] Impairment expense from working capital funding provided during the period.

[4] US$(56) million (2021: US$(6) million; 2020: US$37 million) change in estimate and US$(12) million (2021: US$21 million; 2020: US$(83) million) exchange translation.

[5] US$747 million (2021: US$842 million; 2020: US$916 million) change in estimate and US$(84) million (2021: US$158 million; 2020: US$(457) million) exchange translation.

[6] During the period the Group entered into forward exchange contracts to limit the Brazilian reais exposure on the dam failure provisions. While not applying hedge accounting, the fair value changes in the forward exchange instruments are recorded within Loss from equity accounted investments, related impairments and expenses in the Income Statement.

[7] Amortisation of discounting of provision.

[8] Includes tax on forward exchange derivatives and other taxes incurred during the period.

[9] Includes US$ nil (2021: US$(111) million; 2020: US$(95) million) funding provided during the period, US$(256) million (2021: US$(351) million; 2020: US$(365) million) utilisation of the Samarco dam failure provision, and US$ nil (2021: US$(8) million; 2020: US$(4) million) utilisation of the Samarco Germano decommissioning provision.

Equity accounted investment in Samarco

BHP Brasil's investment in Samarco remains at US$ nil. No dividends have been received by BHP Brasil from Samarco during the period and Samarco currently does not have profits available for distribution.

4 Significant events – Samarco dam failure continued

Provisions related to the Samarco dam failure

		2022 US$M		2021 US$M
At the beginning of the financial year		**2,792**		2,051
Movement in provisions		**629**		741
Comprising:				
Utilised	**(256)**		(359)	
Adjustments charged to the income statement:				
Change in estimate – Samarco dam failure provision	**747**		842	
Change in estimate – Samarco Germano dam decommissioning	**(56)**		(6)	
Amortisation of discounting impacting net finance costs	**290**		85	
Exchange translation	**(96)**		179	
At the end of the financial year		**3,421**		2,792
Comprising:				
Current		**1,815**		1,206
Non-current		**1,606**		1,586
At the end of the financial year		**3,421**		2,792
Comprising:				
Samarco dam failure provision		**3,237**		2,560
Samarco Germano dam decommissioning provision		**184**		232

Samarco dam failure provisions and contingencies

As at 30 June 2022, BHP Brasil has identified provisions and contingent liabilities arising as a consequence of the Samarco dam failure as follows:

Provisions

Provision for Samarco dam failure

On 2 March 2016, BHP Brasil, Samarco and Vale, entered into a Framework Agreement with the Federal Government of Brazil, the states of Espírito Santo and Minas Gerais and certain other public authorities to establish a foundation (Fundação Renova) that is developing and executing environmental and socio-economic programs (Programs) to remediate and provide compensation for damage caused by the Samarco dam failure (the Framework Agreement). Key Programs include those for financial assistance and compensation of impacted persons, including fisherfolk impacted by the dam failure, and those for remediation of impacted areas and resettlement of impacted communities. A committee (Interfederative Committee) comprising representatives from the Brazilian Federal and State Governments, local municipalities, environmental agencies, impacted communities and Public Defence Office oversees the activities of the Fundação Renova in order to monitor, guide and assess the progress of actions agreed in the Framework Agreement. In addition, the 12th Federal Court is supervising the work of the Fundação Renova and the Court's decisions, including decisions relating to the scope of individuals eligible for compensation and the amount of damages to which they are entitled, have been considered in the Samarco dam failure provision change in estimate. Any future decisions will be analysed for impacts on the provision at the time of any decision and the provision may be impacted in future reporting periods as a result of appeals and motions for clarification on certain Court decisions that remain outstanding.

The term of the Framework Agreement is 15 years, renewable for periods of one year successively until all obligations under the Framework Agreement have been performed. Under the Framework Agreement, Samarco has primary responsibility for funding Fundação Renova's annual calendar year budget for the duration of the Framework Agreement. The funding amounts for each calendar year will be dependent on the remediation and compensation projects to be undertaken in a particular year. Annual contributions may be reviewed under the Framework Agreement. To the extent that Samarco does not meet its funding obligations, each of BHP Brasil and Vale have secondary funding obligations under the Framework Agreement in proportion to their 50 per cent shareholding in Samarco.

Samarco began to gradually recommence operations in December 2020, however, there remains significant uncertainty regarding Samarco's long-term cash flow generation and the outcome of the Judicial Reorganisation (outlined below). In light of these uncertainties and based on currently available information, BHP Brasil's provision for its obligations under the Framework Agreement Programs is US$3.2 billion before tax and after discounting at 30 June 2022 (30 June 2021: US$2.6 billion). The dam failure provision at 30 June 2022 reflects only the Group's estimate of the costs to be incurred in completing those Programs, as the Group is unable to provide a range of possible outcomes or a reliable estimate of other existing or potential future claims (refer to contingent liabilities below).

Under a Governance Agreement ratified on 8 August 2018, BHP Brasil, Samarco and Vale were to establish a process to renegotiate the Programs over two years to progress settlement of the R$155 billion (approximately US$30 billion) Federal Public Prosecution Office claim (described below). Pre-requisites established in the Governance Agreement, for re-negotiation of the Framework Agreement, were not implemented during the two year period and on 30 September 2020, Brazilian Federal and State prosecutors and public defenders filed a request for the immediate resumption of the R$155 billion (approximately US$30 billion) claim, which was suspended from the date of ratification of the Governance Agreement. Formal suspension of the claim ceased on 10 December 2021, however no further rulings have been made.

BHP Brasil, Samarco, Vale and Federal and State prosecutors have been engaging in negotiations to seek a definitive and substantive settlement of the obligations under the Framework Agreement and the R$155 billion (approximately US$30 billion) Federal Public Prosecution Office claim. The negotiations are overseen by the President of the National Council of Justice, as the Chief Justice of the Supreme Court in Brazil and are expected to continue until at least the expected end of the term of the current President on 31 August 2022. Outcomes of the negotiations are highly uncertain and, until any revisions to the Programs are agreed, Fundação Renova will continue to implement the Programs in accordance with the terms of the Framework Agreement and the Governance Agreement.

BHP Brasil, Samarco and Vale are required to maintain security of an amount equal to the Fundação Renova's annual budget up to a limit of R$2.2 billion (approximately US$420 million). The security currently comprises R$1.3 billion (approximately US$250 million) in insurance bonds and a charge of R$800 million (approximately US$150 million) over Samarco's assets. A further R$100 million (approximately US$20 million) in liquid assets previously maintained as security was released for COVID-19 related response efforts in Brazil.

Samarco Germano dam decommissioning

Samarco is currently progressing plans for the accelerated decommissioning of its upstream tailings dams (the Germano dam complex). Given the uncertainties surrounding Samarco's long-term cash flow generation, BHP Brasil's provision for a 50 per cent share of the expected Germano decommissioning costs is US$184 million (30 June 2021: US$232 million). The decommissioning is progressing, however further engineering work and required validation by Brazilian authorities could lead to changes to estimates in future reporting periods.

4 Significant events – Samarco dam failure continued

Key judgements and estimates

Judgements: The outcomes of litigation are inherently difficult to predict and significant judgement has been applied in assessing the likely outcome of legal claims and determining which legal claims require recognition of a provision or disclosure of a contingent liability. The facts and circumstances relating to these cases are regularly evaluated in determining whether a provision for any specific claim is required.

Management has determined that a provision can only be recognised for obligations under the Framework Agreement and Samarco Germano dam decommissioning as at 30 June 2022. It is not yet possible to provide a range of possible outcomes or a reliable estimate of potential future exposures to BHP in connection to the contingent liabilities noted below, given their status.

Estimates: The provision for the Samarco dam failure currently only reflects the Group's estimate of the remaining costs to complete Programs under the Framework Agreement and requires the use of significant judgements, estimates and assumptions. Based on current estimates, it is expected that approximately 95 per cent of remaining costs for Programs under the Framework Agreement will be incurred by December 2024.

While the provision has been measured based on the latest information available, changes in facts and circumstances are likely in future reporting periods and may lead to material revisions to these estimates. However, it is currently not possible to determine what facts and circumstances may change, therefore revisions in future reporting periods due to the key estimates and factors outlined below cannot be reliably measured.

The key estimates that may have a material impact on the provision in the next and future reporting periods include the:

- number of people eligible for financial assistance and compensation and the corresponding amount of expected compensation
- costs to complete key infrastructure programs

The provision may also be affected by factors including but not limited to:

- potential changes in scope of work and funding amounts required under the Framework Agreement including the impact of the decisions of the Interfederative Committee along with further technical analysis, community participation required under the Governance Agreement and rulings made by the 12th Federal Court
- the outcome of ongoing negotiations with State and Federal Prosecutors, including review of Fundação Renova's Programs as provided in the Governance Agreement
- actual costs incurred
- resolution of uncertainty in respect of the nature and extent of Samarco's long-term cash generation
- updates to discount and foreign exchange rates
- the outcomes of Samarco's judicial reorganisation

In addition, the provision may be impacted by decisions in, or resolution of, existing and potential legal claims in Brazil and other jurisdictions, including the outcome of the United Kingdom group action complaint and the negotiations seeking a definitive and substantive settlement of the obligations under the Framework Agreement and the R$155 billion (approximately US$30 billion) Federal Public Prosecution Office claim.

Outcomes of the negotiations are highly uncertain and it is therefore not possible to provide a reliable estimate of potential outcomes.

Given these factors, future actual cash outflows may differ from the amounts currently provided and changes to any of the key assumptions and estimates outlined above could result in a material impact to the provision in the next and future reporting periods.

Contingent liabilities

The following matters are disclosed as contingent liabilities and given the status of these matters it is not possible to provide a range of possible outcomes or a reliable estimate of potential future exposures for BHP, unless otherwise stated. A number of the claims below have not specified the amount of damages sought and, where this is specified, amounts could change as the matter progresses. Ultimately, all the legal matters disclosed as contingent liabilities could have a material adverse impact on BHP's business, competitive position, cash flows, prospects, liquidity and shareholder returns.

Federal Public Prosecution Office claim

BHP Brasil is among the defendants named in a claim brought by the Federal Public Prosecution Office on 3 May 2016, seeking R$155 billion (approximately US$30 billion) for reparation, compensation and moral damages in relation to the Samarco dam failure.

The 12th Federal Court previously suspended the Federal Public Prosecution Office claim, including a R$7.7 billion (approximately US$1.5 billion) injunction request. On 30 September 2020, Brazilian Federal and State prosecutors and public defenders filed a request for the immediate resumption of the R$155 billion (approximately US$30 billion) claim, which was suspended since the date of ratification of the Governance Agreement. Formal suspension of the claim ceased on 10 December 2021, however no further rulings have been made.

BHP Brasil, Samarco, Vale and Federal and State prosecutors have been engaging in negotiations to seek a definitive and substantive settlement of the obligations under the Framework Agreement and the R$155 billion (approximately US$30 billion) Federal Public Prosecution Office claim. The negotiations are overseen by the President of the National Council of Justice, as the Chief Justice of the Supreme Court in Brazil and are expected to continue until at least the expected end of the term of the current President on 31 August 2022. Outcomes of the negotiations are highly uncertain and it is therefore not possible to provide a reliable estimate of potential outcomes and there is a risk that a negotiated outcome may be materially higher than amounts currently reflected in the Samarco dam failure provision.

Australian class action complaint

BHP Group Ltd is named as a defendant in a shareholder class action filed in the Federal Court of Australia on behalf of persons who acquired shares in BHP Group Ltd on the Australian Securities Exchange or shares in BHP Group Plc on the London Stock Exchange and Johannesburg Stock Exchange in periods prior to the Samarco dam failure. The amount of damages sought is unspecified.

United Kingdom group action complaint

BHP Group Plc and BHP Group Ltd were named as defendants in group action claims for damages filed in the courts of England. These claims were filed on behalf of certain individuals, governments, businesses and communities in Brazil allegedly impacted by the Samarco dam failure. The amount of damages sought in these claims is unspecified. In August 2019, the BHP parties filed a preliminary application to strike out or stay this action on jurisdictional and other procedural grounds. That application was successful before the High Court and the action was dismissed. However, on 8 July 2022, the Court of Appeal reversed the dismissal decision and allowed the action to proceed in England. BHP Group Ltd and BHP Group (UK) Ltd (formerly BHP Group Plc) will seek permission to appeal to the Supreme Court of the United Kingdom.

Criminal charges

The Federal Prosecutors' Office has filed criminal charges against BHP Brasil, Samarco and Vale and certain employees and former employees of BHP Brasil (Affected Individuals) in the Federal Court of Ponte Nova, Minas Gerais. On 3 March 2017, BHP Brasil filed its preliminary defences. The Federal Court terminated the charges against eight of the Affected Individuals. The Federal Prosecutors' Office has appealed seven of those decisions with hearings of the appeals still pending. BHP Brasil rejects outright the charges against the company and the Affected Individuals and is defending itself from all charges while fully supporting each of the Affected Individuals in their defence of the charges.

Civil public action commenced by Associations concerning the use of Tanfloc for water treatment

The Vila Lenira Residents Association, State of Espírito Santo Rural Producers and Artisans Association, Colatina Velha Neighborhood Residents Association, and United for the Progress of Palmeiras Neighborhood Association have filed a lawsuit against Samarco, BHP Brasil and Vale and others, including the State of Minas Gerais, the State of Espirito Santo and the Federal Government. The plaintiffs allege that the defendants carried out a clandestine study on the citizens of the locations affected by the Fundão's Dam Failure, using TANFLOC – a tannin-based flocculant/coagulant – that is currently used for wastewater treatment applications. The plaintiffs claim that this product allegedly put the population at risk due to its alleged experimental qualities.

The plaintiffs are seeking multiple kinds of relief – material damage, moral damages, loss of profits – and that the defendants should pay for water supply in all locations where there is no water source other than the Doce River.

On 25 July 2022, Samarco, BHP Brasil and Vale presented their defences individually, as well as the State of Minas Gerais, the State of Espírito Santo and the Federal Government. The Court's decision is still pending.

Other claims

BHP Brasil is among the companies named as defendants in a number of legal proceedings initiated by individuals, non-governmental organisations, corporations and governmental entities in Brazilian Federal and State courts following the Samarco dam failure. The other defendants include Vale, Samarco and Fundação Renova. The lawsuits include claims for compensation, environmental reparation and violations of Brazilian environmental and other laws, among other matters. The lawsuits seek various remedies including reparation costs, compensation to injured individuals and families of the deceased, recovery of personal and property losses, moral damages and injunctive relief. In addition, government inquiries and investigations relating to the Samarco dam failure have been commenced by numerous agencies of the Brazilian government and are ongoing.

Additional lawsuits and government investigations relating to the Samarco dam failure could be brought against BHP Brasil and possibly other BHP entities in Brazil or other jurisdictions.

BHP insurance

BHP has various third party general liability and directors and officers insurances for claims related to the Samarco dam failure made directly against BHP Brasil or other BHP entities, their directors and officers, including class actions. External insurers have been notified of the Samarco dam failure along with the third party claims and class actions referred to above. In the period since the dam failure, the Group has recognised US$573 million other income from general liability insurance proceeds related to the dam failure. Recoveries related to general liability insurance are now considered complete.

As at 30 June 2022, an insurance receivable has not been recognised for any potential recoveries in respect of ongoing matters.

Commitments

Under the terms of the Samarco joint venture agreement, BHP Brasil does not have an existing obligation to fund Samarco.

BHP has agreed to fund a total of up to US$1,350 million for the Fundação Renova programs and Samarco's working capital during calendar year 2022. Samarco's cash flow generation in the period was sufficient to fund its working capital and the Fundação Renova programs, as such no funding was provided by the Group in the six months to 30 June 2022. Any additional requests for funding or future investment provided would be subject to a future decision by BHP, accounted for at that time.

Samarco judicial reorganisation

Samarco filed for Judicial Reorganisation (JR) in April 2021, with the Commercial Courts of Belo Horizonte, State of Minas Gerais, Brazil (JR Court), after multiple enforcement actions taken by certain financial creditors of Samarco which threatened Samarco's operations. The JR Court granted a stay of the enforcement actions in Brazil until 15 October 2022.

The JR is an insolvency proceeding that provides a means for Samarco to seek to restructure its financial debts and establish a sustainable financial position that allows Samarco to, among other things, continue to rebuild its operations and strengthen its ability to meet its Fundação Renova funding obligations. Samarco's operations have continued during the JR proceeding.

According to the list of creditors filed with the JR Court by the Judicial Administrators (who are in charge of a first review of the list of creditors filed by Samarco), Fundação Renova's funding obligations undertaken by Samarco are not subject to the JR, although some financial creditors of Samarco have objected to this position. Some such creditors filed challenges to the list of creditors filed by the Judicial Administrators, in order to, among other things, prevent Samarco from funding Fundação Renova. In December 2021, the 12th Federal Court granted BHP Brasil's request that Samarco be able to fund Fundação Renova obligations, overturning a temporary injunction against such funding previously granted by the State Court in October 2021. BHP Brasil also obtained a preliminary injunction from the Superior Court supporting the jurisdiction of the 12th Federal Court, and not the State Court, in this matter. An appeal against this ruling by certain financial creditors is still to be ruled upon. Samarco has, with the support of BHP Brasil and Vale, continued to meet its Fundação Renova funding obligations.

In April 2022, Samarco presented a restructure proposal for voting at a meeting of its creditors under the JR proceeding, which was rejected by certain of the Samarco financial creditors. Certain Samarco creditors, including a group of financial creditors and Samarco's employee unions then proposed alternative restructure proposals. Samarco, BHP Brasil and Vale subsequently each filed objections with the JR Court to both the voting process regarding the rejection of the Samarco proposal and the restructure proposal filed by a group of financial creditors. These legal disputes, and others in the JR process, have yet to be ruled on by the JR Court.

It is expected that there will be continuing litigation from creditors against Samarco and its shareholders over the course of the JR proceeding, including with respect to the treatment of Samarco's Fundação Renova-related obligations and attempts to pierce Samarco's corporate veil to hold BHP Brasil and Vale liable for Samarco's debts. The duration and outcome of the JR remains uncertain with the potential for protracted litigation and appeals because, among other things, the Samarco JR is occurring under new and untested Brazilian bankruptcy legislation.

While the JR is not expected to affect Samarco's obligation or commitment to make full redress for the 2015 Fundão dam failure, and is not expected to impact Fundação Renova's ability to undertake that remediation and compensation, it is not possible to determine the outcomes of the JR or reliably estimate any impact that the reorganisation may have for BHP Brasil, including its share of the Samarco dam failure provisions.

4 Significant events – Samarco dam failure continued

The following section includes disclosure required by IFRS of Samarco's provisions, contingencies and other matters arising from the dam failure for matters in addition to the above-mentioned claims to which Samarco is a party.

Samarco

Dam failure related provisions and contingencies

In addition to its obligations under the Framework Agreement as at 30 June 2022, Samarco has recognised provisions of US$0.3 billion (30 June 2021: US$0.2 billion), based on currently available information. The magnitude, scope and timing of these additional costs are subject to a high degree of uncertainty and Samarco has indicated that it anticipates that it will incur future costs beyond those provided. These uncertainties are likely to continue for a significant period and changes to key assumptions could result in a material change to the amount of the provision in future reporting periods. Any such unrecognised obligations are therefore contingent liabilities and, at present, it is not practicable to estimate their magnitude or possible timing of payment. Accordingly, it is also not possible to provide a range of possible outcomes or a reliable estimate of total potential future exposures at this time.

Samarco is also named as a defendant in a number of other legal proceedings initiated by individuals, non-governmental organisations, corporations and governmental entities in Brazilian Federal and State courts following the Samarco dam failure. The lawsuits include claims for compensation, environmental rehabilitation and violations of Brazilian environmental and other laws, among other matters. The lawsuits seek various remedies including rehabilitation costs, compensation to injured individuals and families of the deceased, recovery of personal and property losses, moral damages and injunctive relief. In addition, government inquiries and investigations relating to the Samarco dam failure have been commenced by numerous agencies of the Brazilian government and are ongoing. Given the status of proceedings it is not possible to provide a range of possible outcomes or a reliable estimate of total potential future exposures to Samarco.

Additional lawsuits and government investigations relating to the Samarco dam failure could be brought against Samarco.

Samarco insurance

Samarco has standalone insurance policies in place with Brazilian and global insurers. Insurers' loss adjusters or claims representatives continue to investigate and assist with the claims process for matters not yet settled. As at 30 June 2022, an insurance receivable has not been recognised by Samarco in respect of ongoing matters.

Samarco commitments

At 30 June 2022, Samarco has commitments of US$0.7 billion (30 June 2021: US$0.7 billion). Following the dam failure Samarco invoked force majeure clauses in a number of long-term contracts with suppliers and service providers to suspend contractual obligations.

Samarco non-dam failure related contingent liabilities

The following non-dam failure related contingent liabilities pre-date and are unrelated to the Samarco dam failure. Samarco is currently contesting both of these matters in the Brazilian courts. Given the status of these tax matters, the timing of resolution and potential economic outflow for Samarco is uncertain.

Brazilian Social Contribution Levy

Samarco has received tax assessments for the alleged non-payment of Brazilian Social Contribution Levy for the calendar years 2007-2014 totalling approximately R$6.2 billion (approximately US$1.2 billion).

Brazilian corporate income tax rate

Samarco has received tax assessments for alleged incorrect calculation of Corporate Income Tax (IRPJ) in respect of the 2000-2003 and 2007-2014 income years totalling approximately R$4.8 billion (approximately US$0.9 billion).

5 Expenses and other income

	2022 US$M	2021 US$M Restated	2020 US$M Restated
Employee benefits expense:			
Wages, salaries and redundancies	**4,197**	4,018	3,318
Employee share awards	**109**	88	90
Social security costs	**4**	3	2
Pension and other post-retirement obligations	**338**	274	246
Less employee benefits expense classified as exploration and evaluation expenditure	**(30)**	(26)	(15)
Changes in inventories of finished goods and work in progress	**(774)**	(321)	(348)
Raw materials and consumables used	**5,991**	4,899	5,472
Freight and transportation	**2,319**	1,900	1,838
External services	**4,525**	4,640	3,899
Third-party commodity purchases	**2,959**	2,220	1,098
Net foreign exchange (gains)/losses	**(326)**	293	(617)
Fair value change on derivatives[1]	**(29)**	87	393
Government royalties paid and payable	**4,014**	3,080	2,171
Exploration and evaluation expenditure incurred and expensed in the current period	**199**	134	123
Depreciation and amortisation expense	**5,683**	5,084	4,667
Net impairments:			
Property, plant and equipment	**515**	2,474	482
Goodwill and other intangible assets	**–**	33	–
All other operating expenses	**2,677**	1,991	2,634
Total expenses	**32,371**	30,871	25,453
Insurance recoveries[2]	**(4)**	(46)	(489)
(Gain)/loss on disposal of subsidiaries and operations[3]	**(840)**	2	–
Dividend income[4]	**(241)**	(2)	(2)
Other income[5]	**(313)**	(334)	(229)
Total other income	**(1,398)**	(380)	(720)

1 Fair value change on derivatives is principally related to commodity price contracts, foreign exchange contracts and embedded derivatives used in the ordinary course of business as well as derivatives used as part of the funding of dividends.

2 Insurance recoveries is principally related to claims received from Samarco dam failure. Refer to note 4 'Significant events – Samarco dam failure' for further information.

3 Mainly relates to the divestment of BMC in FY2022. Refer to note 3 'Exceptional items' for further information.

4 During FY2022, the Group received dividends of US$238 million from Cerrejón, which reduced completion proceeds net of transaction costs to US$50 million. Refer to note 29 'Investments accounted for using the equity method' for details.

5 Other income is generally income earned from transactions outside the course of the Group's ordinary activities and may include certain management fees from non-controlling interests and joint arrangements, royalties and commission income.

Recognition and measurement

Other income is recognised when it is probable that the economic benefits associated with a transaction will flow to the Group and can be reliably measured. Dividend income is recognised upon declaration.

6 Income tax expense

	2022 US$M	2021 US$M Restated	2020 US$M Restated
Total taxation expense comprises:			
Current tax expense	**10,673**	9,018	4,285
Deferred tax expense/(benefit)	**64**	1,598	(88)
	10,737	10,616	4,197

	2022 US$M	2021 US$M Restated	2020 US$M Restated
Factors affecting income tax expense for the year			
Income tax expense differs to the standard rate of corporation tax as follows:			
Profit before taxation	**33,137**	24,292	12,825
Tax on profit at Australian prima facie tax rate of 30 per cent	**9,941**	7,288	3,847
Non-tax effected operating losses and capital gains[1]	**1,087**	2,640	409
Tax on remitted and unremitted foreign earnings	**441**	485	225
Investment and development allowance	**–**	–	(99)
Tax rate changes	**–**	(1)	(8)
Recognition of previously unrecognised tax assets	**(3)**	(28)	(7)
Tax effect of loss from equity accounted investments, related impairments and expenses[2]	**(19)**	315	153
Amounts (over)/under provided in prior years	**(80)**	(57)	13
Foreign exchange adjustments	**(233)**	(33)	41
Impact of tax rates applicable outside of Australia	**(801)**	(669)	(272)
Other	**97**	436	(86)
Income tax expense	**10,430**	10,376	4,216
Royalty-related taxation (net of income tax benefit)	**307**	240	(19)
Total taxation expense	**10,737**	10,616	4,197

1 Includes the tax impacts related to the exceptional impairments of US deferred tax assets in the year ended 30 June 2022, NSWEC and Potash in the year ended 30 June 2021 and Cerro Colorado in the year ended 30 June 2020, as presented in note 3 'Exceptional items'.

2 The loss from equity accounted investments, related impairments and expenses is net of income tax, with the exception of the Samarco forward exchange derivatives described in note 4 'Significant events – Samarco dam failure'. This item removes the prima facie tax effect on such loss, related impairments and expenses, excluding the impact of the Samarco forward exchange derivatives which are taxable.

Income tax recognised in other comprehensive income is as follows:

	2022 US$M	2021 US$M	2020 US$M
Income tax effect of:			
Items that may be reclassified subsequently to the income statement:			
Hedges:			
Gains/(losses) taken to equity	**274**	(259)	94
(Gains)/losses transferred to the income statement	**(264)**	252	(89)
Others	**–**	(1)	–
Income tax credit/(charge) relating to items that may be reclassified subsequently to the income statement	**10**	(8)	5
Items that will not be reclassified to the income statement:			
Remeasurement gains/(losses) on pension and medical schemes	**(9)**	(21)	25
Others	**–**	1	1
Income tax (charge)/credit relating to items that will not be reclassified to the income statement	**(9)**	(20)	26
Total income tax credit/(charge) relating to components of other comprehensive income[1]	**1**	(28)	31

1 Included within total income tax relating to components of other comprehensive income is US$1 million relating to deferred taxes and US$ nil relating to current taxes (2021: US$(28) million and US$ nil; 2020: US$31 million and US$ nil).

6 Income tax expense continued

Recognition and measurement

Taxation on the profit/(loss) for the year comprises current and deferred tax. Taxation is recognised in the income statement except to the extent that it relates to items recognised directly in equity or other comprehensive income, in which case the tax effect is also recognised in equity or other comprehensive income.

Current tax	Deferred tax	Royalty-related taxation
Current tax is the expected tax on the taxable income for the year, using tax rates and laws enacted or substantively enacted at the reporting date, and any adjustments to tax payable in respect of previous years.	Deferred tax is the tax expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit, and is accounted for in accordance with IAS 12. Deferred tax is generally provided on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the Financial Statements. Deferred tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilised. Deferred tax is not recognised for temporary differences relating to: – initial recognition of goodwill – initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit – investment in subsidiaries, associates and jointly controlled entities where the Group is able to control the timing of the reversal of the temporary difference and it is probable that they will not reverse in the foreseeable future Deferred tax is measured at the tax rates that are expected to be applied when the asset is realised or the liability is settled, based on the laws that have been enacted or substantively enacted at the reporting date. Current and deferred tax assets and liabilities are offset when the Group has a legally enforceable right to offset and when the tax balances are related to taxes levied by the same tax authority and the Group intends to settle on a net basis, or realise the asset and settle the liability simultaneously. The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.	Royalties are treated as taxation arrangements (impacting income tax expense/(benefit)) when they are imposed under government authority and the amount payable is calculated by reference to revenue derived (net of any allowable deductions) after adjustment for temporary differences. Obligations arising from royalty arrangements that do not satisfy these criteria are recognised as current liabilities and included in expenses.

Uncertain tax and royalty matters

The Group operates across many tax jurisdictions. Application of tax law can be complex and requires judgement to assess risk and estimate outcomes, particularly in relation to the Group’s cross-border operations and transactions. These judgements are subject to risk and uncertainty, hence there is a possibility that changes in circumstances will alter expectations, which may impact the amount of tax assets and tax liabilities, including deferred tax, recognised on the balance sheet and the amount of other tax losses and temporary differences not yet recognised. The evaluation of tax risks considers both amended assessments received and potential sources of challenge from tax authorities. The status of proceedings for these matters will impact the ability to determine the potential exposure and in some cases, it may not be possible to determine a range of possible outcomes or a reliable estimate of the potential exposure.

The Group has unresolved tax and royalty matters for which the timing of resolution and potential economic outflow are uncertain. Tax and royalty matters with uncertain outcomes arise in the normal course of business and occur due to changes in tax law, changes in interpretation of tax law, periodic challenges and disagreements with tax authorities and legal proceedings.

Tax and royalty obligations assessed as having probable future economic outflows capable of reliable measurement are provided for as at 30 June 2022. Matters with a possible economic outflow and/or presently incapable of being measured reliably are contingent liabilities and disclosed in note 32 ‘Contingent liabilities’. Details of uncertain tax and royalty matters relating to Samarco are disclosed in note 4 ‘Significant events – Samarco dam failure’.

Key judgements and estimates

Income tax classification

Judgements: The Group’s accounting policy for taxation, including royalty-related taxation, requires management’s judgement as to the types of arrangements considered to be a tax on income in contrast to an operating cost.

Deferred tax

Judgements: Judgement is required to determine the amount of deferred tax assets that are recognised based on the likely timing and the level of future taxable profits. Judgement is applied in recognising deferred tax liabilities arising from temporary differences in investments. These deferred tax liabilities caused principally by retained earnings held in foreign tax jurisdictions are recognised unless repatriation of retained earnings can be controlled and is not expected to occur in the foreseeable future.

Estimates: The Group assesses the recoverability of recognised and unrecognised deferred taxes, including losses in Australia, the United States and Canada on a consistent basis. Estimates and assumptions relating to projected earnings and cash flows as applied in the Group impairment process are used for operating assets.

7 Earnings per share

	2022	2021 Restated	2020 Restated
Earnings attributable to BHP shareholders (US$M)			
– Continuing operations	**20,245**	11,529	7,848
– Total	**30,900**	11,304	7,956
Weighted average number of shares (Million)			
– Basic	**5,061**	5,057	5,057
– Diluted	**5,071**	5,068	5,069
Basic earnings per ordinary share (US cents)			
– Continuing operations	**400.0**	228.0	155.2
– Total	**610.6**	223.5	157.3
Diluted earnings per ordinary share (US cents)			
– Continuing operations	**399.2**	227.5	154.8
– Total	**609.3**	223.0	157.0
Headline earnings per ordinary share (US cents)			
– Basic	**439.0**	284.8	171.1
– Diluted	**438.1**	284.2	170.7

Refer to note 27 ‘Discontinued operations’ for basic earnings per share and diluted earnings per share for Discontinued operations.

Earnings on American Depositary Shares represent twice the earnings for BHP Group Limited ordinary shares.

Headline earnings is a Johannesburg Stock Exchange defined performance measure and is reconciled from earnings attributable to ordinary shareholders as follows:

	2022 US$M	2021 US$M	2020 US$M
Earnings attributable to BHP shareholders	**30,900**	11,304	7,956
Adjusted for:			
(Gain)/loss on sales of PP&E, Investments and Operations[1]	**(95)**	(50)	4
Impairments of property, plant and equipment, financial assets and intangibles	**515**	2,633	494
Samarco impairment expense	**–**	111	95
Cerrejón impairment expense	**–**	466	–
Gain on disposal of BHP Mitsui Coal	**(840)**	–	–
Gain on merger of Petroleum	**(8,167)**	–	–
Other[2]	**–**	–	48
Tax effect of above adjustments	**(97)**	(60)	54
Subtotal of adjustments	**(8,684)**	3,100	695
Headline earnings	**22,216**	14,404	8,651
Diluted headline earnings	**22,216**	14,404	8,651

[1] Included in other income.

[2] Mainly represent BHP share of impairment embedded in the statutory income statement of the Group’s equity accounted investments.

Recognition and measurement

Diluted earnings attributable to BHP shareholders are equal to the earnings attributable to BHP shareholders.

Prior to Group’s corporate structure unification, the calculation of the number of ordinary shares used in the computation of basic earnings per share was the aggregate of the weighted average number of ordinary shares of BHP Group Limited and BHP Group Plc outstanding during the period after deduction of the number of shares held by the Billiton Employee Share Ownership Trust and the BHP Billiton Limited Employee Equity Trust. Effective from 31 January 2022, the aggregate of the weighted average number of ordinary shares of only BHP Group Limited is considered in the computation of basic earnings per share. Refer to note 16 ‘Share capital’ for details on unification.

For the purposes of calculating diluted earnings per share, the effect of 10 million dilutive shares has been taken into account for the year ended 30 June 2022 (2021: 11 million shares; 2020: 12 million shares). The Group’s only potential dilutive ordinary shares are share awards granted under the employee share ownership plans for which terms and conditions are described in note 25 ‘Employee share ownership plans’. Diluted earnings per share calculation excludes instruments which are considered antidilutive.

At 30 June 2022, there are no instruments which are considered antidilutive (2021: nil; 2020: nil).

Working capital

8 Trade and other receivables

	2022 US$M	2021 US$M
Trade receivables	**4,411**	4,450
Other receivables[1]	**1,168**	1,946
Total	**5,579**	6,396
Comprising:		
Current	**5,426**	6,059
Non-current	**153**	337

[1] Other receivables mainly relate to indirect tax refunds and receivables from joint venture partners.

Recognition and measurement

Trade receivables are recognised initially at their transaction price or, for those receivables containing a significant financing component, at fair value. Trade receivables are subsequently measured at amortised cost using the effective interest method, less an allowance for impairment, except for provisionally priced receivables which are subsequently measured at fair value through profit or loss under IFRS 9.

The collectability of trade and other receivables is assessed continuously. At the reporting date, specific allowances are made for any expected credit losses based on a review of all outstanding amounts at reporting period-end. Individual receivables are written off when management deems them unrecoverable. The net carrying amount of trade and other receivables approximates their fair values.

Credit risk

Trade receivables generally have terms of less than 30 days. The Group has no material concentration of credit risk with any single counterparty and is not dominantly exposed to any individual industry.

Credit risk can arise from the non-performance by counterparties of their contractual financial obligations towards the Group. To manage credit risk, the Group maintains Group-wide procedures covering the application for credit approvals, granting and renewal of counterparty limits, proactive monitoring of exposures against these limits and requirements triggering secured payment terms. As part of these processes, the credit exposures with all counterparties are regularly monitored and assessed on a timely basis. The credit quality of the Group's customers is reviewed and the solvency of each debtor and their ability to pay the receivable is considered in assessing receivables for impairment.

The 10 largest customers represented 34 per cent (2021: 31 per cent) of total credit risk exposures managed by the Group.

Receivables are deemed to be past due or impaired in accordance with the Group's terms and conditions. These terms and conditions are determined on a case-by-case basis with reference to the customer's credit quality, payment performance and prevailing market conditions. As at 30 June 2022, trade receivables of US$103 million (2021: US$68 million) were past due but not impaired. The majority of these receivables were less than 30 days overdue.

At 30 June 2022, trade receivables are stated net of provisions for expected credit losses of US$3 million (2021: US$3 million).

9 Trade and other payables

	2022 US$M	2021 US$M
Trade payables	**5,360**	5,079
Other payables	**1,327**	1,948
Total	**6,687**	7,027
Comprising:		
Current	**6,687**	7,027
Non-current	**–**	–

10 Inventories

	2022 US$M	2021 US$M	Definitions
Raw materials and consumables	**1,713**	1,904	Spares, consumables and other supplies yet to be utilised in the production process or in the rendering of services.
Work in progress	**3,827**	3,046	Commodities currently in the production process that require further processing by the Group to a saleable form.
Finished goods	**710**	834	Commodities ready-for-sale and not requiring further processing by the Group.
Total[1]	**6,250**	5,784	
Comprising:			Inventories classified as non-current are not expected to be utilised or sold within 12 months after the reporting date or within the operating cycle of the business.
Current	**4,935**	4,426	
Non-current	**1,315**	1,358	

[1] Inventory write-downs of US$163 million were recognised during the year (2021: US$58 million; 2020: US$37 million). Inventory write-downs of US$23 million made in previous periods were reversed during the year (2021: US$26 million; 2020: US$8 million).

10 Inventories continued

Recognition and measurement

Regardless of the type of inventory and its stage in the production process, inventories are valued at the lower of cost and net realisable value. Cost is determined primarily on the basis of average costs and involves estimates of expected metal recoveries and work in progress volumes, calculated using available industry, engineering and scientific data. These estimates are periodically reassessed by the Group taking into account technical analysis and historical performance.

For processed inventories, cost is derived on an absorption costing basis. Cost comprises costs of purchasing raw materials and costs of production, including attributable mining and manufacturing overheads taking into consideration normal operating capacity.

Inventory quantities are assessed primarily through surveys and assays.

Resource assets

11 Property, plant and equipment

	Land and buildings US$M	Plant and equipment US$M	Other mineral assets US$M	Assets under construction US$M	Exploration and evaluation US$M	Total US$M
Net book value – 30 June 2022						
At the beginning of the financial year	**8,072**	**44,682**	**8,941**	**10,432**	**1,686**	**73,813**
Additions[1]	**41**	**1,935**	**792**	**5,872**	**137**	**8,777**
Remeasurements of index-linked freight contracts[2]	**–**	**(369)**	**–**	**–**	**–**	**(369)**
Depreciation for the year	**(663)**	**(5,564)**	**(276)**	**–**	**–**	**(6,503)**
Impairments for the year[3]	**(14)**	**(499)**	**(2)**	**–**	**–**	**(515)**
Disposals	**(3)**	**(22)**	**–**	**–**	**–**	**(25)**
Divestment and demerger of subsidiaries and operations[4]	**(448)**	**(8,007)**	**(545)**	**(3,549)**	**(842)**	**(13,391)**
Transfers and other movements	**1,094**	**3,344**	**(416)**	**(3,724)**	**(790)**	**(492)**
At the end of the financial year[5]	**8,079**	**35,500**	**8,494**	**9,031**	**191**	**61,295**
– Cost	**14,823**	**81,218**	**14,353**	**9,755**	**981**	**121,130**
– Accumulated depreciation and impairments	**(6,744)**	**(45,718)**	**(5,859)**	**(724)**	**(790)**	**(59,835)**
Net book value – 30 June 2021						
At the beginning of the financial year	8,387	39,429	8,652	13,774	2,120	72,362
Additions[1]	25	3,841	797	5,961	93	10,717
Acquisition of subsidiaries & operations[6]	–	151	491	–	–	642
Remeasurements of index-linked freight contracts[2]	–	(59)	–	–	–	(59)
Depreciation for the year	(694)	(5,748)	(310)	–	–	(6,752)
Impairments for the year[3]	(208)	(877)	(687)	(745)	(66)	(2,583)
Disposals	(18)	(9)	–	–	–	(27)
Divestment and demerger of subsidiaries and operations	–	(14)	–	(2)	–	(16)
Transfers and other movements	580	7,968	(2)	(8,556)	(461)	(471)
At the end of the financial year[5]	8,072	44,682	8,941	10,432	1,686	73,813
– Cost	14,545	108,049	15,059	11,177	2,531	151,361
– Accumulated depreciation and impairments	(6,473)	(63,367)	(6,118)	(745)	(845)	(77,548)

1 Includes change in estimates and net foreign exchange gains/(losses) related to the closure and rehabilitation provisions for operating sites. Refer to note 15 'Closure and rehabilitation provisions'.

2 Relates to remeasurements of index-linked freight contracts including continuous voyage charters (CVCs). Refer to note 21 'Leases'.

3 Refer to note 13 'Impairment of non-current assets' for information on impairments.

4 BMC and Petroleum were disposed in May 2022 and June 2022 respectively. Refer to notes 3 'Exceptional items' and 27 'Discontinued operations' for more information.

5 Includes the carrying value of the Group's right-of-use assets relating to land and buildings and plant and equipment of US$2,361 million (2021: US$3,350 million). Refer to note 21 'Leases' for the movement of the right-of-use assets.

6 Relates to the acquisition of an additional 28 per cent working interest in Shenzi.

Recognition and measurement

Property, plant and equipment

Property, plant and equipment is recorded at cost less accumulated depreciation and impairment charges. Cost is the fair value of consideration given to acquire the asset at the time of its acquisition or construction and includes the direct costs of bringing the asset to the location and the condition necessary for operation and the estimated future costs of closure and rehabilitation of the facility.

Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. Refer to note 21 'Leases' for further details. Right-of-use assets are presented within the category of property, plant and equipment according to the nature of the underlying asset leased.

Exploration and evaluation

Exploration costs are incurred to discover mineral resources. Evaluation costs are incurred to assess the technical feasibility and commercial viability of resources found.

Exploration and evaluation expenditure is charged to the income statement as incurred, except in the following circumstances in which case the expenditure may be capitalised:

- the exploration and evaluation activity is within an area of interest that was previously acquired as an asset acquisition or in a business combination and measured at fair value on acquisition or
- the existence of a commercially viable mineral deposit has been established

11 Property, plant and equipment continued

A regular review of each area of interest is undertaken to determine the appropriateness of continuing to carry forward costs in relation to that area. Capitalised costs are only carried forward to the extent that they are expected to be recovered through the successful exploitation of the area of interest or alternatively by its sale. To the extent that capitalised expenditure is no longer expected to be recovered, it is charged to the income statement.

Development expenditure

When proven mineral reserves are determined and development is sanctioned, capitalised exploration and evaluation expenditure is reclassified as assets under construction within property, plant and equipment. All subsequent development expenditure is capitalised and classified as assets under construction, provided commercial viability conditions continue to be satisfied.

The Group may use funds sourced from external parties to finance the acquisition and development of assets and operations. Finance costs are expensed as incurred, except where they relate to the financing of construction or development of qualifying assets. Borrowing costs directly attributable to acquiring or constructing a qualifying asset are capitalised during the development phase. Development expenditure is net of proceeds from the saleable material extracted during the development phase. On completion of development, all assets included in assets under construction are reclassified as either plant and equipment or other mineral assets and depreciation commences.

Other mineral assets

Other mineral assets comprise:

- capitalised exploration, evaluation and development expenditure for assets in production
- mineral rights acquired
- capitalised development and production stripping costs

Overburden removal costs

The process of removing overburden and other waste materials to access mineral deposits is referred to as stripping. Stripping is necessary to obtain access to mineral deposits and occurs throughout the life of an open-pit mine. Development and production stripping costs are classified as other mineral assets in property, plant and equipment.

Stripping costs are accounted for separately for individual components of an ore body. The determination of components is dependent on the mine plan and other factors, including the size, shape and geotechnical aspects of an ore body. The Group accounts for stripping activities as follows:

Development stripping costs

These are initial overburden removal costs incurred to obtain access to mineral deposits that will be commercially produced. These costs are capitalised when it is probable that future economic benefits (access to mineral ores) will flow to the Group and costs can be measured reliably.

Once the production phase begins, capitalised development stripping costs are depreciated using the units of production method based on the proven and probable reserves of the relevant identified component of the ore body which the initial stripping activity benefits.

Production stripping costs

These are post initial overburden removal costs incurred during the normal course of production activity, which commences after the first saleable minerals have been extracted from the component. Production stripping costs can give rise to two benefits, the accounting for which is outlined below:

	Production stripping activity	
Benefits of stripping activity	Extraction of ore (inventory) in current period.	Improved access to future ore extraction.
Period benefited	Current period	Future period(s)
Recognition and measurement criteria	When the benefits of stripping activities are realised in the form of inventory produced; the associated costs are recorded in accordance with the Group's inventory accounting policy.	When the benefits of stripping activities are improved access to future ore; production costs are capitalised when all the following criteria are met: – the production stripping activity improves access to a specific component of the ore body and it is probable that economic benefits arising from the improved access to future ore production will be realised – the component of the ore body for which access has been improved can be identified – costs associated with that component can be measured reliably
Allocation of costs	Production stripping costs are allocated between the inventory produced and the production stripping asset using a life-of-component waste-to-ore (or mineral contained) strip ratio. When the current strip ratio is greater than the estimated life-of-component ratio a portion of the stripping costs is capitalised to the production stripping asset.	
Asset recognised from stripping activity	Inventory	Other mineral assets within property, plant and equipment.
Depreciation basis	Not applicable	On a component-by-component basis using the units of production method based on proven and probable reserves.

Key judgements and estimates

Judgements: Judgement is applied by management in determining the components of an ore body.

Estimates: Estimates are used in the determination of stripping ratios and mineral reserves by component. Changes to estimates related to life-of-component waste-to-ore (or mineral contained) strip ratios and the expected ore production from identified components are accounted for prospectively and may affect depreciation rates and asset carrying values.

11 Property, plant and equipment continued

Depreciation

Depreciation of assets, other than land, assets under construction and capitalised exploration and evaluation that are not depreciated, is calculated using either the straight-line (SL) method or units of production (UoP) method, net of residual values, over the estimated useful lives of specific assets. The depreciation method and rates applied to specific assets reflect the pattern in which the asset's benefits are expected to be used by the Group. The Group's proved reserves for petroleum assets and proved and probable reserves for minerals assets are used to determine UoP depreciation unless doing so results in depreciation charges that do not reflect the asset's useful life. Where this occurs, alternative approaches to determining reserves are applied, such as using management's expectations of future oil and gas prices rather than yearly average prices, to provide a phasing of periodic depreciation charges that better reflects the asset's expected useful life.

Where assets are dedicated to a mine or petroleum lease, the useful lives below are subject to the lesser of the asset category's useful life and the life of the mine or petroleum lease, unless those assets are readily transferable to another productive mine or lease.

Assets classified as held for sale are measured at the lower of their carrying amount and fair value less cost to sell and therefore not depreciated. BMC and Petroleum were classified as held for sale since November 2021 and December 2021 respectively.

Key estimates

The determination of useful lives, residual values and depreciation methods involves estimates and assumptions and is reviewed annually. Any changes to useful lives or any other estimates or assumptions, including the expected impact of climate change and the transition to a lower carbon economy, may affect prospective depreciation rates and asset carrying values. The table below summarises the principal depreciation methods and rates applied to major asset categories by the Group.

Category	Buildings	Plant and equipment	Mineral rights and petroleum interests	Capitalised exploration, evaluation and development expenditure
Typical depreciation methodology	SL	SL	UoP	UoP
Depreciation rate	25-50 years	3-30 years	Based on the rate of depletion of reserves	Based on the rate of depletion of reserves

Commitments

The Group's commitments for capital expenditure were US$2,820 million as at 30 June 2022 (2021: US$2,469 million). The Group's commitments related to leases are included in note 21 'Leases'.

12 Intangible assets

	2022			2021		
	Goodwill US$M	**Other intangibles US$M**	**Total US$M**	Goodwill US$M	Other intangibles US$M	Total US$M
Net book value						
At the beginning of the financial year	**1,197**	**240**	**1,437**	1,197	377	1,574
Additions	**–**	**36**	**36**	–	23	23
Amortisation for the year	**–**	**(60)**	**(60)**	–	(93)	(93)
Impairments for the year[1]	**–**	**–**	**–**	–	(52)	(52)
Disposals	**–**	**(16)**	**(16)**	–	–	–
Divestment and demerger of subsidiaries and operations[2]	**–**	**(66)**	**(66)**	–	–	–
Transfers and other movements	**–**	**38**	**38**	–	(15)	(15)
At the end of the financial year	**1,197**	**172**	**1,369**	1,197	240	1,437
– Cost	**1,197**	**1,363**	**2,560**	1,197	1,506	2,703
– Accumulated amortisation and impairments	**–**	**(1,191)**	**(1,191)**	–	(1,266)	(1,266)

[1] Refer to note 13 'Impairment of non-current assets' for information on impairments.

[2] Relates to the merger of Petroleum with Woodside. Refer to note 27 'Discontinued operations' for more information.

Recognition and measurement

Goodwill

Where the fair value of the consideration paid for a business acquisition exceeds the fair value of the identifiable assets, liabilities and contingent liabilities acquired, the difference is treated as goodwill. Where consideration is less than the fair value of acquired net assets, the difference is recognised immediately in the income statement. Goodwill is not amortised and is measured at cost less any impairment losses.

Other intangibles

The Group capitalises amounts paid for the acquisition of identifiable intangible assets, such as software, licences and initial payments for the acquisition of mineral lease assets, where it is considered that they will contribute to future periods through revenue generation or reductions in cost. These assets, classified as finite life intangible assets, are carried in the balance sheet at the fair value of consideration paid (cost) less accumulated amortisation and impairment charges. Intangible assets with finite useful lives are amortised on a straight-line basis over their useful lives. The estimated useful lives are generally no greater than eight years.

Initial payments for the acquisition of intangible mineral lease assets are capitalised and amortised over the term of the permit. A regular review is undertaken of each area of interest to determine the appropriateness of continuing to carry forward costs in relation to that area. Capitalised costs are only carried forward to the extent that they are expected to be recovered through the successful exploitation of the area of interest or alternatively by its sale. To the extent that capitalised expenditure is no longer expected to be recovered, it is charged to the income statement.

Assets classified as held for sale are measured at the lower of their carrying amount and fair value less cost to sell and therefore not amortised.

13 Impairment of non-current assets

		2022			
Cash generating unit	**Segment**	**Property, plant and equipment US$M**	**Goodwill and other intangibles US$M**	**Equity-accounted investment US$M**	**Total US$M**
Cerro Colorado	Copper	**455**	**–**	**–**	**455**
Other	Various	**60**	**–**	**–**	**60**
Total impairment of non-current assets		**515**	**–**	**–**	**515**
Reversal of impairment		**–**	**–**	**–**	**–**
Net impairment of non-current assets – Continuing operations		**515**	**–**	**–**	**515**
Net impairment of non-current assets – Discontinued operations		**–**	**–**	**–**	**–**
Net impairment of non-current assets		**515**	**–**	**–**	**515**

		2021 Restated			
Cash generating unit	Segment	Property, plant and equipment US$M	Goodwill and other intangibles US$M	Equity-accounted investment US$M	Total US$M
New South Wales Energy Coal	Coal	1,025	32	–	1,057
Cerrejón	Coal	–	–	466	466
Potash	G&U	1,314	–	–	1,314
Other	Various	135	1	–	136
Total impairment of non-current assets		2,474	33	466	2,973
Reversal of impairment		–	–	–	–
Net impairment of non-current assets – Continuing operations		2,474	33	466	2,973
Net impairment of non-current assets – Discontinued operations		109	19	–	128
Net impairment of non-current assets		2,583	52	466	3,101

Recognition and measurement

Impairment tests for all non-financial assets (excluding goodwill) are performed when there is an indication of impairment. Goodwill is tested for impairment at least annually. Where the asset does not generate cash flows that are independent from other assets, the Group estimates the recoverable amount of the cash generating unit (CGU) to which the asset belongs, being the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. If the carrying amount of the asset or CGU exceeds its recoverable amount, the asset or CGU is impaired and an impairment loss is charged to the income statement so as to reduce the carrying amount in the balance sheet to its recoverable amount.

Previously impaired assets (excluding goodwill as impairment losses are not reversed in subsequent periods) are reviewed for possible reversal of previous impairment at each reporting date. Impairment reversal cannot exceed the carrying amount that would have been determined (net of depreciation) had no impairment loss been recognised for the asset or CGU. Such reversal is recognised in the income statement. There were no reversals of impairment in the current or prior year.

How recoverable amount is calculated

The recoverable amount is the higher of an asset's or CGU's fair value less cost of disposal (FVLCD) and its value in use (VIU).

Fair value less cost of disposal

FVLCD is an estimate of the amount that a market participant would pay for an asset or CGU, less the cost of disposal. FVLCD for mineral assets is generally determined using independent market assumptions to calculate the present value of the estimated future post-tax cash flows expected to arise from the continued use of the asset, including the anticipated cash flow effects of any capital expenditure to enhance production or reduce cost, and its eventual disposal where a market participant may take a consistent view. Cash flows are discounted using an appropriate post-tax market discount rate to arrive at a net present value of the asset, which is compared against the asset's carrying value. FVLCD may also take into consideration other market-based indicators of fair value. FVLCD are based primarily on Level 3 inputs as defined in note 23 'Financial risk management' unless otherwise noted.

Value in use

VIU is determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset in its present form and its eventual disposal or closure. VIU is determined by applying assumptions specific to the Group's continued use and cannot take into account future development. These assumptions are different to those used in calculating FVLCD and consequently the VIU calculation is likely to give a different result (usually lower) to a FVLCD calculation.

13 Impairment of non-current assets continued

Impairment of non-current assets (excluding goodwill)

Impairment of non-current assets relating to the year ended 30 June 2022 are detailed below.

Impairment of Cerro Colorado

The Group recognised a pre-tax impairment charge of US$455 million. The impairment charge primarily relates to an increase in closure and rehabilitation provision at Cerro Colorado due to additional work required to re-profile waste dumps for closure and an increase in scope for the closure activities.

Impairments of non-current assets relating to the year ended 30 June 2021 are detailed below.

Impairment of New South Wales Energy Coal

The Group recognised pre-tax impairment charges of US$1,057 million. The recoverable amount of negative US$300 million as at 30 June 2021 was determined using VIU methodology, applying discounted cash flow (DCF) techniques. The valuation for NSWEC was most sensitive to changes in energy coal prices, estimated future production volumes and discount rates. The valuation applied a post-tax real discount rate of 6.5 per cent.

Impairment of Cerrejón

The Group recognised a pre-tax impairment charge of US$466 million. The recoverable amount of US$284 million as at 30 June 2021 represented a FVLCD based on the expected net sale proceeds.

Impairment of Potash assets

The Group recognised a pre-tax impairment charge of US$1,314 million. The recoverable amount of US$3.3 billion as at 30 June 2021 was determined using FVLCD methodology, applying DCF techniques. The valuation was most sensitive to changes in the long-term potash price outlook and the risking applied to the future development phases of the potash resource. The valuation applied a post-tax real discount rate of 6.5 per cent.

Impairment test for goodwill

The carrying amount of goodwill has been allocated to the CGUs, or groups of CGUs, as follows:

Cash generating unit	**2022 US$M**	2021 US$M
Olympic Dam	**1,010**	1,010
Other	**187**	187
Total goodwill	**1,197**	1,197

For the purpose of impairment testing, goodwill has been allocated to CGUs or groups of CGUs, that are expected to benefit from the synergies of previous business combinations, which represent the level at which management will monitor and manage goodwill.

Olympic Dam goodwill	
Impairment test conclusion	The Group performed an impairment test of the Olympic Dam CGU, including goodwill, as at 31 December 2021 and an impairment charge was not required. A goodwill impairment test was not required at 30 June 2022 as there were no indicators of impairment.
How did the goodwill arise?	Goodwill arose on the acquisition of WMC Resources Ltd in June 2005.
Segment	Olympic Dam is part of the Copper reportable segment.
How were the valuations calculated?	FVLCD methodology using DCF techniques has been applied in determining the recoverable amount of Olympic Dam.
Significant assumptions and sensitivities	The current valuation of Olympic Dam exceeds its carrying amount by approximately US$2.4 billion (2021: US$1.8 billion) and is most sensitive to changes in copper and gold commodity prices, production volumes, operating costs and discount rates. The valuation applied a post-tax real discount rate of 6.5 per cent (2021: 6 per cent). Management consider that there are no reasonably possible changes in copper and gold price forecasts, operating cost estimates or the discount rate that would, in isolation, result in the estimated recoverable amount being equal to the carrying amount. A production volume decrease of 6 per cent (2021: 4.8 per cent) across all commodities (copper, gold, silver and uranium) would, in isolation, result in the estimated recoverable amount being equal to the carrying amount. Typically, changes in any one of the aforementioned assumptions (including operating performance) would be accompanied by a change in another assumption which may have an offsetting impact. Action is usually taken to respond to adverse changes in assumptions to mitigate the impact of any such change. Key judgements and estimates that have been applied in the FVLCD valuation are disclosed further below.

Other goodwill

Goodwill held by other CGUs is US$187 million (2021: US$187 million). This represents less than one per cent of net assets at 30 June 2022 (2021: less than one per cent). There was no impairment of other goodwill in the year to 30 June 2022 (2021: US$ nil).

13 Impairment of non-current assets continued

Key judgements and estimates

Judgements: Assessment of indicators of impairment or impairment reversal and the determination of CGUs for impairment purposes require significant management judgement.

Indicators of impairment may include changes in the Group's operating and economic assumptions, including those arising from changes in reserves or mine planning, updates to the Group's commodity supply, demand and price forecasts, or the possible additional impacts from emerging risks including those related to climate change and the transition to a low carbon economy.

Climate change

Impacts related to climate change and the transition to a low carbon economy may include:

- demand for the Group's commodities decreasing, due to policy, regulatory (including carbon pricing mechanisms), legal, technological, market or societal responses to climate change, resulting in a proportion of a CGU's reserves becoming incapable of extraction in an economically viable fashion
- physical impacts related to acute risks resulting from increased frequency or severity of extreme weather events, and those related to chronic risks resulting from longer-term changes in climate patterns

The Group's assessment of the potential impacts of climate change and the transition to a low carbon economy continues to mature. As outlined in the Basis of Preparation, where sufficiently developed, the potential financial impacts on the Group of climate change and the transition to a low carbon economy have been considered in the assessment of indicators of impairment, including:

- the Group's current assumptions relating to demand for commodities and carbon pricing, including their impact on the Group's long-term price forecasts
- the Group's operational emissions reduction strategy

Estimates: The Group performs a recoverable amount determination for an asset or CGU when there is an indication of impairment or impairment reversal.

When the recoverable amount is measured by reference to FVLCD, in the absence of quoted market prices or binding sale agreement, estimates are made regarding the present value of future post-tax cash flows. These estimates are made from the perspective of a market participant and include prices, future production volumes, operating costs, capital expenditure, closure and rehabilitation costs, taxes, risking factors applied to cash flows and discount rates. The cash flow forecasts may include net cash flows expected from the extraction, processing and sale of material that does not currently qualify for inclusion in ore reserves. Reserves and resources are included in the assessment of FVLCD to the extent that it is considered probable that a market participant would attribute value to them.

When recoverable amount is measured using VIU, estimates are made regarding the present value of future cash flows based on internal budgets and forecasts and life of asset plans. Key estimates are similar to those identified for FVLCD, although some assumptions and values may differ as they reflect the perspective of management rather than a market participant.

All estimates require management judgements and assumptions and are subject to risk and uncertainty that may be beyond the control of the Group; hence, there is a possibility that changes in circumstances will materially alter projections, which may impact the recoverable amount of assets/CGUs at each reporting date. While no indicators of impairment, or impairment reversal, were identified across the Group's CGUs at 30 June 2022, with the exception of the Cerro Colorado CGU, the carrying value of the Spence CGU is the most susceptible to changes in the significant estimates outlined below in the next reporting period.

The significant estimates impacting the Group's recoverable amount determinations are:

Commodity prices

Commodity prices were based on latest internal forecasts which assume short-term market prices will revert to the Group's assessment of long-term price. These price forecasts reflect management's long-term views of global supply and demand, built upon past experience of the commodity markets and are benchmarked with external sources of information such as analyst forecasts. Prices are adjusted based upon premiums or discounts applied to global price markers to reflect the location, nature and quality of the Group's production, or to take into account contracted prices.

Future production volumes

Estimated production volumes were based on detailed data and took into account development plans established by management as part of the Group's long-term planning process. When estimating FVLCD, assumptions reflect all reserves and resources that a market participant would consider when valuing the respective CGU, which in some cases are broader in scope than the reserves that would be used in a VIU test. In determining FVLCD, risk factors may be applied to reserves and resources which do not meet the criteria to be treated as proved.

Cash outflows (including operating costs, capital expenditure, closure and rehabilitation costs and taxes)

Cash outflows are based on internal budgets and forecasts and life of asset plans. Cost assumptions reflect management experience and expectations. Tax assumptions reflect existing tax and royalty regimes and rates applicable in the jurisdiction of the CGU. In the case of FVLCD, cash flow projections include the anticipated cash flow effects of any capital expenditure to enhance production or reduce cost where a market participant may take a consistent view. VIU does not take into account future development.

Discount rates

The Group uses real post-tax discount rates applied to real post-tax cash flows. The discount rates are derived using the weighted average cost of capital methodology. Adjustments to the rates are made for any risks that are not reflected in the underlying cash flows, including country risk.

14 Deferred tax balances

The movement for the year in the Group's net deferred tax position is as follows:

	2022 US$M	2021 US$M	2020 US$M
Net deferred tax (liability)/asset			
At the beginning of the financial year	**(1,402)**	(91)	(491)
Income tax (charge)/credit recorded in the income statement[1]	**(125)**	(1,325)	335
Income tax (charge)/credit recorded directly in equity	**(42)**	42	34
Divestment and demerger of subsidiaries and operations[2]	**(1,439)**	–	–
Other movements	**1**	(28)	31
At the end of the financial year	**(3,007)**	(1,402)	(91)

[1] Includes Discontinued operations income tax (charge)/credit to the income statement of US$(61) million (2021: US$273 million; 2020: US$247 million).

[2] Relates to the divestment of BMC and merger of Petroleum with Woodside. Refer to notes 3 'Exceptional items' and 27 'Discontinued operations' for more information.

For recognition and measurement refer to note 6 'Income tax expense'.

The composition of the Group's net deferred tax assets and liabilities recognised in the balance sheet and the deferred tax expense charged/(credited) to the income statement is as follows:

	Deferred tax assets		**Deferred tax liabilities**		**Charged/(credited) to the income statement**		
	2022 US$M	2021 US$M	**2022 US$M**	2021 US$M	**2022 US$M**	2021 US$M	2020 US$M
Type of temporary difference							
Depreciation[1]	**(526)**	(1,349)	**4,844**	4,716	**554**	488	1,394
Exploration expenditure	**9**	51	**–**	–	**13**	347	51
Employee benefits	**21**	94	**(322)**	(333)	**20**	(68)	(38)
Closure and rehabilitation	**104**	638	**(1,448)**	(2,086)	**24**	(515)	(334)
Resource rent tax	**–**	122	**–**	368	**(129)**	(309)	(119)
Other provisions	**70**	108	**(192)**	(227)	**49**	77	(268)
Deferred income	**51**	11	**(1)**	(16)	**(31)**	(31)	33
Deferred charges	**(57)**	(36)	**584**	602	**7**	68	(132)
Investments, including foreign tax credits	**139**	147	**365**	671	**(298)**	414	(77)
Foreign exchange gains and losses	**(13)**	(3)	**154**	133	**33**	63	(18)
Tax losses	**225**	1,999	**(307)**	(82)	**28**	678	(148)
Lease liability[1]	**17**	68	**(594)**	(658)	**(10)**	67	(793)
Other	**16**	62	**(20)**	226	**(135)**	46	114
Total	**56**	1,912	**3,063**	3,314	**125**	1,325	(335)

[1] Includes deferred tax associated with the recognition of right-of-use assets and lease liabilities on adoption of IFRS 16. Refer to note 21 'Leases'.

The amount of deferred tax assets dependent on future taxable profits not arising from the reversal of existing deferred tax liabilities, and which relate to tax jurisdictions where the taxable entity has suffered a loss in the current or preceding year, was US$18 million at 30 June 2022 (2021: US$1,675 million). The decrease from FY2021 is primarily attributable to the disposal of assets giving rise to these deferred tax assets as part of the merger of Petroleum with Woodside. For operating assets, the group assesses the recoverability of these deferred tax assets using estimates and assumptions relating to projected earnings and cash flows as applied in the Group impairment process for associated operations. Further information on the key judgements and estimates relating to the recognition of deferred tax assets is provided in note 6 'Income tax expense'.

14 Deferred tax balances continued

The composition of the Group's unrecognised deferred tax assets and liabilities is as follows:

	2022 US$M	2021 US$M
Unrecognised deferred tax assets		
Tax losses and tax credits[1]	8,462	5,944
Investments in subsidiaries[2]	1,597	1,712
Deductible temporary differences relating to PRRT[3]	–	2,402
Mineral rights[4]	2,781	3,359
Other deductible temporary differences[5]	1,777	1,630
Total unrecognised deferred tax assets	14,617	15,047
Unrecognised deferred tax liabilities		
Investments in subsidiaries[2]	2,099	2,203
Future taxable temporary differences relating to unrecognised deferred tax asset for PRRT[3]	–	720
Total unrecognised deferred tax liabilities	2,099	2,923

[1] At 30 June 2022, the Group had income and capital tax losses with a tax benefit of US$5,777 million (2021: US$3,569 million) and tax credits of US$2,685 million (2021: US$2,375 million), which are not recognised as deferred tax assets, because it is not probable that future taxable profits or capital gains will be available against which the Group can utilise the benefits.

The gross amount of tax losses carried forward that have not been recognised is as follows:

Year of expiry	2022 US$M	2021 US$M
Income tax losses		
Not later than one year	–	13
Later than one year and not later than two years	–	5
Later than two years and not later than five years	43	105
Later than five years and not later than 10 years	248	1,449
Later than 10 years and not later than 20 years	1,290	3,347
Unlimited	4,157	4,799
	5,738	9,718
Capital tax losses		
Not later than one year	–	–
Later than two years and not later than five years	–	–
Unlimited	14,173	4,238
Gross amount of tax losses not recognised	19,911	13,956
Tax effect of total losses not recognised	5,777	3,569

Of the US$2,685 million of tax credits, US$2,129 million expires not later than 10 years and US$556 million expires later than 10 years and not later than 20 years.

[2] The Group had deferred tax assets and deferred tax liabilities associated with undistributed earnings of subsidiaries that have not been recognised because the Group is able to control the timing of the reversal of the temporary differences and it is not probable that these differences will reverse in the foreseeable future. Where the Group has undistributed earnings held by associates and joint interests, the deferred tax liability will be recognised as there is no ability to control the timing of the potential distributions.

[3] The Group had unrecognised deferred tax assets relating to Australian Petroleum Resource Rent Tax (PRRT) in FY2021. The assets giving rise to these deferred tax assets were disposed as part of the merger of Petroleum with Woodside. Refer to note 27 'Discontinued operations' for more information.

[4] The Group had deductible temporary differences relating to mineral rights for which deferred tax assets had not been recognised because it is not probable that future capital gains will be available against which the Group can utilise the benefits. The deductible temporary differences do not expire under current tax legislation.

[5] The Group had other deductible temporary differences for which deferred tax assets had not been recognised because it is not probable that future taxable profits will be available against which the Group can utilise the benefits. The deductible temporary differences do not expire under current tax legislation.

15 Closure and rehabilitation provisions

	2022 US$M	2021 US$M
At the beginning of the financial year	11,910	8,810
Capitalised amounts for operating sites:		
Change in estimate	1,579	1,974
Exchange translation	(694)	483
Adjustments charged/(credited) to the income statement:		
Increases to existing and new provisions	174	564
Exchange translation	(58)	76
Released during the year	(42)	(157)
Other adjustments to the provision:		
Amortisation of discounting impacting net finance costs	554	380
Acquisition of subsidiaries and operations	–	179
Divestment and demerger of subsidiaries and operations	(4,477)	(81)
Expenditure on closure and rehabilitations activities	(316)	(321)
Exchange variations impacting foreign currency translation reserve	(3)	3
Other movements	62	–
At the end of the financial year	8,689	11,910
Comprising:		
Current	475	591
Non-current	8,214	11,319
Operating sites	6,198	9,279
Closed sites	2,491	2,631

15 Closure and rehabilitation provisions continued

The Group is required to close and rehabilitate sites and associated facilities at the end of or, in some cases, during the course of production to a condition acceptable to the relevant authorities, as specified in licence requirements and the Group's closure performance requirements as set out within *Our Charter*.

The key components of closure and rehabilitation activities are:

- the removal of all unwanted infrastructure associated with an operation
- the return of disturbed areas to a safe, stable and self-sustaining condition, consistent with the agreed post-closure land use

Recognition and measurement

Provisions for closure and rehabilitation are recognised by the Group when:

- it has a present legal or constructive obligation as a result of past events
- it is more likely than not that an outflow of resources will be required to settle the obligation
- the amount can be reliably estimated

Initial recognition and measurement	Subsequent measurement
Closure and rehabilitation provisions are initially recognised when an environmental disturbance first occurs. The individual site provisions are an estimate of the expected value of future cash flows required to close the relevant site using current standards and techniques and taking into account risks and uncertainties. Individual site provisions are discounted to their present value using currency specific discount rates aligned to the estimated timing of cash outflows. When provisions for closure and rehabilitation are initially recognised, the corresponding cost is capitalised as an asset, representing part of the cost of acquiring the future economic benefits of the operation.	The closure and rehabilitation asset, recognised within property, plant and equipment, is depreciated over the life of the operations. The value of the provision is progressively increased over time as the effect of discounting unwinds, resulting in an expense recognised in net finance costs. The closure and rehabilitation provision is reviewed at each reporting date to assess if the estimate continues to reflect the best estimate of the obligation. If necessary, the provision is remeasured to account for factors such as: – additional disturbance during the period – revisions to estimated reserves, resources and lives of operations including any changes to expected operating lives arising from the Group's latest assessment of the potential impacts of climate change and the transition to a low carbon economy – developments in technology – changes to regulatory requirements and environmental management strategies – changes in the estimated extent and costs of anticipated activities, including the effects of inflation and movements in foreign exchange rates – movements in interest rates affecting the discount rate applied Changes to the closure and rehabilitation estimate for operating sites are added to, or deducted from, the related asset and amortised on a prospective basis over the remaining life of the operation, generally applying the units of production method. Costs arising from unforeseen circumstances, such as the contamination caused by unplanned discharges, are recognised as an expense and liability when the event gives rise to an obligation that is probable and capable of reliable estimation.

Closed sites

Where future economic benefits are no longer expected to be derived through operation, changes to the associated closure and remediation costs are charged to the income statement in the period identified. This amounted to US$74 million in the year ended 30 June 2022 (2021: US$483 million; 2020: US$669 million).

15 Closure and rehabilitation provisions continued

Key estimates

Closure cost estimates are generally based on conceptual level studies early in the operating life of an asset with more detailed studies and planning performed as closure risks (including those related to climate change) are identified and/or as an asset, or parts thereof, near closure. As such, the recognition and measurement of closure and rehabilitation provisions requires the use of significant estimates and assumptions, including, but not limited to:

- the extent (due to legal or constructive obligations) of potential activities required for the removal of infrastructure, decharacterisation of tailings storage facilities and rehabilitation activities
- costs associated with future closure activities
- the extent and period of post-closure monitoring and maintenance, including water management
- applicable discount rates
- the timing of cash flows and ultimate closure of operations

The extent, cost and timing of future closure activities may also be impacted by the potential physical impacts of climate change. In estimating the potential cost of closure activities, the Group considers factors such as long-term weather outlooks, for example forecast changes in rainfall patterns. Closure cost estimates also consider the impact of the Group's energy transition strategy on the costs and timing of performing closure activities and the impact of new technology when appropriately developed and tested. For example, closure cost estimates largely continue to reflect the use of existing fuel sources for the Group's equipment while the Group continues to invest in the development of alternative fuel sources and fleet electrification.

Estimates for post-closure monitoring and maintenance reflect the Group's strategies for individual sites, which may include possible relinquishment. The period of monitoring and maintenance included in the provision requires judgement and considers regulatory and licencing requirements, the outcomes of studies and management's current assessment of stakeholder expectations. As post-closure monitoring and maintenance may be required for significant periods beyond the completion of other closure activities, it is exposed to the potential long-term impacts of climate change, particularly changes in rainfall patterns. While reflecting management's current best estimate, the cost of post-closure monitoring and maintenance may change in future reporting periods as the understanding of, and potential long-term impacts from, climate change continue to evolve.

While progressive closure is performed across a number of operations, significant activities are generally undertaken at the end of the production life at the individual sites, the estimated timing of which is informed by the Group's current assumptions relating to demand for commodities and carbon pricing, and their impact on the Group's long-term price forecasts.

Remaining production lives range from 2-104 years (2021: 3-91 years). Given the generally shorter remaining operational lives of the Group's previously held Petroleum assets, the average remaining production life for all operating sites, weighted by current closure provision, has increased to approximately 29 years (2021: 27 years). The discount rates applied to the Group's closure and rehabilitation provisions are determined by reference to the currency of the closure cash flows, the period over which the cash flows will be incurred and prevailing market interest rates (where available). The Group continues to monitor current market conditions with no change made to the Group's discount rates in the current year.

The increase in closure and rehabilitation provisions relating to continuing operating sites reflects updates to the expected cost and timing of closure activities across the Group's portfolio, with the most significant increases in the year ended 30 June 2022 being at BHP Mitsubishi Alliance (BMA) and Cerro Colorado.

For BMA, the increase largely reflects a preliminary assessment of the potential impacts on BMA mine lives resulting from:

- the significant increase in coal royalties applicable in Queensland from 1 July 2022
- consideration of the Group's long-term outlook for metallurgical coal commodity prices, which reflects a range of drivers of commodity demand and supply, for example, the latest climate-related announcements from key market countries

These factors have resulted in the Group recognising that the end of operations at BMA sites may be earlier than previously anticipated. The best estimate of the impact on the estimated closure cash flows and their timing, and therefore the discounting of the provision, contributed to an increase in the provision, and associated rehabilitation asset, of approximately US$750 million. Given the timing of the announcement of the change to the Queensland coal royalty regime and the preliminary nature of the assessment, further changes to the provision may arise in future reporting periods.

At Cerro Colorado, additional work required to re-profile waste dumps for closure and an increase in scope for other closure activities have contributed to an increase in the closure provision of approximately US$400 million. As operations are ongoing at Cerro Colorado the increase has initially been capitalised. However, given the proximity to closure and the estimated future cash flows of Cerro Colorado the resulting rehabilitation asset has been impaired as outlined in note 13 'Impairment of non-current assets'.

While the closure and rehabilitation provisions reflect management's best estimates based on current knowledge and information, further studies, trials and detailed analysis of relevant knowledge and resultant closure activities for individual assets continue to be performed throughout the life of asset. Such studies and analysis can impact the estimated costs of closure activities. Estimates can also be impacted by the emergence of new closure and rehabilitation techniques, changes in regulatory requirements and stakeholder expectations for closure (including costs associated with equitable transition), development of new technologies, risks relating to climate change and the transition to a low carbon economy, and experience at other operations. These uncertainties may result in future actual expenditure differing from the amounts currently provided for in the balance sheet.

Sensitivity

A 0.5 per cent increase in the discount rates applied at 30 June 2022 would result in a decrease to the closure and rehabilitation provision of approximately US$675 million, a decrease in property, plant and equipment of approximately US$490 million in relation to operating sites and an income statement credit of approximately US$185 million in respect of closed sites. In addition, the change would result in a decrease of approximately US$70 million to depreciation expense and a US$25 million increment in net finance costs for the year ending 30 June 2023.

Given the long-lived nature of the majority of the Group's assets, the majority of final closure activities are generally not expected to occur for a significant period of time.

However, a one-year acceleration in forecast cash flows of the Group's closure and rehabilitation provisions, in isolation, would result in an increase to the provision of approximately US$185 million, an increase in property, plant and equipment of US$125 million in relation to operating sites and an income statement charge of US$60 million in respect of closed sites.

Capital structure

16 Share capital

	BHP Group Limited			BHP Group Plc		
	2022 shares	2021 shares	2020 shares	**2022 shares**	2021 shares	2020 shares
Share capital issued						
Opening number of shares	**2,945,851,394**	2,945,851,394	2,945,851,394	**2,112,071,796**	2,112,071,796	2,112,071,796
Issue of shares	**4,400,000**	–	–	**–**	–	–
Corporate structure unification	**2,112,071,796**	–	–	**(2,112,071,796)**	–	–
Purchase of shares by ESOP Trusts	**(8,704,669)**	(7,587,353)	(5,975,189)	**(63,567)**	(185,054)	(185,297)
Employee share awards exercised following vesting	**8,522,684**	6,948,683	6,893,113	**77,748**	173,644	222,245
Movement in treasury shares under Employee Share Plans	**181,985**	638,670	(917,924)	**(14,181)**	11,410	(36,948)
Closing number of shares	**5,062,323,190**	2,945,851,394	2,945,851,394	**–**	2,112,071,796	2,112,071,796
Comprising:						
Shares held by the public	**5,061,272,144**	2,944,982,333	2,945,621,003	**–**	2,112,057,615	2,112,069,025
Treasury shares	**1,051,046**	869,061	230,391	**–**	14,181	2,771
Other share classes						
5.5% Preference shares of £1 each	**–**	–	–	**–**	50,000	50,000
Special Voting share of no par value	**–**	1	1	**–**	–	–
Special Voting share of US$0.50 par value	**–**	–	–	**–**	1	1
DLC Dividend share	**–**	1	1	**–**	–	–

During August 2021, BHP Group Limited issued 4,400,000 fully paid ordinary shares to the BHP Billiton Limited Employee Equity Trust at A$52.99 per share, to satisfy the vesting of employee share awards and related dividend equivalent entitlements under those employee share plans.

On 3 September 2021, BHP Group Plc acquired by way of gift from J.P. Morgan Limited the 50,000 issued 5.5 per cent cumulative preference shares of £1.00, in the capital of BHP Group Plc. These preference shares held by BHP Group Plc were cancelled on 31 January 2022.

On 31 January 2022, 2,112,071,796 fully paid ordinary shares in BHP Group Limited were issued to BHP Group Plc shareholders in a one for one exchange of their BHP Group Plc ordinary shares, resulting in BHP Group Limited becoming the sole parent company of the Group with a single set of shareholders.

BHP Group Plc had one Special Voting share on issue and BHP Group Limited had one Special Voting share and one DLC dividend share on issue to facilitate operation of the Group's dual listed structure. These shares were bought back for nominal value in January 2022 and subsequently cancelled.

Share capital of BHP Group Limited at 30 June 2022 is composed of the following classes of shares:

Ordinary shares fully paid	Treasury shares
Each fully paid ordinary share of BHP Group Limited carries the right to one vote at a meeting of the Company.	Treasury shares are shares of BHP Group Limited that are held by the ESOP Trusts for the purpose of issuing shares to employees under the Group's Employee Share Plans. Treasury shares are recognised at cost and deducted from equity, net of any income tax effects. When the treasury shares are subsequently sold or reissued, any consideration received, net of any directly attributable costs and income tax effects, is recognised as an increase in equity. Any difference between the carrying amount and the consideration, if reissued, is recognised in retained earnings.

The following classes of shares existed prior to the Group's unification on 31 January 2022:

Special Voting shares	Preference shares	DLC Dividend share
Each of BHP Group Limited and BHP Group Plc issued one Special Voting share to facilitate joint voting by shareholders of BHP Group Limited and BHP Group Plc on Joint Electorate Actions.	Preference shares have the right to repayment of the amount paid up on the nominal value and any unpaid dividends in priority to the holders of any other class of shares in BHP Group Plc on a return of capital or winding up. The holders of preference shares have limited voting rights if payment of the preference dividends are six months or more in arrears or a resolution is passed changing the rights of the preference shareholders.	The DLC Dividend share supported the Dual Listed Company (DLC) equalisation principles in place since the merger in 2001, including the requirement that ordinary shareholders of BHP Group Plc and BHP Group Limited are paid equal cash dividends per share. This share enabled efficient and flexible capital management across the DLC and was issued on 23 February 2016 at par value of US$10.

17 Other equity

	2022 US$M	2021 US$M	2020 US$M	**Recognition and measurement**
Share premium account	**–**	518	518	The share premium account represented the premium paid on the issue of BHP Group Plc shares recognised in accordance with the UK Companies Act 2006. It was transferred to the common control reserve as part of the unification of the Group's corporate structure.
Capital redemption reserve	**–**	177	177	The capital redemption reserve represented the par value of BHP Group Plc shares that were purchased and subsequently cancelled. It was transferred to the common control reserve as part of unification of the Group's corporate structure.
Common control reserves	**(1,603)**	–	–	The common control reserve arose on unification of the Group's corporate structure and represents the residual on consolidation between BHP Group Ltd's investment in BHP Group Plc's and BHP Group Plc's share capital, share premium and capital redemption reserve at the time of unification.
Employee share awards reserve	**174**	268	246	The employee share awards reserve represents the accrued employee entitlements to share awards that have been charged to the income statement and have not yet been exercised. Once exercised, the difference between the accumulated fair value of the awards and their historical on-market purchase price is recognised in retained earnings.
Cash flow hedge reserve	**41**	100	50	The cash flow hedge reserve represents hedging gains and losses recognised on the effective portion of cash flow hedges. The cumulative deferred gain or loss on the hedge is recognised in the income statement when the hedged transaction impacts the income statement, or is recognised as an adjustment to the cost of non-financial hedged items. The hedging reserve records the portion of the gain or loss on a hedging instrument in a cash flow hedge that is determined to be an effective hedge relationship.
Cost of hedging reserve	**(19)**	(54)	(23)	The cost of hedging reserve represents the recognition of certain costs of hedging for example, basis adjustments, which have been excluded from the hedging relationship and deferred in other comprehensive income until the hedged transaction impacts the income statement.
Foreign currency translation reserve	**(14)**	43	39	The foreign currency translation reserve represents exchange differences arising from the translation of non-US dollar functional currency operations within the Group into US dollars.
Equity investments reserve	**(8)**	15	16	The equity investment reserve represents the revaluation of investments in shares recognised through other comprehensive income. Where a revalued financial asset is sold, the relevant portion of the reserve is transferred to retained earnings.
Non-controlling interest contribution reserve	**1,441**	1,283	1,283	The non-controlling interest contribution reserve represents the excess of consideration received over the book value of net assets attributable to equity instruments when acquired by non-controlling interests.
Total reserves	**12**	2,350	2,306	

Summarised financial information relating to each of the Group's subsidiaries with non-controlling interests (NCI) that are material to the Group before any intra-group eliminations is shown below:

	2022			2021		
US$M	**Minera Escondida Limitada**	**Other individually immaterial subsidiaries (incl. intra-group eliminations)**	**Total**	Minera Escondida Limitada	Other individually immaterial subsidiaries (incl. intra-group eliminations)	Total
Group share (per cent)	**57.5**			57.5		
Current assets	**2,929**			2,996		
Non-current assets	**11,636**			11,867		
Current liabilities	**(2,192)**			(1,912)		
Non-current liabilities	**(4,762)**			(4,733)		
Net assets	**7,611**			8,218		
Net assets attributable to NCI	**3,235**	**574**	**3,809**	3,493	848	4,341
Revenue	**9,500**			9,470		
Profit after taxation	**3,522**			3,605		
Other comprehensive income	**11**			27		
Total comprehensive income	**3,533**			3,632		
Profit after taxation attributable to NCI	**1,497**	**658**	**2,155**	1,532	615	2,147
Other comprehensive income attributable to NCI	**5**	**–**	**5**	11	–	11
Net operating cash flow	**4,519**			5,007		
Net investing cash flow	**(860)**			(655)		
Net financing cash flow	**(4,029)**			(4,001)		
Dividends paid to NCI	**1,760**	**780**	**2,540**	1,590	537	2,127

While the Group controls Minera Escondida Limitada, the non-controlling interests hold certain protective rights that restrict the Group's ability to sell assets held by Minera Escondida Limitada, or use the assets in other subsidiaries and operations owned by the Group. Minera Escondida Limitada is also restricted from paying dividends without the approval of the non-controlling interests.

18 Dividends

	Year ended 30 June 2022		Year ended 30 June 2021		Year ended 30 June 2020	
	Per share US cents	**Total US$M**	Per share US cents	Total US$M	Per share US cents	Total US$M
Dividends paid during the period[1]						
Prior year final dividend	**200**	**10,119**	55	2,779	78	3,946
Interim dividend	**150**	**7,601**	101	5,115	65	3,288
	350	**17,720**	156	7,894	143	7,234

[1] 5.5 per cent dividend on 50,000 preference shares of £1 each determined and paid for financial years 2021 and 2020. No dividend paid for the financial year 2022. These preference shares were cancelled on 31 January 2022.

Dividends paid during the period differs from the amount of dividends paid in the Consolidated Cash Flow Statement as a result of foreign exchange gains and losses relating to the timing of equity distributions between the record date and the payment date. Additional derivative proceeds of US$127 million were received as part of the funding of the interim dividend and is disclosed in Proceeds/(settlements) of cash management related instruments in the Consolidated Cash Flow Statement.

Prior to the corporate structure unification, the Dual Listed Company merger terms required that ordinary shareholders of BHP Group Limited and BHP Group Plc were paid equal cash dividends on a per share basis.

Each American Depositary Share (ADS) represents two ordinary shares of BHP Group Limited. Dividends determined on each ADS represent twice the dividend determined on BHP Group Limited ordinary share.

Dividends are determined after period-end and announced with the results for the period. Interim dividends are determined in February and paid in March. Final dividends are determined in August and paid in September. Dividends determined are not recorded as a liability at the end of the period to which they relate. Subsequent to year-end, on 16 August 2022, BHP Group Limited determined a final dividend of 175 US cents per share (US$8,857 million), which will be paid on 22 September 2022 (30 June 2021: final dividend of 200 US cents per share – US$10,114 million; 30 June 2020: final dividend of 55 US cents per share – US$2,782 million).

BHP Group Limited dividends for all periods presented are, or will be, fully franked based on a tax rate of 30 per cent.

	2022 US$M	2021 US$M	2020 US$M
Franking credits as at 30 June	**7,007**	14,302	10,980
Franking credits arising from the payment of current tax	**2,043**	1,799	471
Total franking credits available[1]	**9,050**	16,101	11,451

[1] The payment of the final 2022 dividend determined after 30 June 2022 will reduce the franking account balance by US$3,796 million.

In addition to dividends paid, the Group made an in specie dividend to eligible BHP shareholders during the period by distributing the 914,768,948 Woodside shares it received as consideration for the sale of BHP Petroleum. The closing price of Woodside shares on ASX on 31 May 2022 was A$29.76. The implied value of the in specie dividend was therefore A$27.2 billion (US$19.6 billion). At this valuation, the in specie dividend was approximately A$5.38 (US$3.86), with A$2.30 (US$1.66) of franking credits being distributed, per BHP share. Further detail are detailed in note 27 'Discontinued operations'.

19 Provisions for dividends and other liabilities

The disclosure below excludes closure and rehabilitation provisions (refer to note 15 'Closure and rehabilitation provisions'), employee benefits, restructuring and post-retirement employee benefits provisions (refer to note 26 'Employee benefits, restructuring and post-retirement employee benefits provisions') and provisions related to the Samarco dam failure (refer to note 4 'Significant events – Samarco dam failure').

	2022 US$M	2021 US$M
Movement in provision for dividends and other liabilities		
At the beginning of the financial year	**581**	1,240
Dividends determined	**17,720**	7,894
Charge/(credit) for the year:		
Underlying	**493**	260
Discounting	**1**	2
Exchange variations	**122**	20
Released during the year	**(48)**	(43)
Utilisation	**(96)**	(267)
Dividends paid	**(17,851)**	(7,901)
Divestment and demerger of subsidiaries and operations	**(146)**	–
Transfers and other movements	**(102)**	(624)
At the end of the financial year	**674**	581
Comprising:		
Current	**356**	293
Non-current	**318**	288

Financial management

20 Net debt

The Group seeks to maintain a strong balance sheet and deploys its capital with reference to the Capital Allocation Framework.

The Group monitors capital using the net debt balance and the gearing ratio, being the ratio of net debt to net debt plus net assets.

The net debt definition includes the fair value of derivative financial instruments used to hedge cash and borrowings which reflects the Group's risk management strategy of reducing the volatility of net debt caused by fluctuations in foreign exchange and interest rates.

Under IFRS 16/AASB16 'Leases', vessel lease contracts are required to be remeasured at each reporting date to the prevailing freight index. While these liabilities are included in the Group interest bearing liabilities, they are excluded from the net debt calculation as they do not align with how the Group assesses net debt for decision making in relation to the Capital Allocation Framework. In addition, the freight index has historically been volatile which creates significant short-term fluctuation in these liabilities.

	2022		2021	
US$M	**Current**	**Non-current**	Current	Non-current
Interest bearing liabilities				
Bank loans	**397**	**2,075**	437	1,823
Notes and debentures	**1,690**	**9,673**	1,244	13,525
Lease liabilities	**519**	**2,057**	889	3,007
Bank overdraft and short-term borrowings	**–**	**–**	–	–
Other	**16**	**1**	58	–
Total interest bearing liabilities	**2,622**	**13,806**	2,628	18,355
Less: Lease liability associated with index-linked freight contracts	**113**	**161**	346	679
Less: Cash and cash equivalents				
Cash	**5,728**	**–**	4,408	–
Short-term deposits	**11,508**	**–**	10,838	–
Less: Total cash and cash equivalents	**17,236**	**–**	15,246	–
Less: Derivatives included in net debt				
Net debt management related instruments[1]	**(358)**	**(1,330)**	20	537
Net cash management related instruments[2]	**273**	**–**	34	–
Less: Total derivatives included in net debt	**(85)**	**(1,330)**	54	537
Net debt		**333**		4,121
Net assets		**48,766**		55,605
Gearing		**0.7%**		6.9%

[1] Represents the net cross currency and interest rate swaps designated as effective hedging instruments included within current and non-current other financial assets and liabilities.

[2] Represents the net forward exchange contracts included within current and non-current other financial assets and liabilities.

Cash and short-term deposits are disclosed in the cash flow statement net of bank overdrafts and interest bearing liabilities at call.

	2022 US$M	2021 US$M	2020 US$M
Total cash and cash equivalents	**17,236**	15,246	13,426
Bank overdrafts and short-term borrowings	**–**	–	–
Total cash and cash equivalents, net of overdrafts	**17,236**	15,246	13,426

Cash and cash equivalents includes US$127 million (2021: US$159 million) restricted by legal or contractual arrangements.

Recognition and measurement

Cash and short-term deposits in the balance sheet comprise cash at bank and on hand and highly liquid cash deposits with short-term maturities that are readily convertible to known amounts of cash with insignificant risk of change in value. The Group considers that the carrying value of cash and cash equivalents approximate fair value due to their short-term to maturity. Refer to note 21 'Leases' and note 23 'Financial risk management' for the recognition and measurement principles for lease liabilities and other financial liabilities.

Interest bearing liabilities and cash and cash equivalents include balances denominated in the following currencies:

	Interest bearing liabilities		**Cash and cash equivalents**	
	2022 US$M	2021 US$M	**2022 US$M**	2021 US$M
USD	**8,813**	11,146	**7,654**	12,003
EUR	**3,463**	4,505	**2,656**	4
GBP	**2,621**	3,415	**30**	32
AUD	**783**	1,053	**3,360**	573
CAD	**584**	635	**3,437**	2,455
Other	**164**	229	**99**	179
Total	**16,428**	20,983	**17,236**	15,246

The Group enters into derivative transactions to convert the majority of its exposures above into US dollars. Further information on the Group's risk management activities relating to these balances is provided in note 23 'Financial risk management'.

Liquidity risk

The Group's liquidity risk arises from the possibility that it may not be able to settle or meet its obligations as they fall due and is managed as part of the portfolio risk management strategy. Operational, capital and regulatory requirements are considered in the management of liquidity risk, in conjunction with short-term and long-term forecast information.

20 Net debt continued

Recognising the cyclical volatility of operating cash flows, the Group has defined minimum target cash and liquidity buffers to be maintained to mitigate liquidity risk and support operations through the cycle.

The Group's strong credit profile, diversified funding sources, its minimum cash buffer and its committed credit facilities ensure that sufficient liquid funds are maintained to meet its daily cash requirements.

The Group's Moody's credit rating has remained at A2/P-1 outlook stable (long-term/short-term) throughout FY2022 and Moody's affirmed its credit rating on 2 June 2022. The Group's Standard & Poor's rating changed from A/A-1 outlook stable (long-term/short-term) to A/A-1 CreditWatch negative (long-term/short-term) on 23 August 2021 following the announcement of the proposed merger of our petroleum business with Woodside. Upon completion of the merger, on 1 June 2022 Standard & Poor's lowered the Group's long-term credit rating by one notch, removed the credit rating from CreditWatch, and confirmed a credit rating of A-/A-1 outlook stable (long-term/short-term).

There were no defaults on the Group's liabilities during the period.

Counterparty risk

The Group is exposed to credit risk from its financing activities, including short-term cash investments such as deposits with banks and derivative contracts. This risk is managed by Group Treasury in line with the counterparty risk framework, which aims to minimise the exposure to a counterparty and mitigate the risk of financial loss through counterparty failure.

Exposure to counterparties is monitored at a Group level across all products and includes exposure with derivatives and cash investments.

Investments and derivatives are only transacted with approved counterparties who have been assigned specific limits based on a quantitative credit risk model. These limits are updated at least bi-annually. Additionally, derivatives are subject to tenor limits and investments are subject to concentration limits by rating.

Derivative fair values are inclusive of valuation adjustments that take into account both the counterparty and the Group's risk of default.

Standby arrangements and unused credit facilities

The Group's committed revolving credit facility operates as a back-stop to the Group's uncommitted commercial paper program. The combined amount drawn under the facility or as commercial paper will not exceed US$5.5 billion. As at 30 June 2022, US$ nil commercial paper was drawn (2021: US$ nil). The facility was amended in November 2021 for IBOR transition and is due to mature on 10 October 2026. A commitment fee is payable on the undrawn balance and interest is payable on any drawn balance comprising a reference rate plus a margin. The agreed margins are typical for a credit facility extended to a company with the Group's credit rating.

Maturity profile of financial liabilities

The maturity profile of the Group's financial liabilities based on the undiscounted contractual amounts, taking into account the derivatives related to debt, is as follows:

2022 US$M	**Bank loans, debentures and other loans**	**Expected future interest payments**	**Derivatives related to debentures**	**Other derivatives**	**Obligations under lease liabilities**	**Trade and other payables[1]**	**Total**
Due for payment:							
In one year or less or on demand	**2,109**	**492**	**525**	**221**	**579**	**6,608**	**10,534**
In more than one year but not more than two years	**1,634**	**427**	**300**	**112**	**443**	**–**	**2,916**
In more than two years but not more than five years	**2,609**	**1,032**	**492**	**246**	**936**	**–**	**5,315**
In more than five years	**7,550**	**3,705**	**1,467**	**245**	**1,470**	**–**	**14,437**
Total	**13,902**	**5,656**	**2,784**	**824**	**3,428**	**6,608**	**33,202**
Carrying amount	**13,852**	**–**	**1,824**	**752**	**2,576**	**6,608**	**25,612**

2021 US$M	Bank loans, debentures and other loans	Expected future interest payments	Derivatives related to debentures	Other derivatives	Obligations under lease liabilities	Trade and other payables[1]	Total
Due for payment:							
In one year or less or on demand	1,722	729	61	149	980	6,851	10,492
In more than one year but not more than two years	2,278	661	267	80	680	–	3,966
In more than two years but not more than five years	4,062	1,492	256	240	1,397	–	7,447
In more than five years	7,801	4,136	585	317	1,842	–	14,681
Total	15,863	7,018	1,169	786	4,899	6,851	36,586
Carrying amount	17,087	–	586	690	3,896	6,851	29,110

[1] Excludes input taxes of US$79 million (2021: US$176 million) included in other payables. Refer to note 9 'Trade and other payables'.

21 Leases

Movements in the Group's lease liabilities during the year are as follows:

	2022 US$M	2021 US$M
At the beginning of the financial year	**3,896**	3,443
Additions	**866**	1,223
Remeasurements of index-linked freight contracts	**(369)**	(59)
Lease payments[1]	**(1,288)**	(879)
Foreign exchange movement	**(126)**	115
Amortisation of discounting	**125**	109
Divestment and demerger of subsidiaries and operations[2]	**(492)**	–
Transfers and other movements	**(36)**	(56)
At the end of the financial year	**2,576**	3,896
Comprising:		
Current liabilities	**519**	889
Non-current liabilities	**2,057**	3,007

[1] Includes US$39 million (2021: US$45 million) related to Discontinued operations.

[2] Relates to the divestment of BMC and merger of Petroleum with Woodside. Refer to notes 3 'Exceptional items' and 27 'Discontinued operations' for more information.

A significant proportion by value of the Group's lease contracts relate to plant facilities, office buildings and vessels. Lease terms for plant facilities and office buildings typically run for over 10 years and vessels for four to 10 years. Other leases include port facilities, various equipment and vehicles. The lease contracts contain a wide range of different terms and conditions including extension and termination options and variable lease payments.

The Group's lease obligations are included in the Group's Interest bearing liabilities and, with the exception of vessel lease contracts that are priced with reference to a freight index, form part of the Group's net debt.

The maturity profile of lease liabilities based on the undiscounted contractual amounts is as follows:

Lease liability	2022 US$M	2021 US$M
Due for payment:		
In one year or less or on demand	**579**	980
In more than one year but not more than two years	**443**	680
In more than two years but not more than five years	**936**	1,397
In more than five years[1]	**1,470**	1,842
Total	**3,428**	4,899
Carrying amount	**2,576**	3,896

[1] Includes US$707 million (2021: US$878 million) due for payment in more than ten years.

At 30 June 2022, commitments for leases not yet commenced based on undiscounted contractual amounts were US$928 million (2021: US$457 million).

Movements in the Group's right-of-use assets during the year are as follows:

	2022			2021		
	Land and buildings US$M	Plant and equipment US$M	Total US$M	Land and buildings US$M	Plant and equipment US$M	Total US$M
Net book value						
At the beginning of the financial year	**638**	**2,712**	**3,350**	689	2,358	3,047
Additions	**41**	**825**	**866**	25	1,227	1,252
Remeasurements of index-linked freight contracts	**–**	**(369)**	**(369)**	–	(59)	(59)
Depreciation expensed during the period	**(103)**	**(872)**	**(975)**	(111)	(670)	(781)
Depreciation classified as exploration	**–**	**(3)**	**(3)**	–	(19)	(19)
Impairments for the year	**(7)**	**–**	**(7)**	(30)	(2)	(32)
Divestment and demerger of subsidiaries and operations[1]	**(116)**	**(313)**	**(429)**	–	–	–
Transfers and other movements	**(1)**	**(71)**	**(72)**	65	(123)	(58)
At the end of the financial year	**452**	**1,909**	**2,361**	638	2,712	3,350
– Cost	**745**	**4,307**	**5,052**	897	4,393	5,290
– Accumulated depreciation and impairments	**(293)**	**(2,398)**	**(2,691)**	(259)	(1,681)	(1,940)

[1] Relates to the divestment of BMC and merger of Petroleum with Woodside. Refer to notes 3 'Exceptional items' and 27 'Discontinued operations' for more information.

Right-of-use assets are included within the underlying asset classes in Property, plant and equipment. Refer to note 11 'Property, plant and equipment'.

21 Leases continued

Amounts recorded in the income statement and the cash flow statement for the year were:

	2022 US$M	2021 US$M Restated	2020 US$M Restated	Included within
Income statement				
Depreciation of right-of-use assets	**964**	753	623	Profit from operations
Short-term, low-value and variable lease costs[1]	**847**	834	637	Profit from operations
Interest on lease liabilities	**119**	102	82	Financial expenses
Cash flow statement				
Principal lease payments	**1,130**	732	632	Cash flows from financing activities
Lease interest payments	**119**	102	82	Cash flows from operating activities

[1] Relates to US$585 million of variable lease costs (2021: US$510 million; 2020: US$415 million), US$222 million of short-term lease costs (2021: US$294 million; 2020: US$201 million) and US$40 million of low-value lease costs (2021: US$30 million; 2020: US$21 million). Variable lease costs include contracts for hire of mining service equipment, drill rigs and transportation services. These contracts contain variable lease payments based on usage and asset performance.

Recognition and measurement

All leases with the exception of short-term (under 12 months) and low-value leases are recognised on the balance sheet, as a right-of-use asset and a corresponding interest bearing liability. Lease liabilities are initially measured at the present value of the future lease payments from the lease commencement date and are subsequently adjusted to reflect the interest on lease liabilities, lease payments and any remeasurements due to, for example, lease modifications or a change to future lease payments linked to an index or rate. Lease payments are discounted using the interest rate implicit in the lease, where this is readily determinable. Where the implicit interest rate is not readily determinable, the interest payments are discounted at the Group's incremental borrowing rate, adjusted to reflect factors specific to the lease, including where relevant the currency, tenor and location of the lease.

In addition to containing a lease, the Group's contractual arrangements may include non-lease components. For example, certain mining services arrangements involve the provision of additional services, including maintenance, drilling activities and the supply of personnel. The Group has elected to separate these non-lease components from the lease components in measuring lease liabilities. Non-lease components are accounted for in accordance with the accounting policies applied to each underlying good or service received.

Low-value and short-term leases continue to be expensed to the income statement. Variable lease payments not dependent on an index or rate are excluded from lease liabilities, and expensed to the income statement.

Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost will initially correspond to the lease liability, adjusted for initial direct costs, lease payments made prior to lease commencement, capitalised provisions for closure and rehabilitation and any lease incentives received.

The lease asset and liability associated with all index-linked freight contracts, including continuous voyage charters (CVCs), are measured at each reporting date based on the prevailing freight index (generally the Baltic C5 index).

Lease costs are recognised in the income statement over the lease term in the form of depreciation on the right-of-use asset and the unwinding of finance charges on the lease liability.

Where the Group is the operator of an unincorporated joint operation and all investors are parties to a lease, the Group recognises its proportionate share of the lease liability and associated right-of-use asset. In the event the Group is the sole signatory to a lease, and therefore has the sole legal obligation to make lease payments, the lease liability is recognised in full. Where the associated right-of-use asset is sub-leased (under a finance sub-lease) to a joint operation, for instance where it is dedicated to a single operation and the joint operation has the right to direct the use of the asset, the Group (as lessor) recognises its proportionate share of the right-of-use asset and a net investment in the lease, representing amounts to be recovered from the other parties to the joint operation. If the Group is not party to the head lease contract but sub-leases the associated right-of-use asset (as lessee), it recognises its proportionate share of the right-of-use asset and a lease liability which is payable to the operator.

Key judgements and estimates

Judgements: Certain contractual arrangements not in the form of a lease require the Group to apply significant judgement in evaluating whether the Group controls the right to direct the use of assets and therefore whether the contract contains a lease. Management considers all facts and circumstances in determining whether the Group or the supplier has the rights to direct how, and for what purpose, the underlying assets are used in certain mining contracts and other arrangements, including outsourcing and shipping arrangements. Judgement is used to assess which decision-making rights mostly affect the benefits of use of the assets for each arrangement.

Where a contract includes the provision of non-lease services, judgement is required to identify the lease and non-lease components.

Estimates: Where the Group cannot readily determine the interest rate implicit in the lease, estimation is involved in the determination of the weighted average incremental borrowing rate to measure lease liabilities.

The incremental borrowing rate reflects the rates of interest a lessee would have to pay to borrow over a similar term, with similar security, the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment. Under the Group's portfolio approach to debt management, the Group does not specifically borrow for asset purchases. Therefore, the incremental borrowing rate is estimated referencing the Group's corporate borrowing portfolio and other similar rated entities, adjusted to reflect the terms and conditions of the lease (including the impact of currency, credit rating of subsidiary entering into the lease and the term of the lease), at the inception of the lease arrangement or the time of lease modification.

The Group estimates stand-alone prices, where such prices are not readily observable, in order to allocate the contractual payments between lease and non-lease components.

22 Net finance costs

	2022 US$M	2021 US$M Restated	2020 US$M Restated
Financial expenses			
Interest expense using the effective interest rate method:			
Interest on bank loans, overdrafts and all other borrowings	**491**	607	1,093
Interest capitalised at 2.90% (2021: 2.83%; 2020: 4.14%)[1]	**(113)**	(204)	(265)
Interest on lease liabilities	**119**	102	82
Discounting on provisions and other liabilities	**645**	353	343
Other gains and losses:			
Fair value change on hedged loans	**(1,286)**	(779)	721
Fair value change on hedging derivatives	**1,277**	704	(788)
Loss on bond repurchase[2]	**–**	395	–
Exchange variations on net debt	**(99)**	99	(18)
Other	**16**	13	24
Total financial expenses	**1,050**	1,290	1,192
Financial income			
Interest income	**(81)**	(67)	(334)
Net finance costs	**969**	1,223	858

1 Interest has been capitalised at the rate of interest applicable to the specific borrowings financing the assets under construction or, where financed through general borrowings, at a capitalisation rate representing the average interest rate on such borrowings. Tax relief for capitalised interest is approximately US$34 million (2021: US$61 million; 2020: US$80 million).

2 Relates to the additional cost on settlement of two multi-currency hybrid debt repurchase programs and the unwind of the associated hedges, included in a total cash payment of US$3,402 million disclosed in repayment of interest bearing liabilities in the Consolidated Cash Flow Statement.

Recognition and measurement

Interest income is accrued using the effective interest rate method. Finance costs are expensed as incurred, except where they relate to the financing of construction or development of qualifying assets.

23 Financial risk management

23.1 Financial risks

Financial and capital risk management strategy

The financial risks arising from the Group's operations comprise market, liquidity and credit risk. These risks arise in the normal course of business and the Group manages its exposure to them in accordance with the Group's portfolio risk management strategy. The objective of the strategy is to support the delivery of the Group's financial targets, while protecting its future financial security and flexibility by taking advantage of the natural diversification provided by the scale, diversity and flexibility of the Group's operations and activities.

As part of the risk management strategy, the Group monitors target gearing levels and credit rating metrics under a range of different stress test scenarios incorporating operational and macroeconomic factors.

Market risk management

The Group's activities expose it to market risks associated with movements in interest rates, foreign currencies and commodity prices. Under the strategy outlined above, the Group seeks to achieve financing costs, currency impacts, input costs and commodity prices on a floating or index basis.

In executing the strategy, financial instruments are potentially employed in three distinct but related activities. The following table summarises these activities and the key risk management processes:

Activity	Key risk management processes
1 Risk mitigation On an exception basis, hedging for the purposes of mitigating risk related to specific and significant expenditure on investments or capital projects will be executed if necessary to support the Group's strategic objectives.	Execution of transactions within approved mandates.
2 Economic hedging of commodity sales, operating costs, short-term cash deposits, other monetary items and debt instruments Where Group commodity production is sold to customers on pricing terms that deviate from the relevant index target and where a relevant derivatives market exists, financial instruments may be executed as an economic hedge to align the revenue price exposure with the index target and US dollars.	Measuring and reporting the exposure in customer commodity contracts and issued debt instruments.
Where debt is issued in a currency other than the US dollar and/or at a fixed interest rate, fair value and cash flow hedges may be executed to align the debt exposure with the Group's functional currency of US dollars and/or to swap to a floating interest rate.	Executing hedging derivatives to align the total group exposure to the index target.
Where short-term cash deposits and other monetary items are denominated in a currency other than US dollars, derivative financial instruments may be executed to align the foreign exchange exposure to the Group's functional currency of US dollars.	Execution of transactions within approved mandates.
3 Strategic financial transactions Opportunistic transactions may be executed with financial instruments to capture value from perceived market over/under valuations.	Execution of transactions within approved mandates.

Primary responsibility for the identification and control of financial risks, including authorising and monitoring the use of financial instruments for the above activities and stipulating policy thereon, rests with the Financial Risk Management Committee under authority delegated by the Chief Executive Officer.

23 Financial risk management continued

Interest rate risk

The Group is exposed to interest rate risk on its outstanding borrowings and short-term cash deposits from the possibility that changes in interest rates will affect future cash flows or the fair value of fixed interest rate financial instruments. Interest rate risk is managed as part of the portfolio risk management strategy.

The majority of the Group's debt is issued at fixed interest rates. The Group has entered into interest rate swaps and cross currency interest rate swaps to convert most of its fixed interest rate exposure to floating US dollar interest rate exposure. As at 30 June 2022, 80 per cent of the Group's borrowings were exposed to floating interest rates inclusive of the effect of swaps (2021: 82 per cent).

The fair value of interest rate swaps and cross currency interest rate swaps in hedge relationships used to hedge both interest rate and foreign currency risks are shown in the valuation hierarchy in section 23.4 'Derivatives and hedge accounting'.

Based on the net debt position as at 30 June 2022, taking into account interest rate swaps and cross currency interest rate swaps, it is estimated that a one percentage point increase in the US LIBOR interest rate will increase the Group's equity and profit after taxation by US$29 million (2021: increase of US$7 million). This assumes the change in interest rates is effective from the beginning of the financial year and the fixed/floating mix and balances are constant over the year.

Interest Rate Benchmark Reform

The London Interbank Offered Rate (LIBOR) and other benchmark interest rates are being replaced by alternative risk-free rates (ARR) as part of inter-bank offer rate (IBOR) reform. Sterling LIBOR ceased to be published on 1 January 2022 and USD LIBOR will no longer be published after 30 June 2023. The Group has assessed the implication of IBOR reform and has updated various policies, systems and processes including the adoption of the International Swaps and Derivatives Association (ISDA) IBOR Fallbacks Protocol. In November 2021, the Group amended its US$5.5 billion revolving credit facility to reference ARRs. Furthermore, in March 2022 Escondida executed the Group's first Secured Overnight Financing Rate (SOFR) linked loans.

The amendments to IFRS 9/AASB 9 'Financial Instruments', IFRS 7/AASB 7 'Financial Instruments (IFRS 7): Disclosures' and IFRS 16/AASB 16 'Leases' in relation to IBOR reform early adopted by the Group in previous periods impact the Group's cross currency and interest rate swaps, which reference US LIBOR, and the associated hedge accounting. Refer to section 23.4 'Derivatives and hedge accounting' for further information.

Currency risk

The US dollar is the predominant functional currency within the Group and as a result, currency exposures arise from transactions and balances in currencies other than the US dollar. The Group's potential currency exposures comprise:

- translational exposure in respect of non-functional currency monetary items
- transactional exposure in respect of non-functional currency expenditure and revenues

The Group's foreign currency risk is managed as part of the portfolio risk management strategy.

Translational exposure in respect of non-functional currency monetary items

Monetary items, including financial assets and liabilities, denominated in currencies other than the functional currency of an operation are restated at the end of each reporting period to US dollar equivalents and the associated gain or loss is taken to the income statement. The exception is foreign exchange gains or losses on foreign currency denominated provisions for closure and rehabilitation at operating sites, which are capitalised in property, plant and equipment.

The Group has entered into cross currency interest rate swaps and foreign exchange forwards to convert its significant foreign currency exposures in respect of monetary items into US dollars. Fluctuations in foreign exchange rates are therefore not expected to have a significant impact on equity and profit after tax.

The following table shows the carrying values of financial assets and liabilities at the end of the reporting period denominated in currencies other than the US dollar that are exposed to foreign currency risk:

Net financial (liabilities)/assets – by currency of denomination	**2022 US$M**	2021 US$M
AUD	**(3,649)**	(4,421)
CLP	**(602)**	(649)
GBP	**388**	535
EUR	**280**	366
Other	**187**	128
Total	**(3,396)**	(4,041)

The principal non-functional currencies to which the Group is exposed are the Australian dollar, the Chilean peso, the Pound sterling and the Euro. Based on the Group's net financial assets and liabilities as at 30 June 2022, a weakening of the US dollar against these currencies (one cent strengthening in Australian dollar, 10 pesos strengthening in Chilean peso, one penny strengthening in Pound sterling and one cent strengthening in Euro), with all other variables held constant, would decrease the Group's equity and profit after taxation by US$16 million (2021: decrease of US$21 million).

Transactional exposure in respect of non-functional currency expenditure and revenues

Certain operating and capital expenditure is incurred in currencies other than an operation's functional currency. To a lesser extent, certain sales revenue is earned in currencies other than the functional currency of operations and certain exchange control restrictions may require that funds be maintained in currencies other than the functional currency of the operation. These currency risks are managed as part of the portfolio risk management strategy. The Group may enter into forward exchange contracts when required under this strategy.

Commodity price risk

The risk associated with commodity prices is managed as part of the portfolio risk management strategy. Substantially all of the Group's commodity production is sold on market-based index pricing terms, with derivatives used from time to time to achieve a specific outcome.

Financial instruments with commodity price risk comprise forward commodity and other derivative contracts with net liabilities at fair value of US$56 million (2021: net assets of US$138 million).

23 Financial risk management continued

Provisionally priced commodity sales and purchases contracts

Provisionally priced sales or purchases volumes are those for which price finalisation, referenced to the relevant index, is outstanding at the reporting date. Provisional pricing mechanisms within these sales and purchases arrangements have the character of a commodity derivative. Trade receivables or payables under these contracts are carried at fair value through profit or loss using Level 2 valuation inputs based on forecast selling prices in the quotation period. The Group's exposure at 30 June 2022 to the impact of movements in commodity prices upon provisionally invoiced sales and purchases volumes was predominately around copper.

The Group had 289 thousand tonnes of copper exposure as at 30 June 2022 (2021: 254 thousand tonnes) that was provisionally priced. The final price of these sales and purchases volumes will be determined during the first half of FY2023. A 10 per cent change in the price of copper realised on the provisionally priced sales, with all other factors held constant, would increase or decrease profit after taxation by US$162 million (2021: US$166 million).

The relationship between commodity prices and foreign currencies is complex and movements in foreign exchange rates can impact commodity prices.

Liquidity risk

Refer to note 20 'Net debt' for details on the Group's liquidity risk.

Credit risk

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities (primarily from customer receivables) and from its financing activities, including deposits with banks and financial institutions, other short-term investments, interest rate and currency derivative contracts and other financial instruments.

Refer to note 8 'Trade and other receivables' and note 20 'Net debt' for details on the Group credit risk.

23.2 Recognition and measurement

All financial assets and liabilities, other than derivatives and trade receivables, are initially recognised at the fair value of consideration paid or received, net of transaction costs as appropriate. Financial assets are initially recognised on their trade date.

Financial assets are subsequently carried at fair value or amortised cost based on:

- the Group's purpose, or business model, for holding the financial asset
- whether the financial asset's contractual terms give rise to cash flows that are solely payments of principal and interest

The resulting Financial Statements classifications of financial assets can be summarised as follows:

Contractual cash flows	Business model	Category
Solely principal and interest	Hold in order to collect contractual cash flows	Amortised cost
Solely principal and interest	Hold in order to collect contractual cash flows and sell	Fair value through other comprehensive income
Solely principal and interest	Hold in order to sell	Fair value through profit or loss
Other	Any of those mentioned above	Fair value through profit or loss

Solely principal and interest refers to the Group receiving returns only for the time value of money and the credit risk of the counterparty for financial assets held. The main exceptions for the Group are provisionally priced receivables and derivatives which are measured at fair value through profit or loss under IFRS 9.

The Group has the intention of collecting payment directly from its customers in most cases, however the Group also participates in receivables financing programs in respect of selected customers. Receivables in these portfolios which are classified as 'hold in order to sell', are provisionally priced receivables and are therefore held at fair value through profit or loss prior to sale to the financial institution.

With the exception of derivative contracts and provisionally priced trade payables which are carried at fair value through profit or loss, the Group's financial liabilities are classified as subsequently measured at amortised cost.

The Group may in addition elect to designate certain financial assets or liabilities at fair value through profit or loss or to apply hedge accounting where they are not mandatorily held at fair value through profit or loss.

Fair value measurement

The carrying amount of financial assets and liabilities measured at fair value is principally calculated based on inputs other than quoted prices that are observable for these financial assets or liabilities, either directly (i.e. as unquoted prices) or indirectly (i.e. derived from prices). Where no price information is available from a quoted market source, alternative market mechanisms or recent comparable transactions, fair value is estimated based on the Group's views on relevant future prices, net of valuation allowances to accommodate liquidity, modelling and other risks implicit in such estimates.

The inputs used in fair value calculations are determined by the relevant segment or function. The functions support the assets and operate under a defined set of accountabilities authorised by the Executive Leadership Team. Movements in the fair value of financial assets and liabilities may be recognised through the income statement or in other comprehensive income according to the designation of the underlying instrument.

For financial assets and liabilities carried at fair value, the Group uses the following to categorise the inputs to the valuation method used based on the lowest level input that is significant to the fair value measurement as a whole:

IFRS 13 Fair value hierarchy	Level 1	Level 2	Level 3
Valuation inputs	Based on quoted prices (unadjusted) in active markets for identical financial assets and liabilities.	Based on inputs other than quoted prices included within Level 1 that are observable for the financial asset or liability, either directly (i.e. as unquoted prices) or indirectly (i.e. derived from prices).	Based on inputs not observable in the market using appropriate valuation models, including discounted cash flow modelling.

23 Financial risk management continued

23.3 Financial assets and liabilities

The financial assets and liabilities are presented by class in the table below at their carrying amounts.

	IFRS 13 Fair value hierarchy Level[1]	IFRS 9 Classification	2022 US$M	2021 US$M
Current cross currency and interest rate swaps[2]	2	Fair value through profit or loss	–	20
Current other derivative contracts[3]	2,3	Fair value through profit or loss	326	207
Current other financial assets		Amortised cost	100	–
Current other investments[5]	1,2	Fair value through profit or loss	203	3
Non-current cross currency and interest rate swaps[2]	2	Fair value through profit or loss	136	1,123
Non-current other derivative contracts[3]	2,3	Fair value through profit or loss	16	152
Non-current other financial assets[4]	3	Fair value through profit or loss	273	–
Non-current investment in shares	1,3	Fair value through other comprehensive income	138	31
Non-current other investments[5]	1,2	Fair value through profit or loss	239	304
Total other financial assets			1,431	1,840
Cash and cash equivalents		Amortised cost	17,236	15,246
Trade and other receivables[6]		Amortised cost	1,674	2,363
Provisionally priced trade receivables	2	Fair value through profit or loss	3,478	3,547
Total financial assets			23,819	22,996
Non-financial assets			71,347	85,931
Total assets			95,166	108,927
Current cross currency and interest rate swaps[2]	2	Fair value through profit or loss	358	–
Current other derivative contracts[3]	2,3	Fair value through profit or loss	118	52
Current other financial liabilities[7]		Amortised cost	103	78
Non-current cross currency and interest rate swaps[2]	2	Fair value through profit or loss	1,466	586
Non-current other derivative contracts[3]	2,3	Fair value through profit or loss	31	–
Non-current other financial liabilities[7]		Amortised cost	500	560
Total other financial liabilities			2,576	1,276
Trade and other payables[8]		Amortised cost	5,223	6,277
Provisionally priced trade payables	2	Fair value through profit or loss	1,385	574
Bank loans[9]		Amortised cost	2,472	2,260
Notes and debentures[9]		Amortised cost	11,363	14,769
Lease liabilities			2,576	3,896
Other[9]		Amortised cost	17	58
Total financial liabilities			25,612	29,110
Non-financial liabilities			20,788	24,212
Total liabilities			46,400	53,322

[1] All of the Group's financial assets and financial liabilities recognised at fair value were valued using market observable inputs categorised as Level 2 unless specified otherwise in the following footnotes.

[2] Cross currency and interest rate swaps are valued using market data including interest rate curves (which include the base LIBOR rate and swap rates) and foreign exchange rates. A discounted cash flow approach is used to derive the fair value of cross currency and interest rate swaps at the reporting date.

[3] Includes other derivative contracts of US$ nil (2021: US$121 million) categorised as Level 3. Significant items in FY2021 were derivatives embedded in physical commodity purchase and sales contracts of gas in Trinidad and Tobago which were disposed as part of the merger of the Petroleum business during the period.

[4] Includes receivables contingent on outcome of future events relating to mining, and regulatory approvals of US$233 million (2021: US$ nil).

[5] Includes investments held by BHP Billiton Foundation which are restricted and not available for general use by the Group of US$252 million (2021: US$260 million) of which other investment (mainly US Treasury Notes) of US$119 million categorised as Level 1 (2021: US$72 million).

[6] Excludes input taxes of US$427 million (2021: US$486 million) included in other receivables.

[7] Includes the discounted settlement liability in relation to the cancellation of power contracts at the Group's Escondida operations.

[8] Excludes input taxes of US$79 million (2021: US$176 million) included in other payables.

[9] All interest bearing liabilities, excluding lease liabilities, are unsecured.

The carrying amounts in the table above generally approximate to fair value. In the case of US$3,018 million (2021: US$3,018 million) of fixed rate debt not swapped to floating rate, the fair value at 30 June 2022 was US$3,126 million (2021: US$4,052 million). The fair value is determined using a method that can be categorised as Level 2 and uses inputs based on benchmark interest rates, alternative market mechanisms or recent comparable transactions.

For financial instruments that are carried at fair value on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by reassessing categorisation at the end of each reporting period. There were no transfers between categories during the period.

Offsetting financial assets and liabilities

The Group enters into money market deposits and derivative transactions under International Swaps and Derivatives Association master netting agreements that do not meet the criteria in IAS 32 'Financial Instruments: Presentation' for offsetting, but allow for the related amounts to be set-off in certain circumstances. The amounts set out as cross currency and interest rate swaps in the table above represent the derivative financial assets and liabilities of the Group that may be subject to the above arrangements and are presented on a gross basis.

23.4 Derivatives and hedge accounting

The Group uses derivatives to hedge its exposure to certain market risks and may elect to apply hedge accounting.

Hedge accounting

Derivatives are included within financial assets or liabilities at fair value through profit or loss unless they are designated as effective hedging instruments. Financial instruments in this category are classified as current if they are due or expected to be settled within 12 months otherwise they are classified as non-current.

23 Financial risk management continued

Where hedge accounting is applied, at the start of the transaction, the Group documents the type of hedge, the relationship between the hedging instrument and hedged items and its risk management objective and strategy for undertaking various hedge transactions. The documentation also demonstrates that the hedge is expected to be effective.

The Group applies the following types of hedge accounting to its derivatives hedging the interest rate and currency risks of its notes and debentures:

- Fair value hedges – the fair value gain or loss on interest rate and cross currency swaps relating to interest rate risk, together with the change in the fair value of the hedged fixed rate borrowings attributable to interest rate risk are recognised immediately in the income statement. If the hedge no longer meets the criteria for hedge accounting, the fair value adjustment on the note or debenture is amortised to the income statement over the period to maturity using a recalculated effective interest rate.
- Cash flow hedges – changes in the fair value of cross currency interest rate swaps which hedge foreign currency cash flows on the notes and debentures are recognised directly in other comprehensive income and accumulated in the cash flow hedging reserve. To the extent a hedge is ineffective, changes in fair value are recognised immediately in the income statement.

  When a hedging instrument expires, or is sold, terminated or exercised, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity and is amortised to the income statement over the period to the hedged item's maturity.

When hedged, the Group hedges the full notional value of notes or debentures. However, certain components of the fair value of derivatives are not permitted under IFRS 9 to be included in the hedge accounting above. Certain costs of hedging are permitted to be recognised in other comprehensive income. Any change in the fair value of a derivative that does not qualify for hedge accounting, or is ineffective in hedging the designated risk due to contractual differences between the hedged item and hedging instrument, is recognised immediately in the income statement.

The table below shows the carrying amounts of the Group's notes and debentures by currency and the derivatives which hedge them:

- The carrying amount of the notes and debentures includes foreign exchange remeasurement to period-end rates and fair value adjustments when included in a fair value hedge.
- The breakdown of the hedging derivatives includes remeasurement of foreign currency notional values at period-end rates, fair value movements due to interest rate risk, foreign currency cash flows designated into cash flow hedges, costs of hedging recognised in other comprehensive income, ineffectiveness recognised in the income statement and accruals or prepayments.
- The hedged value of notes and debentures includes their carrying amounts adjusted for the offsetting derivative fair value movements due to foreign currency and interest rate risk remeasurement.

		Fair value of derivatives							
2022 US$M	**Carrying amount of notes and debentures**	**Foreign exchange notional at spot rates**	**Interest rate risk**	**Recognised in cash flow hedging reserve**	**Recognised in cost of hedging reserve**	**Recognised in the income statement[1]**	**Accrued cash flows**	**Total**	**Hedged value of notes and debentures[2]**
	A	**B**	**C**	**D**	**E**	**F**	**G**	**B to G**	**A + B + C**
USD	**4,740**	**–**	**(16)**	**–**	**–**	**(7)**	**86**	**63**	**4,724**
GBP	**2,599**	**796**	**(115)**	**(35)**	**13**	**26**	**42**	**727**	**3,280**
EUR	**3,449**	**585**	**112**	**(16)**	**8**	**(4)**	**45**	**730**	**4,146**
CAD	**575**	**167**	**5**	**(8)**	**6**	**(3)**	**1**	**168**	**747**
Total	**11,363**	**1,548**	**(14)**	**(59)**	**27**	**12**	**174**	**1,688**	**12,897**

		Fair value of derivatives							
2021 US$M	Carrying amount of notes and debentures	Foreign exchange notional at spot rates	Interest rate risk	Recognised in cash flow hedging reserve	Recognised in cost of hedging reserve	Recognised in the income statement[1]	Accrued cash flows	Total	Hedged value of notes and debentures[2]
	A	B	C	D	E	F	G	B to G	A + B + C
USD	6,270	–	(318)	–	–	11	77	(230)	5,952
GBP	3,387	435	(544)	(81)	25	(34)	53	(146)	3,278
EUR	4,486	73	(418)	(33)	27	7	49	(295)	4,141
CAD	626	142	(21)	(28)	25	(2)	(2)	114	747
Total	14,769	650	(1,301)	(142)	77	(18)	177	(557)	14,118

1 Predominantly related to ineffectiveness.

2 Includes US$3,018 million (2021: US$3,018 million) of fixed rate debt not swapped to floating rate that is not in a hedging relationship.

The weighted average interest rate payable is USD LIBOR + 1.74 per cent (2021: USD LIBOR + 2.18 per cent). Refer to note 22 'Net finance costs' for details of net finance costs for the year.

Interest Rate Benchmark Reform

IBOR reform impacts the Group's cross currency and interest rate swaps, which reference 3-month US LIBOR, and the associated hedge accounting. At 30 June 2022, the notional value of hedging instruments that reference 3-month US LIBOR is US$ 15.6 billion (2021: US$16.8 billion). The SOFR benchmark rate is being widely adopted by market participants as the replacement for US LIBOR in new contracts. However, a number of US LIBOR settings, including 3-month US LIBOR, will continue to be published until 30 June 2023. Accordingly, absent of any agreement with counterparties to transition to an alternative risk-free rate before this date, the Group's existing cross currency and interest rate swaps with maturity dates beyond 30 June 2023 will only transition to ARR once US LIBOR publication ceases. As at 30 June 2022, the Group has not transitioned any of its existing cross currency and interest rate swaps to alternative risk-free rates, however it is expecting to commence active transition of the existing cross currency and interest rate swaps portfolio to alternative benchmark rates during FY2023.

23 Financial risk management continued

The following table shows the notional value of the Group's hedging instruments that are expected to expire before 30 June 2023.

Hedging instrument	Notional currency	Notional value US$M	Notional value to mature before LIBOR expires FY2023 US$M
Interest rate swaps	USD	**10,719**	**748**
Cross-currency interest rate swaps	EUR	**3,187**	**404**
	GBP	**1,673**	**923**
	Total	**15,579**	**2,075**

In addition, the Group has other arrangements which reference 3-month US LIBOR benchmarks and extend beyond 2022. These include USD bank loans of US$1.6 billion (2021: US$2.3 billion). Refer to note 20 'Net debt'.

The Group has previously adopted amendments to IFRS 9 and IFRS 7 in relation to IBOR Reform. These amendments provide reliefs from applying specific hedge accounting requirements to hedging arrangements directly impacted by these reforms. In particular, where changes to the Group's instruments arise solely as a result of IBOR reform and do not change the economic substance of the Group's arrangements, the Group is able to maintain its existing hedge relationships and accounting. The Group has continued to apply these reliefs, resulting in no impact on the Group's hedge accounting. Upon transition to alternative risk-free rates, the Group will seek to apply further reliefs in IFRS 9 and continue to apply hedge accounting to its hedging arrangements.

Movements in reserves relating to hedge accounting

The following table shows a reconciliation of the components of equity and an analysis of the movements in reserves for all hedges. For a description of these reserves, refer to note 17 'Other equity'.

2022 US$M	**Cash flow hedging reserve**			**Cost of hedging reserve**			
	Gross	**Tax**	**Net**	**Gross**	**Tax**	**Net**	**Total**
At the beginning of the financial year	**142**	**(42)**	**100**	**(77)**	**23**	**(54)**	**46**
Add: Change in fair value of hedging instrument recognised in OCI	**(914)**	**274**	**(640)**	**–**	**–**	**–**	**(640)**
Less: Reclassified from reserves to interest expense – recognised through OCI	**831**	**(250)**	**581**	**50**	**(15)**	**35**	**616**
At the end of the financial year	**59**	**(18)**	**41**	**(27)**	**8**	**(19)**	**22**

2021 US$M	Cash flow hedging reserve			Cost of hedging reserve			
	Gross	Tax	Net	Gross	Tax	Net	Total
At the beginning of the financial year	71	(21)	50	(32)	9	(23)	27
Add: Change in fair value of hedging instrument recognised in OCI	863	(259)	604	–	–	–	604
Less: Reclassified from reserves to interest expense – recognised through OCI	(792)	238	(554)	(45)	14	(31)	(585)
At the end of the financial year	142	(42)	100	(77)	23	(54)	46

Changes in interest bearing liabilities and related derivatives resulting from financing activities

The movement in the year in the Group's interest bearing liabilities and related derivatives are as follows:

2022 US$M	**Interest bearing liabilities**					**Derivatives (assets)/ liabilities**	
	Bank loans	**Notes and debentures**	**Lease liabilities**	**Bank overdraft and short-term borrowings**	**Other**	**Cross currency and interest rate swaps**	**Total**
At the beginning of the financial year	**2,260**	**14,769**	**3,896**	**–**	**58**	**(557)**	
Proceeds from interest bearing liabilities	**1,150**	**–**	**–**	**–**	**14**	**–**	**1,164**
Settlements of debt related instruments	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Repayment of interest bearing liabilities[1]	**(941)**	**(1,232)**	**(1,163)**	**–**	**(55)**	**–**	**(3,391)**
Change from Net financing cash flows	**209**	**(1,232)**	**(1,163)**	**–**	**(41)**	**–**	**(2,227)**
Other movements:							
Divestment and demerger of subsidiaries and operations	**–**	**–**	**(492)**	**–**	**–**	**–**	
Interest rate impacts	**–**	**(1,286)**	**–**	**–**	**–**	**1,277**	
Foreign exchange impacts	**3**	**(894)**	**(126)**	**–**	**(2)**	**898**	
Lease additions	**–**	**–**	**866**	**–**	**–**	**–**	
Remeasurement of index-linked freight contracts	**–**	**–**	**(369)**	**–**	**–**	**–**	
Other interest bearing liabilities/derivative related changes	**–**	**6**	**(36)**	**–**	**2**	**70**	
At the end of the financial year	**2,472**	**11,363**	**2,576**	**–**	**17**	**1,688**	

23 Financial risk management continued

	Interest bearing liabilities					Derivatives (assets)/ liabilities	
2021 US$M	Bank loans	Notes and debentures	Lease liabilities	Bank overdraft and short-term borrowings	Other	Cross currency and interest rate swaps	Total
At the beginning of the financial year	2,492	21,045	3,443	–	68	(433)	
Proceeds from interest bearing liabilities	504	–	–	–	64	–	568
Settlements of debt related instruments	–	–	–	–	–	167	167
Repayment of interest bearing liabilities[1]	(737)	(6,888)	(770)	–	–	–	(8,395)
Change from Net financing cash flows	(233)	(6,888)	(770)	–	64	167	(7,660)
Other movements:							
Loss on bond repurchase	–	579	–	–	–	(184)	
Interest rate impacts	–	(764)	–	–	–	704	
Foreign exchange impacts	(1)	798	115	–	(14)	(796)	
Lease additions	–	–	1,223	–	–	–	
Remeasurement of index-linked freight contracts	–	–	(59)	–	–	–	
Other interest bearing liabilities/derivative related changes	2	(1)	(56)	–	(60)	(15)	
At the end of the financial year	2,260	14,769	3,896	–	58	(557)	

[1] Includes US$33 million (2021: US$38 million) of Discontinued operations cash flows.

Employee matters

24 Key management personnel

Key management personnel compensation comprises:

	2022 US$	2021 US$	2020 US$
Short-term employee benefits	**13,979,139**	14,081,625	12,564,637
Post-employment benefits	**634,363**	744,951	1,172,727
Share-based payments	**11,165,439**	11,601,866	13,514,588
Total	**25,778,941**	26,428,442	27,251,952

Key Management Personnel (KMP) includes the roles which have the authority and responsibility for planning, directing and controlling the activities of BHP. These are Non-executive Directors, the CEO, the Chief Financial Officer, the President Minerals Australia, the President Minerals Americas and the Senior Executive Officer (i.e. President Petroleum until 31 May 2022).

Transactions and outstanding loans/amounts with key management personnel

There were no purchases by key management personnel from the Group during FY2022 (2021: US$ nil; 2020: US$ nil).

There were no amounts payable by key management personnel at 30 June 2022 (2021: US$ nil; 2020: US$ nil).

There were no loans receivable from or payable to key management personnel at 30 June 2022 (2021: US$ nil; 2020: US$ nil).

Transactions with personally related entities

A number of Directors of the Group hold or have held positions in other companies (personally related entities) where it is considered they control or significantly influence the financial or operating policies of those entities. There were no reportable transactions with those entities and no amounts were owed by the Group to personally related entities at 30 June 2022 (2021: US$ nil; 2020: US$ nil).

For more information on remuneration and transactions with key management personnel, refer to the Remuneration Report under Governance.

25 Employee share ownership plans

Awards, in the form of the right to receive ordinary shares in BHP Group Limited have been granted under the following employee share ownership plans: Cash and Deferred Plan (CDP), Short-Term Incentive Plan (STIP), Long-Term Incentive Plan (LTIP), Management Award Plan (MAP), Transitional and Commencement KMP awards and the all-employee share plan, Shareplus. Following unification of our dual listed company structure in January 2022, employees holding unvested BHP Group Plc awards received one BHP Group Limited award per BHP Group Plc award held at the time of unification. Vesting of awards will stay on the original timeframes. Employees holding BHP Group Plc acquired shares under Shareplus received one BHP Group Limited share for each BHP Group Plc share owned.

Some awards are eligible to receive a cash payment, or the equivalent value in shares, equal to the dividend amount that would have been earned on the underlying shares awarded to those participants (the Dividend Equivalent Payment, or DEP). The DEP is provided to the participants once the underlying shares are allocated or transferred to them. Awards under the plans do not confer any rights to participate in a share issue; however, there is discretion under each of the plans to adjust the awards in response to a variation in the share capital of BHP Group Limited.

On completion of the merger between BHP Petroleum and Woodside on 1 June 2022, adjustments were made to unvested awards held under the above mentioned employee share ownership plans to ensure participants continue to be appropriately treated. The number of 'Uplift' awards granted of 1,574,034 shares was calculated based on the number of unvested awards held prior to the merger multiplied by 1.1205 being the USD value of the in specie dividend divided by the closing BHP Group Limited share price on 31 May 2022 (converted into USD on the same date) plus one.

25 Employee share ownership plans continued

The table below provides a description of each of the plans.

Plan	CDP and STIP	LTIP and MAP	Transitional and Commencement KMP awards	Shareplus
Type	Short-term incentive	Long-term incentive	Long-term incentive	All-employee share purchase plan
Overview	The CDP was implemented in FY2020 as a replacement for the STIP, both of which are generally plans for Executive KMP and members of the Executive Leadership Team who are not Executive KMP. Under the CDP, two thirds of the value of a participant's short-term incentive amount is awarded as rights to receive BHP Group Limited shares at the end of the vesting period (and the remaining one third is delivered in cash). Two awards of deferred shares are granted, each of the equivalent value to the cash award, vesting in two and five years respectively. Under STIP, half of the value of a participant's short-term incentive amount is awarded as rights to receive BHP Group Limited shares at the end of the two-year vesting period.	The LTIP is a plan for Executive KMP and members of the Executive Leadership Team who are not Executive KMP, and awards are granted annually. The MAP is a plan for BHP senior management who are not KMP. The number of share rights awarded is determined by a participant's role and grade.	Awards may be granted to new Executive KMP recruited into or within the Group to bridge the time-based gap between the vesting of awards either granted in their non-KMP roles or to replace awards foregone from a previous company.	Employees may contribute up to US$5,000 to acquire shares in any plan year. On the third anniversary of the start of a plan year, the Group will match the number of acquired shares.
Vesting conditions	CDP: Service conditions only for the two-year award. Vesting of the five-year award is subject to service conditions and also to holistic review of performance at the end of the five-year vesting period, including a five-year view on HSEC performance, profitability, cash flow, balance sheet health, returns to shareholders, corporate governance and conduct. STIP: Service conditions only.	LTIP: Service and performance conditions. BHP's Total Shareholder Return[1] (TSR) performance relative to the Peer Group TSR over a five-year performance period determines the vesting of 67 per cent of the awards, while performance relative to the Index TSR (being the index value where the comparator group is a market index) determines the vesting of 33 per cent of the awards. For awards granted from December 2017 onwards, 25 per cent of the award will vest where BHP's TSR is equal to the median TSR of the relevant comparator group(s), as measured over the performance period. Where TSR is below the median, awards will not vest. Vesting occurs on a sliding scale when BHP's TSR measured over the performance period is between the median TSR of the relevant comparator group(s) up to a nominated level of TSR outperformance over the relevant comparator group(s), as determined by the Committee, above which 100 per cent of the award will vest. MAP: Service conditions only.	Service and performance conditions. The Remuneration Committee has absolute discretion to determine if the performance condition has been met and whether any, all or part of the award will vest (or otherwise lapse), having regard to personal performance and the underlying financial performance of the Group during the performance period. To the extent the performance condition is not achieved, awards will lapse. There is no retesting of the performance condition. Vested awards may be subject to a holding lock.	Service conditions only.
Vesting period	CDP – 2 and 5 years STIP – 2 years	LTIP – 5 years MAP – 1 to 5 years	2 years	3 years
Dividend Equivalent Payment	CDP – Yes STIP – Yes	LTIP – Yes MAP – Varies	Yes	No
Exercise period	None	None	None	None

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[1] For LTIP awards granted prior to unification and where the five-year performance period ends after unification, the TSR at the start of the performance period is based on the weighted average of the TSRs of BHP Group Limited and BHP Group Plc and the TSR at the end of the performance period is based on the TSR of BHP Group Limited.

25 Employee share ownership plans continued

Employee share awards

2022	Number of awards at the beginning of the financial year	Number of awards issued during the year	Number of awards vested and exercised	Number of awards lapsed	Number of BHP Group Plc awards transferred to BHP Group Limited on unification[1]	Number of awards at the end of the financial year	Weighted average remaining contractual life (years)	Weighted average share price at exercise date
BHP Group Limited								
CDP awards	**216,340**	**491,654**	**–**	**–**	**–**	**707,994**	**2.2**	**n/a**
STIP awards	**200,785**	**9,014**	**125,989**	**–**	**–**	**83,810**	**0.2**	**A$47.70**
LTIP awards	**3,543,220**	**714,781**	**1,114,524**	**–**	**–**	**3,143,477**	**1.8**	**A$47.70**
MAP awards[2]	**9,953,517**	**3,915,785**	**4,615,318**	**2,321,453**	**161,642**	**7,094,173**	**1.2**	**A$46.62**
Transitional and Commencement KMP awards	**77,000**	**9,279**	**–**	**–**	**–**	**86,279**	**0.2**	**n/a**
Shareplus	**4,539,194**	**3,091,639**	**2,465,378**	**531,479**	**280,494**	**4,914,470**	**1.3**	**A$50.54**
BHP Group Plc								
MAP awards	**176,049**	**72,412**	**70,657**	**16,162**	**161,642**	**–**	**n/a**	**£22.18**
Shareplus	**232,767**	**63,209**	**2,174**	**13,308**	**280,494**	**–**	**n/a**	**£22.11**

[1] On unification of the Group's corporate structure on 31 January 2022 (refer note 16 'Share capital' for details) 161,642 of unvested awards over BHP Group Plc shares lapsed and were replaced by equivalent awards over BHP Group Limited on the terms of the MAP awards. Under the rules of the Shareplus, on unification, holders of acquired BHP Group Plc shares, exchanged them for BHP Group Limited shares on the same terms of other BHP Group Plc shareholders. As participants were not eligible for matching shares in BHP Group Plc, BHP Group Limited made an equivalent offer of rights to match 280,494 unvested awards, which will vest based on their original timeline and will be satisfied with the delivery of BHP Group Limited shares. Given the unification had no impact on the vesting timelines or the terms and conditions of the MAP awards and Shareplus, the changes did not represent a modification that changed the fair value of the awards.

[2] There were 2,761 number of awards vested and exercisable at the end of the financial year.

Fair value and assumptions in the calculation of fair value for awards issued

2022	Weighted average fair value of awards granted during the year US$	Risk-free interest rate	Estimated life of awards	Share price at grant date	Estimated volatility of share price	Dividend yield
BHP Group Limited						
CDP awards	**27.46**	**n/a**	**2 and 5 years**	**A$38.05**	**n/a**	**n/a**
LTIP awards	**13.66**	**1.36%**	**5 years**	**A$38.05**	**30.0%**	**n/a**
MAP awards[1]	**22.10**	**n/a**	**1-5 years**	**A$51.33/A$36.39/A$46.55/ A$50.58/A$42.52**	**n/a**	**5.0% up to 30 June 2022 and 7.5% per annum thereafter**
Shareplus	**22.80**	**0.12%**	**3 years**	**A$45.66**	**n/a**	**5.51%**
BHP Group Plc						
MAP awards	**20.85**	**n/a**	**3 years**	**£18.62**	**n/a**	**5.0% up to 30 June 2022 and 7.5% per annum thereafter**
Shareplus	**14.53**	**0.15%**	**3 years**	**£20.68**	**n/a**	**6.60%**

[1] Includes MAP awards granted on 17 August 2021, 29 September 2021, 1 March 2022, 30 March 2022 and 17 June 2022.

Recognition and measurement

The fair value at grant date of equity-settled share awards is charged to the income statement over the period for which the benefits of employee services are expected to be derived. The fair values of awards granted were estimated using a Monte Carlo simulation methodology and Black-Scholes option pricing technique and consider the following factors:

- exercise price
- expected life of the award
- current market price of the underlying shares
- expected volatility using an analysis of historic volatility over different rolling periods. For the LTIP, it is calculated for all sector comparators and the published MSCI World index
- expected dividends
- risk-free interest rate, which is an applicable government bond rate
- market-based performance hurdles
- non-vesting conditions

Where awards are forfeited because non-market-based vesting conditions are not satisfied, the expense previously recognised is proportionately reversed.

The tax effect of awards granted is recognised in income tax expense, except to the extent that the total tax deductions are expected to exceed the cumulative remuneration expense. In this situation, the excess of the associated current or deferred tax is recognised in equity and forms part of the employee share awards reserve. The fair value of awards as presented in the tables above represents the fair value at grant date.

In respect of employee share awards, the Group utilises the BHP Billiton Limited Employee Equity Trust. The trustee of this trust is an independent company, resident in Jersey. The trust uses funds provided by the Group to acquire ordinary shares to enable awards to be made or satisfied. The ordinary shares may be acquired by purchase in the market or by subscription at not less than nominal value.

26 Employee benefits, restructuring and post-retirement employee benefits provisions

	2022 US$M	2021 US$M
Employee benefits[1]	**1,351**	1,624
Restructuring[2]	**27**	54
Post-retirement employee benefits[3]	**281**	534
Total provisions	**1,659**	2,212
Comprising:		
Current	**1,319**	1,606
Non-current	**340**	606

2022	**Employee benefits US$M**	**Restructuring US$M**	**Post-retirement employee benefits[3] US$M**	**Total US$M**
At the beginning of the financial year	**1,624**	**54**	**534**	**2,212**
Charge/(credit) for the year:				
Underlying	**1,424**	**24**	**78**	**1,526**
Discounting	**–**	**–**	**30**	**30**
Net interest expense	**–**	**–**	**(9)**	**(9)**
Exchange variations	**(131)**	**(1)**	**(51)**	**(183)**
Released during the year	**(58)**	**(2)**	**(2)**	**(62)**
Remeasurement gains taken to retained earnings	**–**	**–**	**(24)**	**(24)**
Utilisation	**(1,381)**	**(43)**	**(58)**	**(1,482)**
Divestment and demerger of subsidiaries and operations	**(128)**	**(6)**	**(217)**	**(351)**
Transfers and other movements	**1**	**1**	**–**	**2**
At the end of the financial year	**1,351**	**27**	**281**	**1,659**

[1] The expenditure associated with total employee benefits will occur in a pattern consistent with when employees choose to exercise their entitlement to benefits.

[2] Total restructuring provisions include provisions for terminations and office closures.

[3] The net liability recognised in the Consolidated Balance Sheet includes US$165 million present value of funded defined benefits pension obligation (2021: US$377 million) offset by fair value of defined benefit scheme assets US$(169) million (2021: US$(398) million), US$85 million present value of unfunded defined pension and post-retirement medical benefits obligation (2021: US$321 million) and US$200 million unfunded post-employment benefits obligation in Chile (2021: US$234 million).

Recognition and measurement

Provisions are recognised by the Group when:

- there is a present legal or constructive obligation as a result of past events
- it is more likely than not that a permanent outflow of resources will be required to settle the obligation
- the amount can be reliably estimated and measured at the present value of management's best estimate of the cash outflow required to settle the obligation at the reporting date

Provision	Description
Employee benefits	Liabilities for benefits accruing to employees up until the reporting date in respect of wages and salaries, annual leave and any accumulating sick leave are recognised in the period the related service is rendered. Liabilities recognised in respect of short-term employee benefits expected to be settled within 12 months are measured at the amounts expected to be paid when the liabilities are settled. Liabilities for other long-term employee benefits, including long service leave are measured as the present value of estimated future payments for the services provided by employees up to the reporting date. Liabilities that are not expected to be settled within 12 months are discounted at the reporting date using market yields of high-quality corporate bonds or government bonds for countries where there is no deep market for corporate bonds. The rates used reflect the terms to maturity and currency that match, as closely as possible, the estimated future cash outflows. In relation to industry-based long service leave funds, the Group's liability, including obligations for funding shortfalls, is determined after deducting the fair value of dedicated assets of such funds. Liabilities for short and long-term employee benefits (other than unpaid wages and salaries) are disclosed within employee benefits. Liabilities for unpaid wages and salaries are recognised in other creditors.
Restructuring	Restructuring provisions are recognised when: – the Group has developed a detailed formal plan identifying the business or part of the business concerned, the location and approximate number of employees affected, a detailed estimate of the associated costs, and an appropriate timeline – the restructuring has either commenced or been publicly announced and can no longer be withdrawn Payments that are not expected to be settled within 12 months of the reporting date are measured at the present value of the estimated future cash payments expected to be made by the Group.

26 Employee benefits, restructuring and post-retirement employee benefits provisions continued

Post-retirement employee benefits

Defined contribution pension schemes and multi-employer pension schemes

For defined contribution schemes or schemes operated on an industry-wide basis where it is not possible to identify assets attributable to the participation by the Group's employees, the pension charge is calculated on the basis of contributions payable. The Group contributed US$324 million during the financial year (2021: US$301 million; 2020: US$243 million) to defined contribution plans and multi-employer defined contribution plans. These contributions are expensed as incurred.

Defined benefit pension and post-retirement medical schemes

The Group operates or participates in a number of defined benefit pension schemes throughout the world, all of which are closed to new entrants. The funding of the schemes complies with local regulations. The assets of the schemes are generally held separately from those of the Group and are administered by trustees or management boards. The Group also operates a number of unfunded post-retirement medical schemes in the United States, Canada and Europe.

For defined benefit schemes, an asset or liability is recognised in the balance sheet based at the present value of defined benefit obligations less, where funded, the fair value of plan assets, except that any such asset cannot exceed the present value of expected refunds from and reductions in future contributions to the plan. Full actuarial valuations are prepared by local actuaries for all schemes, using discount rates based on market yields at the reporting date on high-quality corporate bonds or by reference to national government bonds if high-quality corporate bonds are not available.

Where funded, scheme assets are invested in a diversified range of asset classes, predominantly comprising bonds and equities.

Group and related party information

27 Discontinued operations

On 22 November 2021, the Group and Woodside signed a binding SSA for the merger of the Group's oil and gas portfolio with Woodside. Woodside has subsequently acquired the entire share capital of BHP Petroleum International Pty Ltd ('BHP Petroleum') in exchange for new Woodside ordinary shares.

While the merger had an economic effective date of 1 July 2021, the Group continued to control the Petroleum assets and carry on business in the normal course for 11 months until 1 June 2022 (Completion Date). As such, the Group recognises its share of revenue, expenses, net finance costs and associated income tax expense related to the Discontinued operation until the Completion Date.

As consideration for the sale of BHP Petroleum, the Group received 914,768,948 newly issued Woodside ordinary shares at Completion Date. On the Completion Date, the Group paid a fully franked in specie dividend in the form of Woodside shares to eligible BHP shareholders. Eligible BHP shareholders received one Woodside share for every 5.5340 BHP shares they held on the Group's register at the record date of 26 May 2022.

As part of completion and in order to reflect the economic effective date, the Group made a net cash payment of US$0.7 billion to Woodside in addition to US$0.4 billion in cash that was left in the BHP Petroleum bank accounts to fund ongoing operations. The total cash transfer of US$1.1 billion reflects the net cash flows generated by BHP Petroleum between 1 July 2021 and Completion Date adjusted for dividends Woodside would have paid on the newly issued Woodside ordinary shares, had the Merger completed on 1 July 2021. The net cash completion payment to Woodside is subject to a customary post-completion review, which may result in an adjustment to the amount paid.

BHP Mitsui Coal Pty Ltd (BMC), while being divested on 3 May 2022, is not considered to meet the criteria for classification as a Discontinued operation given its relative size to the Group and the Coal segment. For further information, refer to note 3 'Exceptional items'.

The contribution of Discontinued operations to the Group's profit and cash flows is detailed below:

Income statement – Discontinued operations

	2022 US$M	2021 US$M	2020 US$M
Revenue	**6,404**	3,896	4,007
Other income	**170**	130	57
Expenses excluding net finance costs	**(2,207)**	(3,629)	(3,322)
Loss from equity accounted investments, related impairments and expenses	**(4)**	(6)	(4)
Profit from operations	**4,363**	391	738
Financial expenses	**(165)**	(88)	(70)
Financial income	**6**	6	17
Net finance costs	**(159)**	(82)	(53)
Profit before taxation	**4,204**	309	685
Income tax expense	**(1,471)**	(545)	(492)
Royalty-related taxation (net of income tax benefit)	**(237)**	11	(85)
Total taxation expense	**(1,708)**	(534)	(577)
Profit/(loss) after taxation from operating activities	**2,496**	(225)	108
Net gain on Petroleum merger with Woodside (after tax)	**8,159**	–	–
Profit/(loss) after taxation	**10,655**	(225)	108
Attributable to non-controlling interests	**–**	–	–
Attributable to BHP shareholders	**10,655**	(225)	108
Basic earnings/(loss) per ordinary share (cents)	**210.5**	(4.5)	2.1
Diluted earnings/(loss) per ordinary share (cents)	**210.1**	(4.5)	2.1

The total comprehensive income attributable to BHP shareholders from Discontinued operations was a gain of US$10,596 million (30 June 2021: loss of US$231 million; 30 June 2020: gain of US$118 million).

The conversion of options and share rights would decrease the loss per share for the year ended 30 June 2021, therefore its impact has been excluded from the diluted earnings per share calculation.

27 Discontinued operations continued

Cash flows from Discontinued operations

	2022 US$M	2021 US$M	2020 US$M
Net operating cash flows	**2,889**	1,351	1,021
Net investing cash flows[1]	**(904)**	(1,520)	(1,033)
Net financing cash flows[2]	**(33)**	(38)	(39)
Net increase/(decrease) in cash and cash equivalents from Discontinued operations	**1,952**	(207)	(51)
Net cash completion payment on merger of Petroleum with Woodside	**(683)**	–	–
Cash and cash equivalents disposed	**(399)**	–	–
Total cash impact	**870**	(207)	(51)

1 Includes purchases of property, plant and equipment and capitalised exploration of US$1,144 million related to drilling and development expenditure (30 June 2021: US$1,020 million; 30 June 2020: US$1,079 million), proceeds from sale of subsidiaries, operations and joint operations, net of cash of US$91 million (30 June 2021: investment of US$480 million; 30 June 2020: US$ nil), proceeds from sale of assets of US$151 million (30 June 2021: US$39 million; 30 June 2020: US$78 million) and other investing outflows of US$2 million (30 June 2021: outflow of US$59 million; 30 June 2020: outflow of US$32 million).

2 Represents net repayment of interest bearing liabilities of US$33 million (30 June 2021: US$38 million; 30 June 2020: US$39 million).

Exceptional items – Discontinued operations

Exceptional items are those gains or losses where their nature, including the expected frequency of the events giving rise to them, and impact is considered material to the Financial Statements.

Items related to Discontinued operations included within the Group's profits for the year ended 30 June 2022 are detailed below.

Year ended 30 June 2022	Gross US$M	Tax US$M	Net US$M
Exceptional items by category			
Net gain on Petroleum merger with Woodside[1]	**8,167**	**(8)**	**8,159**
Total	**8,167**	**(8)**	**8,159**
Attributable to non-controlling interests	**–**	**–**	**–**
Attributable to BHP shareholders	**8,167**	**(8)**	**8,159**

1 The tax expense associated with the exceptional item reflects the tax impact of transaction costs and other restructuring related activities undertaken pre-merger. There are no further tax impacts arising on the net gain on merger of our Petroleum business with Woodside as generated tax losses were either offset with capital gains in other entities in the Group, or not recognised on the basis that it is not probable that future capital gains will be available against which the Group can utilise the tax losses.

Net gain on disposal of Discontinued operations

Details of the net gain on Petroleum merger with Woodside is presented below:

	2022 US$M
Assets	
Cash and cash equivalents	**399**
Trade and other receivables	**1,560**
Other financial assets	**91**
Inventories	**295**
Property, plant and equipment	**12,055**
Intangible assets	**66**
Investments accounted for using the equity method	**240**
Deferred tax assets	**1,470**
Other	**18**
Total assets	**16,194**
Liabilities	
Trade and other payables	**913**
Interest bearing liabilities	**243**
Tax payables	**300**
Provisions	**4,518**
Deferred income	**48**
Total liabilities	**6,022**
Net assets	**10,172**
Fair value of Woodside shares[1]	**19,566**
Net cash completion payment on merger of Petroleum with Woodside[2]	**(683)**
Foreign currency translation reserve transferred to the income statement	**54**
Other provisions and related indemnities recognised at completion	**(353)**
Transaction and other directly attributable costs	**(245)**
Income tax expense	**(8)**
Net gain on Petroleum merger with Woodside	**8,159**

1 Represents the consideration received being the fair value of 914,768,948 Woodside ordinary shares received using the closing ASX share price of A$29.76 on 31 May 2022 (US$21.39 equivalent based on an exchange rate of AUD/USD 0.7187).

2 Reflects the net cash flows generated by BHP Petroleum between 1 July 2021 and Completion Date adjusted for dividends Woodside would have paid on the newly issued Woodside ordinary shares, had the Merger completed on 1 July 2021.

27 Discontinued operations continued

The Exceptional items related to Discontinued operations included within the Group's profit for the years ended 30 June 2021 and 30 June 2020 are outlined below:

Year ended 30 June 2021	Gross US$M	Tax US$M	Net US$M
Exceptional items by category			
Impairment of Potash assets[1]	–	(278)	(278)
COVID-19 related costs	(47)	8	(39)
Total	(47)	(270)	(317)
Attributable to non-controlling interests	–	–	–
Attributable to BHP shareholders	(47)	(270)	(317)

[1] The exceptional item reflects the impairment of tax losses originally expected to be recoverable against taxable profits from the Group's Potash assets. The impairment is included in Discontinued operations as the entity with the losses transferred to Woodside and therefore the losses are no longer available to the Group.

Year ended 30 June 2020	Gross US$M	Tax US$M	Net US$M
Exceptional items by category			
COVID-19 related costs	(6)	2	(4)
Total	(6)	2	(4)
Attributable to non-controlling interests	–	–	–
Attributable to BHP shareholders	(6)	2	(4)

28 Subsidiaries

Significant subsidiaries of the Group are those with the most significant contribution to the Group's net profit or net assets. The Group's interest in the subsidiaries' results are listed in the table below.

			Group's interest	
Significant subsidiaries	**Country of incorporation**	**Principal activity**	**2022 %**	2021 %
Coal				
BHP Mitsui Coal Pty Ltd[1]	Australia	Coal mining	**–**	80
Hunter Valley Energy Coal Pty Ltd	Australia	Coal mining	**100**	100
Copper				
BHP Olympic Dam Corporation Pty Ltd	Australia	Copper and uranium mining	**100**	100
Compañia Minera Cerro Colorado Limitada	Chile	Copper mining	**100**	100
Minera Escondida Ltda[2]	Chile	Copper mining	**57.5**	57.5
Minera Spence SA	Chile	Copper mining	**100**	100
Iron Ore				
BHP Iron Ore (Jimblebar) Pty Ltd[3]	Australia	Iron ore mining	**85**	85
BHP Iron Ore Pty Ltd	Australia	Service company	**100**	100
BHP (Towage Service) Pty Ltd	Australia	Towing services	**100**	100
Marketing				
BHP Billiton Freight Singapore Pte Limited	Singapore	Freight services	**100**	100
BHP Billiton Marketing AG	Switzerland	Marketing and trading	**100**	100
BHP Billiton Marketing Asia Pte Ltd	Singapore	Marketing support and other services	**100**	100
Group and Unallocated				
BHP Billiton Finance B.V.	The Netherlands	Finance	**100**	100
BHP Billiton Finance Limited	Australia	Finance	**100**	100
BHP Billiton Finance (USA) Limited	Australia	Finance	**100**	100
BHP Canada Inc.	Canada	Potash development	**100**	100
BHP Group Operations Pty Ltd	Australia	Administrative services	**100**	100
BHP Nickel West Pty Ltd	Australia	Nickel mining, smelting, refining and administrative services	**100**	100
WMC Finance (USA) Limited	Australia	Finance	**100**	100

[1] The divestment of BHP's 80 per cent interest in BHP Mitsui Coal Pty Ltd (BMC) to Stanmore Resources Limited was completed on 3 May 2022. Refer to note 3 'Exceptional items' for further information.

[2] As the Group has the ability to direct the relevant activities at Minera Escondida Ltda, it has control over the entity. The assessment of the most relevant activity in this contractual arrangement is subject to judgement. The Group establishes the mine plan and the operating budget and has the ability to appoint the key management personnel, demonstrating that the Group has the existing rights to direct the relevant activities of Minera Escondida Ltda.

[3] The Group has an effective interest of 92.5 per cent in BHP Iron Ore (Jimblebar) Pty Ltd; however, by virtue of the shareholder agreement with ITOCHU Iron Ore Australia Pty Ltd and Mitsui & Co. Iron Ore Exploration & Mining Pty Ltd, the Group's interest in the Jimblebar mining operation is 85 per cent, which is consistent with the other respective contractual arrangements at Western Australia Iron Ore.

29 Investments accounted for using the equity method

Significant interests in equity accounted investments of the Group are those with the most significant contribution to the Group's net profit or net assets. The Group's ownership interest in equity accounted investments results are listed in the table below.

					Ownership interest	
Significant associates and joint ventures	**Country of incorporation/ principal place of business**	**Associate or joint venture**	**Principal activity**	**Reporting date**	**2022 %**	2021 %
Cerrejón[1]	Anguilla/Colombia/Ireland	Associate	Coal mining in Colombia	31 December	**–**	33.33
Compañía Minera Antamina S.A. (Antamina)	Peru	Associate	Copper and zinc mining	31 December	**33.75**	33.75
Samarco Mineração S.A. (Samarco)	Brazil	Joint venture	Iron ore mining	31 December	**50.00**	50.00

[1] At 30 June 2021, the Group's investment in Cerrejón was classified as 'Assets held for sale' and payables owed to Cerrejón was classified as 'Liabilities directly associated with the assets held for sale'. During FY2022 the Group received dividends of US$238 million from Cerrejón and on 11 January 2022, BHP completed the sale of its 33.33 per cent interest in Cerrejón to Glencore. In accordance with the sale agreement, the final sale proceeds was adjusted for the dividends received to a final number of US$50 million.

Voting in relation to relevant activities in Antamina, determined to be the approval of the operating and capital budgets, does not require unanimous consent of all participants to the arrangement, therefore joint control does not exist. Instead, because the Group has the power to participate in the financial and operating policies of the investee, this investment is accounted for as an associate.

Samarco is jointly owned by BHP Billiton Brasil Ltda (BHP Brasil) and Vale S.A. (Vale). As the Samarco entity has the rights to the assets and obligations to the liabilities relating to the joint arrangement and not its owners, this investment is accounted for as a joint venture.

The Group is restricted in its ability to make dividend payments from its investments in associates and joint ventures as any such payments require the approval of all investors in the associates and joint ventures. The ownership interest at the Group's and the associates' or joint ventures' reporting dates are the same. When the annual financial reporting date is different to the Group's, financial information is obtained as at 30 June in order to report on an annual basis consistent with the Group's reporting date.

The movement for the year in the Group's investments accounted for using the equity method is as follows:

Year ended 30 June 2022 US$M	**Investment in associates**	**Investment in joint ventures**	**Total equity accounted investments**
At the beginning of the financial year	**1,742**	**–**	**1,742**
Loss from equity accounted investments, related impairments and expenses[1,2]	**653**	**(676)**	**(23)**
Investment in equity accounted investments	**52**	**–**	**52**
Dividends received from equity accounted investments[3]	**(787)**	**–**	**(787)**
Divestment and demerger of equity accounted investments	**(240)**	**–**	**(240)**
Other	**–**	**676**	**676**
At the end of the financial year	**1,420**	**–**	**1,420**

[1] US$(676) million represents US$(663) million movement in the Samarco dam failure provision including US$(747) million change in estimate and US$84 million exchange translation, US$68 million movement in provisions related to the Samarco Germano dam decommissioning provision including US$56 million change in estimate and US$12 million exchange translation and US$(81) million fair value change on forward exchange derivatives. Refer to note 4 'Significant events – Samarco dam failure' for further information.

[2] Includes share of operating losses of equity accounted investments from Discontinued operations of US$4 million (2021: US$6 million; 2020: US$4 million). Refer to note 27 'Discontinued operations'.

[3] Includes dividends received from equity accounted investments from Discontinued operations of US$10 million (2021: US$10 million; 2020: US$12 million).

The following table summarises the financial information relating to each of the Group's significant equity accounted investments. BHP Brasil's 50 per cent portion of Samarco's commitments, for which BHP Brasil has no funding obligation, is US$350 million (2021: US$350 million).

	Associates		Joint ventures		
2022 US$M	**Antamina**	**Individually immaterial[1]**	**Samarco[2]**	**Individually immaterial**	**Total**
Current assets	**1,275**		**499[3]**		
Non-current assets	**5,293**		**5,717**		
Current liabilities	**(847)**		**(10,830)[4]**		
Non-current liabilities	**(1,851)**		**(7,873)**		
Net assets/(liabilities) – 100%	**3,870**		**(12,487)**		
Net assets/(liabilities) – Group share	**1,306**		**(6,244)**		
Adjustments to net assets related to accounting policy adjustments	**–**		**268[5]**		
Investment in Samarco	**–**		**516[6]**		
Impairment of the carrying value of the investment in Samarco	**–**		**(1,041)[7]**		
Additional share of Samarco losses	**–**		**5,326[8]**		
Unrecognised losses	**–**		**1,175[9]**		
Carrying amount of investments accounted for using the equity method	**1,306**	**114**	**–**	**–**	**1,420**
Revenue – 100%	**5,264**		**1,670**		
Profit/(loss) from Continuing operations – 100%	**2,133**		**(528)[10]**		
Share of profit/(loss) of equity accounted investments	**720**		**(276)[11]**		
Impairment of the carrying value of the investment in Samarco	**–**		**–**		
Additional share of Samarco losses	**–**		**290**		
Fair value change on forward exchange derivatives	**–**		**(81)**		
Unrecognised losses	**–**		**(609)[9]**		
Profit/(loss) from equity accounted investments, related impairments and expenses	**720**	**(63)**	**(676)**	**–**	**(19)**
Comprehensive income – 100%	**2,133**		**(528)**		
Share of comprehensive income/(loss) – Group share in equity accounted investments	**720**	**(63)**	**(676)**	**–**	**(19)**
Dividends received from equity accounted investments	**776**	**11**	**–**	**–**	**787**

29 Investments accounted for using the equity method continued

2021 US$M Restated	Associates			Joint ventures		
	Antamina	Cerrejón	Individually immaterial[1]	Samarco[2]	Individually immaterial	Total
Current assets	1,499	–		509[3]		
Non-current assets	4,885	–		4,380		
Current liabilities	(1,285)	–		(9,222)[4]		
Non-current liabilities	(1,062)	–		(7,627)		
Net assets/(liabilities) – 100%	4,037	–		(11,960)		
Net assets/(liabilities) – Group share	1,362	–		(5,980)		
Adjustments to net assets related to accounting policy adjustments	–	–		280[5]		
Investment in Samarco	–	–		516[6]		
Impairment of the carrying value of the investment in Samarco	–	–		(1,041)[7]		
Additional share of Samarco losses	–	–		4,442[8]		
Unrecognised losses	–	–		1,783[9]		
Carrying amount of investments accounted for using the equity method	1,362	–	380	–	–	1,742
Revenue – 100%	4,822	844		814		
Profit/(loss) from Continuing operations – 100%	1,847	(43)		(2,202)[10]		
Share of profit/(loss) of equity accounted investments	623	(14)		(1,076)[11]		
Impairment of the carrying value of the investment in Cerrejón	–	(466)		–		
Impairment of the carrying value of the investment in Samarco	–	–		(111)[7]		
Additional share of Samarco losses	–	–		85		
Fair value change on forward exchange derivatives	–	–		136		
Unrecognised losses	–	–		(24)[9]		
Profit/(loss) from equity accounted investments, related impairments and expenses	623	(480)	(68)	(990)	–	(915)
Comprehensive income/(loss) – 100%	1,847	(43)		(2,202)		
Share of comprehensive income/(loss) – Group share in equity accounted investments	623	(480)	(68)	(990)	–	(915)
Dividends received from equity accounted investments	714	13	10	–	–	737

2020 US$M Restated	Associates			Joint ventures		
	Antamina	Cerrejón	Individually immaterial	Samarco[2]	Individually immaterial	Total
Revenue – 100%	2,464	1,091		26		
Profit/(loss) from Continuing operations – 100%	629	(182)		(3,617)[10]		
Share of profit/(loss) of equity accounted investments	212	(68)		(1,918)[11]		
Impairment of the carrying value of the investment in Samarco	–	–		(95)[7]		
Additional share of Samarco losses	–	–		93		
Unrecognised losses	–	–		1,412[9]		
Profit/(loss) from equity accounted investments, related impairments and expenses	212	(68)	(144)	(508)	–	(508)
Comprehensive income/(loss) – 100%	629	(182)		(3,617)		
Share of comprehensive income/(loss) – Group share in equity accounted investments	212	(68)	(144)	(508)	–	(508)
Dividends received from equity accounted investments	105	9	12	–	–	126

1 The unrecognised share of gain for the period was US$16 million (2021: unrecognised share of loss for the period was US$40 million), which decreased the cumulative losses to US$217 million (2021: increase to US$233 million).

2 Refer to note 4 'Significant events – Samarco dam failure' for further information regarding the financial impact of the Samarco dam failure in November 2015 on BHP Brasil's share of Samarco's losses.

3 Includes cash and cash equivalents of US$106 million (2021: US$134 million).

4 Includes current financial liabilities (excluding trade and other payables and provisions) of US$6,837 million (2021: US$6,567 million).

5 Relates mainly to dividends declared by Samarco that remain unpaid at balance date and which, in accordance with the Group's accounting policy, are recognised when received not receivable.

6 Working capital funding provided to Samarco during the period is capitalised as part of the Group's investments in joint ventures and disclosed as an impairment included within the Samarco impairment expense line item.

7 In the year ended 30 June 2016 BHP Brasil adjusted its investment in Samarco to US$ nil (resulting from US$(655) million share of loss from Samarco and US$(525) million impairment). Additional cumulative impairment losses relating to working capital funding of US$(516) million have also been recognised.

8 BHP Brasil has recognised accumulated additional share of Samarco losses of US$(5,326) million resulting from US$(4,539) million provisions relating to the Samarco dam failure, including US$(787) million recognised as net finance costs.

9 Share of Samarco's losses for which BHP Brasil does not have an obligation to fund.

10 Includes depreciation and amortisation of US$205 million (2021: US$154 million; 2020: US$84 million), interest income of US$19 million (2021: US$1 million; 2020: US$16 million), interest expense of US$628 million (2021: US$492 million; 2020: US$588 million) and income tax (expense)/benefit of US$(7) million (2021: US$(303) million; 2020: US$(256) million).

11 Includes accounting policy adjustments mainly related to the removal of foreign exchange gains on excluded dividends payable.

30 Interests in joint operations

Significant joint operations of the Group are those with the most significant contributions to the Group's net profit or net assets. The Group's interest in the joint operations results are listed in the table below.

			Group's interest	
Significant joint operations	**Country of operation**	**Principal activity**	**2022 %**	2021 %
Mt Goldsworthy[1]	Australia	Iron ore mining	**85**	85
Mt Newman[1]	Australia	Iron ore mining	**85**	85
Yandi[1]	Australia	Iron ore mining	**85**	85
Central Queensland Coal Associates	Australia	Coal mining	**50**	50
Atlantis[2]	US	Hydrocarbons production	**–**	44
Bass Strait[2]	Australia	Hydrocarbons production	**–**	50
Macedon[2]	Australia	Hydrocarbons production	**–**	71.43
Mad Dog[2]	US	Hydrocarbons production	**–**	23.9
North West Shelf[2]	Australia	Hydrocarbons production	**–**	12.5–16.67
Pyrenees[2]	Australia	Hydrocarbons production	**–**	40–71.43
ROD Integrated Development[2]	Algeria	Hydrocarbons production	**–**	28.85
Shenzi[2]	US	Hydrocarbons production	**–**	72
Trinidad/Tobago[2]	Trinidad and Tobago	Hydrocarbons production	**–**	45–68.46

1 These contractual arrangements are controlled by the Group and do not meet the definition of joint operations. However, as they are formed by contractual arrangement and are not entities, the Group recognises its share of assets, liabilities, revenue and expenses arising from these arrangements.

2 These joint operations formed part of the Group's oil and gas portfolio that merged with Woodside on 1 June 2022. Refer to note 27 'Discontinued operations' for details.

Assets held in joint operations subject to significant restrictions are as follows:

	Group's share	
	2022 US$M	2021 US$M
Current assets	**1,928**	2,260
Non-current assets	**26,256**	38,725
Total assets[1]	**28,184**	40,985

1 While the Group is unrestricted in its ability to sell a share of its interest in these joint operations, it does not have the right to sell individual assets that are used in these joint operations without the unanimous consent of the other participants. The assets in these joint operations are also restricted to the extent that they are only available to be used by the joint operation itself and not by other operations of the Group.

31 Related party transactions

The Group's related parties are predominantly subsidiaries, associates and joint ventures, and key management personnel of the Group. Disclosures relating to key management personnel are set out in note 24 'Key management personnel'. Transactions between each parent company and its subsidiaries are eliminated on consolidation and are not disclosed in this note.

- All transactions to/ from related parties are made at arm's length, i.e. at normal market prices and rates and on normal commercial terms.
- Outstanding balances at year-end are unsecured and settlement occurs in cash. Loan amounts owing from related parties represent secured loans made to associates and joint ventures under co-funding arrangements. Such loans are made on an arm's length basis.
- No guarantees are provided or received for any related party receivables or payables.
- No provision for expected credit losses has been recognised in relation to any outstanding balances and no expense has been recognised in respect of expected credit losses due from related parties.
- There were no other related party transactions in the year ended 30 June 2022 (2021: US$ nil), other than those with post-employment benefit plans for the benefit of Group employees. These are shown in note 26 'Employee benefits, restructuring and post-retirement employee benefits provisions'.
- Related party transactions with Samarco are described in note 4 'Significant events – Samarco dam failure'.

Further disclosures related to related party transactions are as follows:

Transactions with related parties

	Joint ventures		Associates	
	2022 US$M	2021 US$M	**2022 US$M**	2021 US$M
Sales of goods/services	**–**	–	**–**	–
Purchases of goods/services	**–**	–	**1,852.132**	1,564.073
Interest income	**–**	–	**0.398**	2.241
Interest expense	**–**	–	**0.005**	–
Dividends received	**–**	–	**787.208**	737.250
Net loans made to/(repayments from) related parties	**–**	–	**(23.554)**	(12.108)

Outstanding balances with related parties

	Joint ventures		Associates	
	2022 US$M	2021 US$M	**2022 US$M**	2021 US$M
Trade amounts owing to related parties	**–**	–	**351.607**	316.269
Loan amounts owing to related parties	**–**	–	**–**	17.097
Trade amounts owing from related parties	**–**	–	**6.855**	0.004
Loan amounts owing from related parties	**–**	–	**–**	40.651

Unrecognised items and uncertain events

32 Contingent liabilities

	2022 US$M	2021 US$M
Associates and joint ventures[1]	**1,541**	1,532
Subsidiaries and joint operations[1]	**925**	1,615
Total	**2,466**	3,147

[1] There are a number of matters, for which it is not possible at this time to provide a range of possible outcomes or a reliable estimate of potential future exposures, and for which no amounts have been included in the table above.

A contingent liability is a possible obligation arising from past events and whose existence will be confirmed only by occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group. A contingent liability may also be a present obligation arising from past events but is not recognised on the basis that an outflow of economic resources to settle the obligation is not viewed as probable, or the amount of the obligation cannot be reliably measured.

When the Group has a present obligation, an outflow of economic resources is assessed as probable and the Group can reliably measure the obligation, a provision is recognised.

The Group has entered into various counter-indemnities of bank and performance guarantees related to its own future performance, which are in the normal course of business. The likelihood of these guarantees being called upon is considered remote.

The Group presently has tax matters, litigation and other claims, for which the timing of resolution and potential economic outflow are uncertain. Obligations assessed as having probable future economic outflows capable of reliable measurement are provided at reporting date and matters assessed as having possible future economic outflows capable of reliable measurement are included in the total amount of contingent liabilities above. Individually significant matters, including narrative on potential future exposures incapable of reliable measurement, are disclosed below, to the extent that disclosure does not prejudice the Group.

Uncertain tax and royalty matters	The Group is subject to a range of taxes and royalties across many jurisdictions, the application of which is uncertain in some regards. Changes in tax law, changes in interpretation of tax law, periodic challenges and disagreements with tax authorities, and legal proceedings result in uncertainty of the outcome of the application of taxes and royalties to the Group’s business. Areas of uncertainty at reporting date include the application of taxes and royalties to the Group’s cross-border operations and transactions. To the extent uncertain tax and royalty matters give rise to a contingent liability, an estimate of the potential liability is included within the table above, where it is capable of reliable measurement.
Samarco contingent liabilities	The table above includes contingent liabilities related to the Group’s equity accounted investment in Samarco to the extent they are capable of reliable measurement. Details of contingent liabilities related to Samarco are disclosed in note 4 ‘Significant events – Samarco dam failure’.
Divestments and demergers	Where the Group divests or demerges entities, it is generally agreed to provide certain indemnities to the acquiring or demerged entity. Such indemnities include those provided as part of the demerger of South 32 Ltd in May 2015, divestment of Group’s Onshore US assets in September 2018 and October 2018 divestment of BMC in May 2022 and the merger of the Group’s Petroleum business with Woodside in June 2022. No material claims have been made pursuant to these indemnities as at 30 June 2022.

33 Subsequent events

Other than the matters outlined above, no matters or circumstances have arisen since the end of the financial year that have significantly affected, or may significantly affect, the operations, results of operations or state of affairs of the Group in subsequent accounting periods.

Other items

34 Auditor's remuneration

	2022 US$M	2021 US$M	2020 US$M
Fees payable to the Group's auditors for assurance services			
Audit of the Group's Annual Report	**9.816**	10.642	11.196
Audit of the accounts of subsidiaries, joint ventures and associates	**0.605**	1.234	1.262
Audit-related assurance services required by legislation to be provided by the auditor	**1.933**	1.770	1.815
Other assurance and agreed-upon procedures under legislation or contractual arrangements	**7.938**	1.867	2.003
Total assurance services	**20.292**	15.513	16.276
Fees payable to the Group's auditors for non-assurance services			
Other services	**–**	–	0.400
Total other services	**–**	–	0.400
Total fees	**20.292**	15.513	16.676

All amounts were paid to EY or EY affiliated firms with fees determined, and predominantly billed, in US dollars.

Fees payable to the Group's auditors for assurance services

Audit of the Group's Annual Report comprises fees for auditing the statutory financial report of the Group and includes audit work in relation to compliance with section 404 of the US Sarbanes-Oxley Act.

Audit-related assurance services required by legislation to be provided by the auditors mainly comprises review of half-year reports.

Other assurance services comprise assurance in respect of the Group's sustainability reporting and economic contribution report, in addition to the audits of the financial reports prepared in connection with the merger of BHP's oil and gas portfolio with Woodside and the unification of BHP's dual listed corporate structure.

Fees payable to the Group's auditors for other services

No amounts were payable for other services in FY2022 or FY2021. Amounts for other services in FY2020 comprised tax compliance services (US$0.269 million) and tax advisory services (US$0.131 million).

35 BHP Group Limited

BHP Group Limited does not present unconsolidated parent company Financial Statements. Selected financial information of the BHP Group Limited parent company is as follows:

	2022 US$M	2021 US$M
Income statement information for the financial year		
Profit after taxation for the year	**22,871**	3,106
Total comprehensive income	**22,868**	3,108
Balance sheet information as at the end of the financial year		
Current assets	**4,778**	7,126
Total assets	**43,565**	49,957
Current liabilities	**3,176**	2,819
Total liabilities	**3,517**	3,097
Share capital[1]	**4,350**	823
Treasury shares	**(31)**	(32)
Reserves	**168**	236
Retained earnings	**35,561**	45,833
Total equity	**40,048**	46,860

1 The increase from FY2021 mainly relates to the Group's unification transaction completed during the current period. Refer to note 16 'Share capital'.

Parent company guarantees

BHP Group Limited has guaranteed certain financing arrangements available to subsidiaries of US$6,980 million at 30 June 2022 (2021: US$7,879 million).

The Deed Poll Guarantee where BHP Group Limited had guaranteed certain current and future liabilities of BHP Group (UK) Ltd (formerly BHP Group Plc) was terminated during the year (guaranteed liabilities at 30 June 2021: US$10 million).

BHP Group Limited and its wholly owned subsidiary BHP Group (UK) Ltd have severally, fully and unconditionally guaranteed the payment of the principal and premium, if any, and interest, including certain additional amounts that may be payable in respect of the notes issued by 100 per cent owned finance subsidiary, BHP Billiton Finance (USA) Ltd. BHP Group Limited and BHP Group (UK) Ltd have guaranteed the payment of such amounts when they become due and payable, whether on an interest payment date, at the stated maturity of the notes, by declaration or acceleration, call for redemption or otherwise. The guaranteed liabilities at 30 June 2022 amounted to US$4,234 million (2021: US$5,466 million). In addition, BHP Group Limited and BHP Group (UK) Ltd have severally guaranteed a Group Revolving Credit Facility of US$5,500 million (2021: US$5,500 million), which remains undrawn.

36 Deed of Cross Guarantee

BHP Group Limited together with certain wholly owned subsidiaries set out below have entered into a Deed of Cross Guarantee (Deed) dated 6 June 2016 or have subsequently joined the deed by way of an Assumption Deed. The effect of the Deed is that BHP Group Limited has guaranteed to pay any outstanding liabilities upon the winding up of any wholly owned subsidiary that is party to the Deed. Wholly owned subsidiaries that are party to the Deed have also given a similar guarantee in the event that BHP Group Limited or another party to the Deed is wound up.

The wholly owned subsidiaries that are identified below are relieved from the requirements to prepare and lodge audited financial statements.

The following companies are parties to the Deed and members of the Closed Group as at 30 June 2022:

BHP (Towage Services) Pty Ltd[1]	OS ACPM Pty Ltd[1]
BHP Direct Reduced Iron Pty Limited	OS MCAP Pty Ltd
BHP Iron Ore Pty Ltd[1]	UMAL Consolidated Pty Ltd[1]
BHP Minerals Pty Ltd[1]	BHP Freight Pty Ltd
BHP WAIO Pty Ltd[1]	BHP Group Operations Pty Ltd[1]
Pilbara Gas Pty Limited	BHP Innovation Pty Ltd
BHP Coal Pty Ltd[1]	BHP Lonsdale Investments Pty Ltd
BHP MetCoal Holdings Pty Ltd[1]	BHP Minerals Holdings Proprietary Limited[1]
Broadmeadow Mine Services Pty Ltd	BHP Nickel West Pty Ltd[1]
Central Queensland Services Pty Ltd	BHP Olympic Dam Corporation Pty Ltd[1]
Hay Point Services Pty Limited	The Broken Hill Proprietary Company Pty Ltd[1]
BHP Yakabindie Nickel Pty Ltd[1,2]	

1 These companies are parties to the Deed and are relieved from the Corporations Act 2001 requirements for preparation, audit and lodgement of financial reports and Directors' reports.

2 The company is eligible for relief from the Corporations Act 2001 requirements for preparation, audit and lodgement of financial reports and Directors' reports as at 30 June 2022 and was not eligible for relief as at 30 June 2021.

3 Dampier Coal (Queensland) Proprietary Limited was removed from the Deed on 10 May 2022, as it is no longer wholly owned by BHP Group Limited following the completion of the Group's divestment of BMC.

A Consolidated Statement of Comprehensive Income and Retained Earnings and Consolidated Balance Sheet, comprising BHP Group Limited and the wholly owned subsidiaries that are party to the Deed for the years ended 30 June 2022 and 30 June 2021 are as follows:

Consolidated Statement of Comprehensive Income and Retained Earnings	2022 US$M	2021 US$M
Revenue	38,159	37,568
Other income	6,077	4,751
Expenses excluding net finance costs	(15,293)	(26,789)
Net finance costs	(172)	(247)
Total taxation expense	(5,651)	(5,495)
Profit after taxation	23,120	9,788
Total other comprehensive income	(3)	1
Total comprehensive income	23,117	9,789
Retained earnings at the beginning of the financial year	50,277	48,666
Net effect on retained earnings of entities added to/removed from the Deed	(62)	–
Profit after taxation for the year	23,120	9,788
Transfers to and from reserves	(84)	(52)
Dividends	(33,055)	(8,125)
Retained earnings at the end of the financial year	40,196	50,277

36 Deed of Cross Guarantee continued

Consolidated Balance Sheet	2022 US$M	2021 US$M
ASSETS		
Current assets		
Cash and cash equivalents	**13**	2
Trade and other receivables	**1,527**	1,906
Loans to related parties	**8,697**	7,158
Other financial assets	**284**	–
Inventories	**2,582**	2,101
Other	**75**	96
Total current assets	**13,178**	11,263
Non-current assets		
Trade and other receivables	**43**	60
Other financial assets	**234**	–
Inventories	**456**	491
Property, plant and equipment	**36,199**	35,457
Intangible assets	**1,120**	1,143
Investments in Group companies	**26,800**	31,838
Other	**–**	20
Total non-current assets	**64,852**	69,009
Total assets	**78,030**	80,272
LIABILITIES		
Current liabilities		
Trade and other payables	**3,919**	3,898
Loans from related parties	**9,966**	4,828
Interest bearing liabilities	**213**	283
Other financial liabilities	**26**	–
Current tax payable	**1,783**	1,777
Provisions	**1,611**	1,459
Deferred income	**8**	8
Total current liabilities	**17,526**	12,253
Non-current liabilities		
Trade and other payables	**–**	4
Loans from related parties	**10,014**	11,472
Interest bearing liabilities	**586**	690
Deferred tax liabilities	**874**	998
Provisions	**3,896**	3,236
Deferred income	**5**	8
Total non-current liabilities	**15,375**	16,408
Total liabilities	**32,901**	28,661
Net assets	**45,129**	51,611
EQUITY		
Share capital – BHP Group Limited	**4,638**	1,111
Treasury shares	**(31)**	(32)
Reserves	**326**	255
Retained earnings	**40,196**	50,277
Total equity	**45,129**	51,611

37 New and amended accounting standards and interpretations and changes to accounting policies

New and amended accounting pronouncements adopted in the current year

The adoption of new and amended accounting pronouncements applicable from 1 July 2021 did not result in a significant impact on the Group's Financial Statements. This includes the Interest Rate Benchmark (IBOR) Reform – Phase 2 (Amendments to IFRS 9/AASB 9 'Financial Instruments', IAS 39/ AASB139 'Financial Instruments: Recognition and Measurement'; IFRS 7/AASB 7 'Financial Instruments: Disclosures'; IFRS 4/AASB 4 'Insurance Contracts' and IFRS 16/AASB 16 'Leases') early adopted in the prior year.

New and amended accounting pronouncements on issue but not yet effective

From 1 July 2022, the Group will adopt an amendment to IAS 16/AASB 116 'Property, Plant and Equipment' that requires an entity to recognise the sales proceeds from selling items produced while preparing property, plant and equipment for its intended use, and the related cost, in profit or loss, instead of deducting the amounts received from the cost of the asset.

The amendment is applied retrospectively, but only to items of property, plant and equipment that became ready for its intended use on or after 1 July 2020.

The impact of the amendment on the Group is not expected to be significant and the Group has not identified any material amounts deducted from the cost of assets since 1 July 2020.

A number of other accounting standards and interpretations have been issued and will be applicable in future periods. While these remain subject to ongoing assessment, no significant impacts have been identified to date.

These pronouncements have not been applied in the preparation of these Financial Statements.

2 Directors' declaration

In accordance with a resolution of the Directors of BHP Group Limited, the Directors declare that:

(a) in the Directors' opinion the Financial Statements and notes are in accordance with the Australian Corporations Act 2001 (Cth), including:

   (i) complying with the applicable Accounting Standards and the Australian Corporations Regulations 2001 (Cth); and

   (ii) giving a true and fair view of the assets, liabilities, financial position and profit or loss of BHP Group Limited and the Group as at 30 June 2022 and of their performance for the year ended 30 June 2022

(b) the Financial Statements also comply with International Financial Reporting Standards, as disclosed in the Basis of preparation to the Financial Statements

(c) to the best of the Directors' knowledge, the management report (comprising the Operating and Financial Review and Directors' Report) includes a fair review of the development and performance of the business and the position of the Group and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that the Group faces

(d) in the Directors' opinion there are reasonable grounds to believe that BHP Group Limited will be able to pay its debts as and when they become due and payable

(e) as at the date of this declaration, there are reasonable grounds to believe that BHP Group Limited and each of the Closed Group entities identified in note 36 to the Financial Statements will be able to meet any liabilities to which they are, or may become, subject because of the Deed of Cross Guarantee between BHP Group Limited and those group entities pursuant to ASIC Corporations (Wholly-owned Companies) Instrument 2016/785

(f) the Directors have been given the declarations required by Section 295A of the Australian Corporations Act 2001 (Cth) from the Chief Executive Officer and Chief Financial Officer for the financial year ended 30 June 2022

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

Ken MacKenzie
Chair

Mike Henry
Chief Executive Officer

16 August 2022

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

Auditor’s independence declaration to the directors of BHP Group Limited

As lead auditor for the audit of the financial report of BHP Group Limited for the financial year ended 30 June 2022, I declare to the best of my knowledge and belief, there have been:

(a) no contraventions of the auditor independence requirements of the Corporations Act 2001 in relation to the audit;

(b) no contraventions of any applicable code of professional conduct in relation to the audit; and

(c) no non-audit services provided that contravene any applicable code of professional conduct in relation to the audit.

This declaration is in respect of BHP Group Limited and the entities it controlled during the financial year.

Ernst & Young

Ernst & Young

RCPiltz

Rodney Piltz
Partner
Melbourne

16 August 2022

4 Independent auditor's report to the members of BHP Group Limited

Report on the audit of the financial report

Opinion

We have audited the financial report of BHP Group Limited (the Company) and its subsidiaries (collectively the Group), which comprises the consolidated balance sheet as at 30 June 2022, the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated cash flow statement for the year then ended, notes to the financial statements, including a summary of significant accounting policies, and the directors' declaration.

In our opinion, the accompanying financial report of the Group is in accordance with the *Corporations Act 2001*, including:

a. Giving a true and fair view of the consolidated financial position of the Group as at 30 June 2022 and of its consolidated financial performance for the year ended on that date; and

b. Complying with International Financial Reporting Standards as issued by the International Accounting Standards Board (IASB), Australian Accounting Standards and the *Corporations Regulations 2001*.

Basis for opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial report* section of our report. We are independent of the Group in accordance with the auditor independence requirements of the *Corporations Act 2001* and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our consideration of climate change related risks

The Group continues to develop its assessment of the potential impacts of climate change, including considering divergent climate scenarios across a range of temperature outcomes, with two scenarios; the Central Energy View and the Lower Carbon View, currently being used as inputs to the Group's operational planning cases as explained in the Climate change section within the financial report.

The financial impacts of climate change and the transition to a low carbon economy (climate change) on the Group were considered in our audit where they have the potential to materially impact the basis of preparation, including the key judgements and estimates exercised by the Group in the preparation of the financial report, particularly in relation to the assessment of the carrying value of property, plant and equipment and the determination of closure and rehabilitation provisions.

The key judgements and estimates disclosed in the financial report, incorporate assumptions that are directly and/or indirectly impacted by climate change, including Board approved climate related commitments and strategies, to the extent they can be reliably estimated, in accordance with International Financial Reporting Standards as issued by the IASB and Australian Accounting Standards.

The key audit matters section of this report address how we have assessed the Group's climate related assumptions to the extent they impact each key audit matter.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial report of the current year. These matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, but we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the financial report* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial report. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying financial report.

Assessment of the carrying value of property, plant and equipment

Why significant	**How our audit addressed the key audit matter**
Refer to Note 3 ‘Exceptional items’, Note 11 ‘Property, plant and equipment’ and Note 13 ‘Impairment of non-current assets’. Accounting standards require an assessment of indicators of impairment and impairment reversal annually, or more frequently if indicators of impairment exist, for each cash generating unit (CGU). The Group’s assessment of indicators of impairment and impairment reversal included an evaluation of geo-political events and conflicts, regulatory and legislative changes, macro-economic disruptions, commodity price forecasts, reserves, operating expenditure, asset performance and ongoing impact of the COVID-19 pandemic. During the year, the Group determined that no indicators of impairment or impairment reversal existed for the Group’s CGUs, with the exception of Cerro Colorado. The Group recorded an impairment expense of US$515 million primarily in relation to Cerro Colorado as outlined in Note 13. The assessment of the indicators of impairment and impairment reversal for CGUs was considered to be a key audit matter as it involved significant judgement. Assessing the existence of indicators of impairment or impairment reversal for a CGU is complex and subjective due to the use of forward-looking estimates, which are inherently difficult to determine with precision. There is also a level of judgement applied by the Group in determining the key inputs into these forward-looking estimates. The key estimates in the Group’s determination of indicators of impairment or impairment reversal, which influence whether or not an estimate of the recoverable amount of a CGU is required were as follows: – Commodity prices: assumptions in relation to commodity price forecasts are inherently uncertain. There is a risk that the assumptions are not reasonable and may not appropriately reflect changes in supply and demand, including the impact of climate change. – Reserves: assessing the estimation of reserves is complex as there is significant estimation uncertainty in assessing the quantities of reserves, and the amount that will be economically recovered based on future production estimates over the asset life. – Discount rates: given the long life of the Group’s assets, CGU recoverable amounts are sensitive to the discount rate applied. Determining the appropriate discount rate to apply to a CGU is judgemental. The Group has continued to advance its evaluation of the potential financial impacts of climate change incorporated into the assessment of indicators of impairment and impairment reversal, the results of which are disclosed in the Climate change section and Note 13 of the financial report.	The primary audit procedures we performed, amongst others, included the following: – We evaluated the design of, and tested the operating effectiveness of, the internal controls over the Group’s processes of assessment for indicators of impairment and impairment reversal. – We performed an analysis for indicators of impairment and impairment reversal, which included considering the performance of the assets and external market conditions. Our procedures involved assessing the key inputs such as commodity price forecasts, discount rates, reserve estimation, operating expenditure and asset performance. – We considered the impact of geo-political events and conflicts, regulatory and legislative changes, macro-economic disruptions and the COVID-19 pandemic as part of our evaluation of indicators of impairment and impairment reversal. – We assessed commodity price forecasts assumed by the Group against comparable market data. – We involved our valuation specialists to assist in evaluating, amongst other things, the discount rates applied and commodity price forecasts. The Group uses internal and external experts to provide geological, metallurgical, mine planning, commodity price forecasts and technological information to support key assumptions in the assessment of indicators of impairment or impairment reversal. With assistance from our mining reserves specialists, we examined the information provided by the Group’s experts, including assessment of the reserve estimation methodology against the relevant industry and regulatory guidance. We also assessed the qualifications, competence and objectivity of the internal and external experts. With the assistance of our climate change and valuation specialists we have evaluated how climate related considerations and judgements such as those reflected through commodity price forecasts, carbon price assumptions and the incorporation of climate related strategies and commitments into the forecast cashflows have been reflected in the consideration of asset carrying values, including the assessment of indicators of impairment and indicators of impairment reversal. We assessed the adequacy of the disclosures included in Notes 11 and 13 of the financial report.

Closure and rehabilitation provisions

Why significant	How our audit addressed the key audit matter

Refer to Note 15 ‘Closure and rehabilitation provisions’.
The Group has closure and rehabilitation obligations to restore and rehabilitate environmental disturbances created by its operations and related sites.
These obligations arise from regulatory and legislative requirements across multiple jurisdictions.
The key inputs used to determine the closure and rehabilitation provisions are:
– Life of the operation or site;
– Estimated cost of future closure and rehabilitation activities;
– Timing of the closure and rehabilitation activities;
– Discount rates; and
– Current regulatory and legislative requirements.
As a result of these inputs and the evaluation of climate related risks and strategies, closure and rehabilitation provisions have a high degree of estimation uncertainty with a wide potential range of reasonable outcomes.
Closure and rehabilitation provisions were considered to be a key audit matter as the estimation of these provisions is complex, involves a high degree of judgement and often requires specialist expertise to estimate the costs required to satisfy closure and rehabilitation obligations.
The Group has continued to advance its evaluation of the potential financial impacts of climate change and incorporated the related estimates, to the extent they can be reliably measured, in the determination of the closure and rehabilitation provisions, the results of which are disclosed in Notes 1 and 15 of the financial report.
	The primary audit procedures we performed, amongst others, included the following:
	– We evaluated the design of, and tested the operating effectiveness of, internal controls related to the Group’s closure and rehabilitation provision estimates.
	– We evaluated the Group’s legal and regulatory obligations for closure and rehabilitation, life of operation, future rehabilitation costs, discount rates and timing of future cashflows.
	– We tested that the future rehabilitation costs were consistent with the closure plans prepared by the Group’s internal experts.
	– We tested the mathematical accuracy of the closure and rehabilitation provision calculations.
	– With the assistance of our rehabilitation subject matter specialists, we evaluated a sample of closure and rehabilitation provisions for operating and closed asset sites within the Group, including:
	  – Evaluation of the closure and rehabilitation plans with regard to applicable regulatory and legislative requirements;
	  – Evaluation of the methodology used by the Group’s internal mine closure engineers against industry practice and our understanding of the business; and
	  – Assessment of the reasonableness of the timing of cash flows and cost estimates against the closure and rehabilitation plan and industry practice.
	– The Group has used internal and external experts to support the estimation of the mine closure and rehabilitation provisions. With the assistance of our rehabilitation subject matter specialists, we assessed the qualifications, competence and objectivity of the internal and external experts and that the information provided by the Group’s internal and external experts has been appropriately reflected in the calculation of the closure and rehabilitation provisions.
	– We assessed the discount rates adopted to calculate the closure and rehabilitation provisions, including benchmarking to comparable market data.
	– With the assistance of our climate change and other subject matter specialists, we evaluated how the Group’s response to climate change had been considered in the determination of closure and rehabilitation provision estimates, such as physical risks created by changes to long-term weather outlooks, estimates related to post closure monitoring and maintenance and the timing of closure activities impacted by mine operating lives.
	– We assessed the adequacy of the disclosures included in Note 15 of the financial report.

Samarco dam failure provisions recognised, including the Germano dam decommissioning, and contingent liabilities disclosures

Why significant	How our audit addressed the key audit matter
Refer to Note 3 ‘Exceptional items’, Note 4 ‘Significant events – Samarco dam failure’ and Note 32 ‘Contingent liabilities’. There were a number of significant judgements and disclosures made by the Group in relation to the Samarco dam failure and the Germano dam decommissioning, including: – Determining the extent of the Group’s and BHP Billiton Brasil Ltda’s legal obligation to continue to fund the costs associated with the Samarco dam failure, and the quantification of the continued obligation required by the Governance Agreement and Framework Agreement; – Determining the costs of the decommissioning of the Germano dam complex; – Determining the status, accounting treatment and quantification (if applicable) of the legal claims against BHP Group Limited, BHP Group (UK) Ltd, BHP Billiton Brasil Ltda and Samarco; – Determining the status of any potential settlements; and – Disclosures relating to the contingent liabilities from the various legal claims and other circumstances that represent exposures to the Group.	The primary audit procedures we performed, amongst others, included the following: – We assessed the design of, and tested the operating effectiveness of, the internal controls over the Samarco dam failure accounting and disclosure process. This included testing controls over: – The determination of the provision for the remediation of the Samarco dam failure, including significant assumptions such as the cost estimate to remediate, the nature and extent of remediation activities and compensation for the impacted peoples; and – The Group’s assessment of the legal claims and determination of the associated provision and related contingent liability disclosures. – We assessed the key assumptions used to determine the provision recorded by the Group in relation to potential obligations by: – Understanding the impact of any court decisions on the number and compensation category of impacted peoples; – Understanding the impact of any Brazilian court decisions on the infrastructure remediation program relating to the resettling of communities impacted by the dam failure;
We identified the Samarco dam failure provisions recognised, and contingent liabilities disclosures, as a key audit matter as auditing these estimates is complex. There is a high degree of estimation uncertainty, together with a wide range of reasonable outcomes. Significant judgement was required in relation to assessing the completeness and measurement of the estimated cash outflows related to the provisions and contingent liabilities, including the probability of the outflows. This is due to: – The significant size of the potential claims, combined with the multi-jurisdictional legal and regulatory locations; – High degree of judgement and estimation around certain key assumptions in the provision, including: – Cost estimates of remediation and compensation requirements for the Samarco dam failure; – The number and compensation category of impacted people entitled to compensation; and – Nature and extent of remediation activities.	– Inquiring with the Group’s subject matter experts for the various remediation programs regarding the cost estimate to remediate the environment, residents’ wellbeing and infrastructure damaged by the dam failure; – Evaluating the qualifications, competence and objectivity of the Group’s subject matter experts, and the independent external party that contribute to the determination of the cash flow estimates by considering their qualifications, scope of work and remuneration structure; – Comparing the nature and extent of remediation activities described in the Framework Agreement to the activities included in the cash flow forecasts; – Selecting a sample of cost estimates included in the provision and considering the underlying supporting documentation, such as court decisions; – Assessing the period in which a provision change was recorded by understanding when the event that caused the change occurred; – Assessing the Germano dam decommissioning provision, with the assistance of our rehabilitation subject matter specialists, as part of our audit procedures reported in the Closure and Rehabilitation Provisions key audit matter above; – Determining whether or not it is possible to provide a range of outcomes or a reliable estimate of any potential settlement outcomes; and – Evaluating the historical accuracy of prior year’s forecasted cash flows with respect to the Group’s current year actual cash flows. – We read the claims and assessed their status and considered whether they now represented liabilities through: – Inquiries with the Group’s external and internal legal advisors, senior management, Group finance, and members of the Executive Leadership Team, with respect to the ongoing proceedings; – Inspection of correspondence with external legal advisors; and – Independent confirmation letters received from external legal advisors. – We assessed the disclosures regarding the environmental and legal contingent liabilities as included in Note 32, and the relevant disclosures regarding the significant events relating to Samarco dam failure as included in Note 4 against the disclosure requirements of the relevant accounting standards.

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Information other than the financial report and auditor’s report thereon

The directors are responsible for the other information. The other information comprises the information included in the Company’s 2022 annual report other than the financial report and our auditor’s report thereon.

Our opinion on the financial report does not cover the other information and we do not and will not express any form of assurance conclusion thereon, with the exception of the Remuneration Report and our related assurance opinion.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report, or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed on the other information obtained prior to the date of this auditor’s report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the directors for the financial report

The directors of the Company are responsible for the preparation of the financial report that gives a true and fair view in accordance with International Financial Reporting Standards as issued by the IASB, Australian Accounting Standards and the *Corporations Act 2001* and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the Group’s ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Auditor’s responsibilities for the audit of the financial report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor’s 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 the Australian Auditing Standards 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 this financial report.

As part of an audit in accordance with the Australian Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group’s internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors’ use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor’s report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor’s report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the financial report. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated to the directors, we determine those matters that were of most significance in the audit of the financial report of the current year and are therefore the key audit matters. We describe these matters in our auditor’s report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on the audit of the Remuneration Report

Opinion on the Remuneration Report

We have audited the Remuneration Report included in the Directors’ Report for the year ended 30 June 2022.

In our opinion, the Remuneration Report of BHP Group Limited for the year ended 30 June 2022, complies with section 300A of the *Corporations Act 2001*.

Responsibilities

The directors of the Company are responsible for the preparation and presentation of the Remuneration Report in accordance with section 300A of the *Corporations Act 2001*. Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with Australian Auditing Standards.

Ernst & Young

Ernst & Young

RCPiltz

Rodney Piltz
Partner
Melbourne

16 August 2022

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Glossary

Glossary

Units of measure

%
percentage or per cent

dmt
dry metric tonne

g/t
grams per tonne

ha
hectare

kcal/kg
kilocalories per kilogram

kg/tonne or kg/t
kilograms per tonne

km
kilometre

koz
thousand troy ounces

kt
kilotonnes

ktpa
kilotonnes per annum

ktpd
kilotonnes per day

kV
kilovolt

kW
kilowatt

kWh
kilowatt hour

lb
pound

m
metre

m3
cubic metre

ML
megalitre

mm
millimetre

Mt
million tonnes

Mtpa
million tonnes per annum

MW
megawatt

oz
troy ounce

ppm
parts per million

scf
standard cubic feet

t
tonne

TW
terawatt

TWh
terawatt hour

tpa
tonnes per annum

tpd
tonnes per day

t/h
tonnes per hour

wmt
wet metric tonnes

Other terms

AASB (Australian Accounting Standards Board)
Accounting standards as issued by the Australian Accounting Standards Board.

Activity data
A quantitative measure of a level of activity that results in greenhouse gas emissions. Activity data is multiplied by an energy and/or emissions factor to derive the energy consumption and greenhouse gas emissions associated with a process or an operation. Examples of activity data include kilowatt-hours of electricity used, quantity of fuel used, output of a process, hours equipment is operated, distance travelled and floor area of a building.

ADR (American Depositary Receipt)
An instrument evidencing American Depositary Shares or ADSs, which trades on a stock exchange in the United States.

ADS (American Depositary Share)
A share issued under a deposit agreement that has been created to permit US-resident investors to hold shares in non-US companies and, if listed, trade them on the stock exchanges in the United States.

ADSs are evidenced by American Depositary Receipts, or ADRs, which are the instruments that, if listed, trade on a stock exchange in the United States.

ASIC (Australian Securities and Investments Commission)
The Australian Government agency that enforces laws relating to companies, securities, financial services and credit in order to protect consumers, investors and creditors.

Assets
Assets are a set of one or more geographically proximate operations (including open-cut mines and underground mines). Assets include our operated and non-operated assets.

ASX (Australian Securities Exchange)
ASX is a multi-asset class vertically integrated exchange group that functions as a market operator, clearing house and payments system facilitator. It oversees compliance with its operating rules, promotes standards of corporate governance among Australia's listed companies and helps educate retail investors.

BHP
BHP Group Limited and its subsidiaries.

BHP Group Limited
BHP Group Limited and its subsidiaries.

BHP Group Limited share
A fully paid ordinary share in the capital of BHP Group Limited.

BHP Group Limited shareholders
The holders of BHP Group Limited shares.

BHP Group Limited Special Voting Share
A single voting share issued to facilitate joint voting by shareholders of BHP Group Limited on Joint Electorate Actions.

BHP Group Plc
BHP Group Plc (now known as BHP Group (UK) Ltd) and its subsidiaries.

BHP Group Plc share
A fully paid ordinary share in the capital of BHP Group Plc (now known as BHP Group (UK) Ltd).

BHP Group Plc shareholders
The holders of BHP Group Plc shares (prior to unification of the DLC structure).

BHP Group Plc Special Voting Share
A single voting share issued to facilitate joint voting by shareholders of BHP Group Plc on Joint Electorate Actions (prior to unification of the DLC structure).

BHP Group (UK) Ltd
BHP Group (UK) Ltd (formerly known as BHP Group Plc) and its subsidaries.

BHP shareholders
In the context of BHP's financial results, BHP shareholders refers to the holders of shares in BHP Group Limited.

Board
The Board of Directors of BHP.

Carbon neutral
Carbon neutral includes all those greenhouse gas emissions as defined for BHP reporting purposes.

Carbon dioxide equivalent (CO_2-e)
The universal unit of measurement to indicate the global warming potential (GWP) of each greenhouse gas, expressed in terms of the GWP of one unit of carbon dioxide. It is used to evaluate releasing (or avoiding releasing) different greenhouse gases against a common basis.

Carbon offsets
The central purpose of a carbon offset for an organisation is to substitute for internal GHG emission reductions. Offsets may be generated through projects in which GHG emissions are avoided, reduced, removed from the atmosphere or permanently stored (sequestration). Carbon offsets are generally created and independently verified in accordance with either a voluntary program or under a regulatory program. The purchaser of a carbon offset can 'retire' or 'surrender' it to claim the underlying reduction towards their own GHG emissions reduction targets or goals or to meet legal obligations.

CEO Water Mandate
The CEO Water Mandate is a UN Global Compact initiative that mobilises business leaders on water, sanitation, and the Sustainable Development Goals. Endorsers of the CEO Water Mandate commit to continuous progress against six core elements of stewardship and in so doing understand and manage their own water risks. Companies that endorse the Mandate agree to continuous improvement in six core areas of their water stewardship practice: Direct Operations, Supply Chain & Watershed Management, Collective Action, Public Policy, Community Engagement and Transparency. BHP is an active signatory of the Mandate.

Commercial
Our Commercial function seeks to maximise commercial and social value across our end-to-end supply chain. It provides effective and efficient service levels to our assets and customers through world-class insights and market intelligence, deep subject-matter expertise, simple processes and centralised standard activities. The function is organised around the core activities in our inbound and outbound value chains, supported by credit and market risk management, and strategy and planning activities.

Company
BHP Group Limited and its respective subsidiaries.

Continuing operations
Assets/operations/entities that are owned and/or operated by BHP, excluding assets/operations/entities classified as Discontinued Operations.

Convention of Biological Diversity
The Convention on Biological Diversity (CBD) is the international legal instrument for ‘the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources’ that has been ratified by 196 nations.

Discontinued operations
Assets/operations/entities that have either been disposed of or are classified as held for sale in accordance with IFRS 5/AASB 5 *Non-current Assets Held for Sale and Discontinued Operations*.

Dividend record date
The date, determined by a company’s board of directors, by when an investor must be recorded as an owner of shares in order to qualify for a forthcoming dividend.

DLC (Dual Listed Company)
BHP’s Dual Listed Company structure had two parent companies (BHP Group Limited and BHP Group Plc (now known as BHP Group (UK) Ltd)) operating as a single economic entity as a result of the DLC merger. The DLC structure was unified on 31 January 2022.

DLC Dividend Share
A share to enable a dividend to be paid by BHP Group Plc to BHP Group Limited or by BHP Group Limited to BHP Group Plc (as applicable) prior to unification of the DLC structure.

DLC merger
The Dual Listed Company merger between BHP Group Limited and BHP Group Plc (now known as BHP Group (UK) Ltd) on 29 June 2001.

ECR
BHP’s Economic Contribution Report for the year ended 30 June 2022.

Emission factor
A factor that converts activity data into greenhouse gas emissions data (e.g. $kgCO_2$-e emitted per GJ of fuel consumed, kg CO_2-e emitted per KWh of electricity used).

Equity share approach
A consolidation approach whereby a company accounts for greenhouse gas emissions from operations according to its share of equity in the operation. The equity share reflects economic interest, which is the extent of rights a company has to the risks and rewards flowing from an operation. Also see the definition for ‘Operational control approach’.

ELT (Executive Leadership Team)
The Executive Leadership Team directly reports to the Chief Executive Officer and is responsible for the day-to-day management of BHP and leading the delivery of our strategic objectives.

Energy
Energy means all forms of energy products where ‘energy products’ means combustible fuels, heat, renewable energy, electricity, or any other form of energy from operations that are owned or controlled by BHP. The primary sources of energy consumption come from fuel consumed by haul trucks at our operated assets, as well as purchased electricity used at our operated assets.

Energy content factor
The energy content of a fuel is an inherent chemical property that is a function of the number and types of chemical bonds in the fuel.

Entrained water
Entrained water includes water incorporated into product and/or waste streams, such as tailings, that cannot be easily recovered.

Executive KMP (Key Management Personnel)
Executive KMP includes the Executive Director (our CEO), the Chief Financial Officer, the President Operations (Minerals Australia), the President Operations (Minerals Americas), and the Senior Executive Officer (President Petroleum until 31 May). It does not include the Non-Executive Directors (our Board).

Financial control approach
A consolidation approach whereby a company reports greenhouse gas emissions based on the accounting treatment in the company’s consolidated financial statements, as follows:

– 100 per cent for operations accounted for as subsidiaries, regardless of the equity interest owned
– for operations accounted for as a joint operation, the company’s interest in the operations

It does not report greenhouse gas emissions from operations that are accounted for using the equity method in the company’s financial statements.

Functions
Functions operate along global reporting lines to provide support to all areas of the organisation. Functions have specific accountabilities and deep expertise in areas such as finance, legal, governance, technology, human resources, corporate affairs, health, safety and community.

Gearing ratio
The ratio of net debt to net debt plus net assets.

GHG (greenhouse gas)
For BHP reporting purposes, these are the aggregate anthropogenic carbon dioxide equivalent emissions of carbon dioxide (CO_2), methane (CH4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6). Nitrogen trifluoride (NF_3) GHG emissions are currently not relevant for BHP reporting purposes.

Global goal for nature
The global goal for nature defines what is needed to halt and reverse today’s catastrophic loss of nature. It is supported by a number of organisations that ask governments to adopt the goal at the international level, which each country, the private sector, communities and others can contribute to achieving.

Goal (in respect of greenhouse gas emissions)
An ambition to seek an outcome for which there is no current pathway(s), but for which efforts will be pursued towards addressing that challenge, subject to certain assumptions or conditions.

GRI (Global Reporting Initiative)
GRI works with businesses and governments to understand and communicate their impact on critical sustainability issues.

Groundwater
Water beneath the earth’s surface, including beneath the seabed, which fills pores or cracks between porous media such as soil, rock, coal, and sand, often forming aquifers. Groundwater may be abstracted for use from bore fields or accessed via dewatering to access ore. For accounting purposes, water that is entrained in the ore can be considered as groundwater.

Group
BHP Group Limited and its respective subsidiaries.

GWP (global warming potential)
A factor describing the radiative forcing impact (degree of harm to the atmosphere) of one unit of a given greenhouse gas relative to one unit of CO_2. BHP currently uses GWP from the Intergovernmental Panel on Climate Change (IPCC) Assessment Report 5 (AR5) based on 100-year timeframe.

HPI (high-potential injuries)
High-potential injuries (HPI) are recordable injuries and first aid cases where there was the potential for a fatality.

ICMM (International Council on Mining and Metals)
The International Council on Mining and Metals is an international organisation dedicated to a safe, fair and sustainable mining and metals industry.

IFRS (International Financial Reporting Standards)
Accounting standards as issued by the International Accounting Standards Board.

IPCC (Intergovernmental Panel on Climate Change)
The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change.

Glossary continued

KMP (Key Management Personnel)

Key Management Personnel (KMP) includes the roles which have the authority and responsibility for planning, directing and controlling the activities of BHP. These are Non-executive Directors, the CEO, the Chief Financial Officer, the President Minerals Australia, the President Minerals Americas and the Senior Executive Officer (i.e. President Petroleum until 31 May 2022).

KPI (key performance indicator)

Used to measure the performance of the Group, individual businesses and executives in any one year.

Legacy assets

Legacy assets refer to those BHP-operated assets, or part thereof, located in the Americas that are in the closure phase.

LME (London Metal Exchange)

A major futures exchange for the trading of industrial metals.

Location-based reporting

Scope 2 greenhouse gas emissions based on average energy generation emission factors for defined geographic locations, including local, subnational, or national boundaries (i.e. grid factors). In the case of a direct line transfer, the location-based emissions are equivalent to the market-based emissions.

Market-based reporting

Scope 2 greenhouse gas emissions based on the generators (and therefore the generation fuel mix from which the reporter contractually purchases electricity and/or is directly provided electricity via a direct line transfer).

Nature positive

A high-level goal and concept describing a future state of nature (e.g. biodiversity, ecosystem services and natural capital) which is greater than the current state. This definition comes from the Taskforce on Nature-related Financial Disclosures (TNFD) Framework – Beta release v0.1

Net zero (for a BHP greenhouse gas goal, target or pathway, or similar)

Net zero includes the use of carbon offsets as governed by BHP's approach to carbon offsetting described at bhp.com/climate.

Net zero (for industry sectors, the global economy, transition or future, or similar)

Net zero refers to a state in which the greenhouse gases (as defined in this Glossary) going into the atmosphere are balanced by removal out of the atmosphere.

NGER (National Greenhouse and Energy Reporting Scheme)

The Australian National Greenhouse and Energy Reporting (NGER) scheme is a single national framework for reporting and disseminating company information about greenhouse gas emissions, energy production, energy consumption and other information specified under NGER legislation.

Nickel intermediates

Concentrate, matte, residue, and mix sulphide.

Non-operated asset/non-operated joint venture (NOJV)

Non-operated assets/non-operated joint ventures include interests in assets that are owned as a joint venture but not operated by BHP. References in this Annual Report to a 'joint venture' are used for convenience to collectively describe assets that are not wholly owned by BHP. Such references are not intended to characterise the legal relationship between the owners of the asset.

Occupational illness

An illness that occurs as a consequence of work-related activities or exposure. It includes acute or chronic illnesses or diseases, which may be caused by inhalation, absorption, ingestion or direct contact.

OELs (occupational exposure limits)

An occupational exposure limit is an upper limit on the acceptable concentration of a hazardous substance in workplace air for a particular material or class of materials. OELs may also be set for exposure to physical agents such as noise, vibration or radiation.

OFR

BHP's Operating and Financial Review for the year ended 30 June 2022.

Onshore US

BHP's petroleum asset (divested in the year ended 30 June 2019) in four US shale areas (Eagle Ford, Permian, Haynesville and Fayetteville), where we produced oil, condensate, gas and natural gas liquids.

Operated assets

Operated assets include assets that are wholly owned and operated by BHP and assets that are owned as a joint venture and operated by BHP. References in this Annual Report to a 'joint venture' are used for convenience to collectively describe assets that are not wholly owned by BHP. Such references are not intended to characterise the legal relationship between the owners of the asset.

Operational control approach

A consolidation approach whereby a company accounts for 100 per cent of the greenhouse gas emissions over which it has operational control (a company is considered to have operational control over an operation if it or one of its subsidiaries has the full authority to introduce and implement its operating policies at the operation). It does not account for greenhouse gas emissions from operations in which it owns an interest but does not have operational control. Also see the definition for 'Equity share approach'.

Operations

Open-cut mines, underground mines and processing facilities.

Other (with respect to water consumption volumes)

This includes water volumes used for purposes such as potable water consumption and amenity facilities at our operated assets.

Paris Agreement

The Paris Agreement is an agreement between countries party to the United Nations Framework Convention on Climate Change (UNFCC) to strengthen efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so.

Aims of the Paris Agreement

The central objective of the Paris Agreement is its long-term temperature goal to hold global average temperature increase to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels.

Paris-aligned

Aligned to the Paris Agreement goals.

Petroleum (asset group)

A group of oil and gas assets (see 'Asset groups') formerly operated by BHP before its merger with Woodside in June 2022. Petroleum's core production operations were located in the US Gulf of Mexico, Australia and Trinidad and Tobago. Petroleum produced crude oil and condensate, gas and natural gas liquids.

PPE (personal protective equipment)

PPE means anything used or worn to minimise risk to worker's health and safety, including air supplied respiratory equipment.

Residual mix

The mix of energy generation resources and associated attributes such as greenhouse gas emissions in a defined geographic boundary left after contractual instruments have been claimed/retired/cancelled. The residual mix can provide an emission factor for companies without contractual instruments to use in a market-based method calculation. A residual mix is currently unavailable to account for voluntary purchases and this may result in double counting between electricity consumers.

SASB (Sustainability Accounting Standards Board)

The Sustainability Accounting Standards Board is a non-profit organisation that develops standards focused on the financial impacts of sustainability.

Scope 1 greenhouse gas emissions

Scope 1 greenhouse gas emissions are direct emissions from operations that are owned or controlled by the reporting company. For BHP, these are primarily emissions from fuel consumed by haul trucks at our operated assets, as well as fugitive methane emissions from coal and petroleum production at our operated assets.

Scope 2 greenhouse gas emissions

Scope 2 greenhouse gas emissions are indirect emissions from the generation of purchased or acquired electricity, steam, heat or cooling that is consumed by operations that are owned or controlled by the reporting company. BHP's Scope 2 emissions have been calculated using the market-based method unless otherwise specified.

Scope 3 greenhouse gas emissions

Scope 3 greenhouse gas emissions are all other indirect emissions (not included in Scope 2) that occur in the reporting company's value chain. For BHP, these are primarily emissions resulting from our customers using and processing the commodities we sell, as well as upstream emissions associated with the extraction, production and transportation of the goods, services, fuels and energy we purchase for use at our operations; emissions resulting from the transportation and distribution of our products; and operational emissions (on an equity basis) from our non-operated joint ventures.

SEC (United States Securities and Exchange Commission)

The US regulatory commission that aims to protect investors, maintain fair, orderly and efficient markets and facilitate capital formation.

Senior manager

An employee who has responsibility for planning, directing or controlling the activities of the entity or a strategically significant part of it. In the OFR, senior manager includes senior leaders and any persons who are directors of any subsidiary company even if they are not senior leaders.

Shareplus

All-employee share purchase plan.

Social investment

Social investment is our voluntary contribution towards projects or donations with the primary purpose of contributing to the resilience of the communities where we operate and the environment, aligned with our broader business priorities. BHP's targeted level of contribution is 1 per cent of pre-tax profit calculated on the average of the previous three years' pre-tax profit as reported. For FY2023-FY2030, our social investment will be assessed as a total over the seven year goals period to FY2030, rather than calculated as an average of the previous three years' pre-tax profit.

South32

During FY2015, BHP demerged a selection of our alumina, aluminium, coal, manganese, nickel, silver, lead and zinc assets into a new company – South32 Limited.

Surface water

All water naturally open to the atmosphere, including rivers, lakes and creeks and external water dams but excluding water from oceans, seas and estuaries (e.g. precipitation and runoff, including snow and hail).

Target (in respect of greenhouse gas emissions)

An intended outcome in relation to which we have identified one or more pathways for delivery of that outcome, subject to certain assumptions or conditions.

Third-party water

Water supplied by an entity external to the operational facility. Third-party water may contain water from three sources, surface water, groundwater and seawater.

Tier 1 asset

An asset that we believe is large, long-life and low-cost.

TRIF (total recordable injury frequency)

The sum of (fatalities + lost-time cases + restricted work cases + medical treatment cases) x 1,000,000 ÷ actual hours worked.

Stated in units of per million hours worked. BHP adopts the US Government Occupational Safety and Health Administration guidelines for the recording and reporting of occupational injury and illnesses. TRIF statistics exclude non-operated assets.

TSR (total shareholder return)

TSR measures the return delivered to shareholders over a certain period through the movements in share price and dividends paid (which are assumed to be reinvested). It is the measure used to compare BHP's performance to that of other relevant companies under the Long-Term Incentive Plan.

Underlying attributable profit

Profit/(loss) after taxation attributable to BHP shareholders excluding any exceptional items attributable to BHP shareholders as described in Financial Statements note 3 'Exceptional items'. For more information refer to OFR 11.

Underlying EBIT

Earnings before net finance costs, taxation expense, Discontinued operations and any exceptional items. Underlying EBIT includes BHP's share of profit/(loss) from investments accounted for using the equity method including net finance costs and taxation expense/(benefit). For further information, refer to OFR 11.

Underlying EBITDA

Earnings before net finance costs, depreciation, amortisation and impairments, taxation expense, Discontinued operations and exceptional items. Underlying EBITDA includes BHP's share of profit/(loss) from investments accounted for using the equity method including net finance costs, depreciation, amortisation and impairments and taxation expense/(benefit). For further information, refer to OFR 11.

Unification

The unification of BHP's corporate structure under BHP Group Limited as effected on 31 January 2022.

Unit costs

One of the financial measures BHP uses to monitor the performance of individual assets. Unit costs are calculated as ratio of net costs of the assets to the equity share of sales tonnage. Net costs is defined as revenue less Underlying EBITDA excluding freight and other costs, depending on the nature of each asset.Western Australia Iron Ore, Queensland Coal and New South Wales Energy Coal unit costs exclude government royalties; Escondida unit costs exclude by-product credits.

United Nations Sustainable Development Goals (SDGs)

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.

WAF (Water Accounting Framework)

The Water Accounting Framework is a common mining and metals industry approach to water accounting in Australia.

Water quality – Type 1

Water of high quality that would require minimal (if any) treatment to meet drinking water standards. This water is considered high-quality/high-grade in the International Council on Mining and Metals (ICMM) 'Good Practice' Guide (2nd Edition) (2021).

Water quality – Type 2

Water of medium quality that would require moderate treatment to meet drinking water standards (it may have a high salinity threshold of no higher than 5,000 milligrams per litre total dissolved solids and other individual constituents). This water is considered high-quality/high-grade in the International Council on Mining and Metals (ICMM) 'Good Practice' Guide (2nd Edition) (2021).

Water quality – Type 3

Water of low quality that would require significant treatment to meet drinking water standards. It may have individual constituents with high values of total dissolved solids, elevated levels of metals or extreme levels of pH. This type of water also includes seawater. This water is considered low-quality/low-grade in the International Council on Mining and Metals (ICMM) 'Good Practice' Guide (2nd Edition) (2021).

WRSA (Water Resource Situational Analysis)

A Water Resource Situational Analysis (WRSA) is a holistic assessment of the water situation where an asset operates. The process is designed to describe the water challenges that stakeholders share and the opportunities for collective action to address those challenges. The WRSA is prepared by a credible third-party and draws on publicly available information and direct stakeholder input. Within a defined area that includes the water resources that BHP interacts, each WRSA includes assessment of:

- the sustainability of the volume and quality of the water resources, taking into account interactions of all other parties and any related environmental, social or cultural values and climate change forecasts
- the state of water infrastructure, water access, sanitation and hygiene of local communities
- the environmental health of the water catchments that feed the water resources taking into account the extent of vegetation, runoff, and any conservation of the area
- external water governance arrangements and their effectiveness

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