WHITEHAVEN

Sustainability
Report 2023

Contents

Acknowledgement of Country and Traditional Owners

Whitehaven Coal acknowledges Australia's Traditional Owners, recognising their connection to land, waters and community. We pay our respects to First Nations peoples, and to their Elders past and present.

We launched our Indigenous design truck tray and high-vis personal protective equipment at a NAIDOC Week 2023 event at our Maules Creek Mine.

Managing Director and CEO's message

In FY23, we delivered strong improvements and positive outcomes across our priority sustainability areas, and achieved a record financial result. As a company, we view our performance holistically and aim to deliver lasting impacts through our full value chain.

People

The safety and wellbeing of our people is our foremost priority, and I am pleased to report we continued to see a positive trend in our safety metrics. Our total recordable injury frequency rate (TRIFR) for employees and contractors improved by 13%, and our near miss frequency rate declined 22% on the prior year.

These results are a testament to our targeted efforts to build a stronger, more mature safety culture and capability. A key area of progress has been better identification and investigation of safety hazards and incidents to prevent future incidents by sharing and applying our learnings across the organisation.

Economy-wide labour constraints continue to challenge our business and the industry more broadly, We are addressing this through targeted attraction, recruitment and retention strategies.

To further enhance our employee value proposition, we are taking practical steps to ensure we have the right culture, reward strategies and development opportunities in place for our people. We are seeing these initiatives get results. Our latest workforce engagement survey reported a 5% increase in overall engagement level, and we have seen a decrease in our employee turnover.

Fostering a diverse and inclusive workplace is also a key priority, and we are making pleasing progress towards the goal we set in FY22 to have women represent 20% of employees and 20% of leadership roles by the end of FY26. Women represented 17.3% of our employees and held 14.1% of leadership roles at the end of FY23. We also continued to maintain a high representation of Aboriginal and Torres Strait Islander people across the workforce, at 10.5%.

Strategy and decarbonisation

Looking beyond our business, global events over the past 12 months have again underscored the importance of access to secure, reliable and affordable energy – domestically and abroad. The uncertainty and volatility we have seen in the global energy market has further validated the enduring role Whitehaven Coal (Whitehaven) plays in supporting global access to energy for industrial activity and economic development over the long term.

The energy transition will take many decades and high-quality, high-calorific value (high-CV) thermal coal will continue to be an important resource.

Given the global focus on energy security and supply, it has unsurprisingly remained a key area of public interest and policy focus here in Australia. Whitehaven continues to advocate for sensible policy outcomes that maintain the global competitiveness of Australia's coal sector and enable it to continue its significant contribution to the nation's economic prosperity.

In FY23, Australian coal (thermal and metallurgical) export revenue totalled $128 billion – more than iron ore and more than gold, aluminium and copper combined. In New South Wales (NSW), coal royalties delivered $5.5 billion to the State Budget during FY23. This revenue is applied to schools, hospitals, roads and other State Government priorities. Whitehaven paid or will pay $1.65 billion in taxes and royalties to governments for FY23, highlighting our value to the national economy.

The Australian Government's reformed Safeguard Mechanism took effect on 1 July 2023, setting declining greenhouse gas emissions (emissions) intensity baselines for facilities captured under the scheme. This includes our Maules Creek and Narrabri mines.

Despite Whitehaven's advocacy efforts, the adopted scheme does not acknowledge the distinct differences between open cut and underground coal mine emissions profiles. It therefore places a disproportionate emissions intensity reduction obligation on our Narrabri underground mine.

Managing Director and CEO's message continued

We have set an overall Scope 1 emissions intensity reduction target that aligns with our obligations under the Safeguard Mechanism.

We also continue to offset our Scope 2 emissions by purchasing Climate Active–certified carbon neutral electricity, and commenced the development application process for a solar farm to reduce our Narrabri Mine's use of electricity from the grid.

We recognise the need to take sensible steps to reduce our operational carbon footprint where technically and economically feasible. Our decarbonisation roadmap outlines our current initiatives and the potential future abatement initiatives we are considering, with multiple investigations currently underway. We also continue to invest in emerging technology solutions. However, with feasible technology solutions not yet available to abate the majority of our emissions, we expect carbon offsets to form a large part of the solution for now. I invite you to find out more here.

Environment

In FY23, we reported zero environmental enforcement actions, which compares favourably with four in the prior year. This reflects our focused investment in strengthening our environmental systems, processes, capacity and infrastructure over the past several years. We recognise there is more work to be done, and this will remain an ongoing area of focus to ensure the positive trend continues.

Communities

This year represented a record financial performance for the business. This performance delivered significant value for our stakeholders and, importantly, it enabled us to maintain our long-term investment in the local communities in which we operate.

We invested about $560 million in regional communities via salaries and wages, procurement, and community investments. With about 75% of our workforce living in the towns around our operational footprint, the benefits of this investment are felt locally. We are proud of the role we play in supporting our local communities.

We contributed $4.35 million to local community causes and initiatives through the year across a range of diverse areas, including health, education, sport, flood relief and nature conservation.

Pleasingly, our efforts in this space are being recognised in the local communities to which support is oriented. Our seventh wave of community research since 2014 shows a continuing trend of improving sentiment towards the company and that, in 2023, positivity was at its highest level since surveying began.

Thank you

Importantly, I would like to sincerely thank our people for their hard work and contributions over the past 12 months. Together, they made Whitehaven a better, stronger and more sustainable company, delivering value right through our value chain.

Paul Flynn
Managing Director and CEO

Performance highlights

PEOPLE

4.7
TRIFR,
a 13% improvement

Females represent

17.3%
of employees,
up from 15.3%

14.1%
of leadership roles,
up from 10.6%

10.5%
of workforce identify
as Aboriginal and/or
Torres Strait Islander people

5%
increase in
workforce
engagement

ENVIRONMENT

Zero
environmental
enforcement actions,
down from four

1.17 mt CO_2-e
Scope 1 emissions

~100%
Scope 2 emissions
offset

35%
of water used
was recycled water

107 ha
of land rehabilitated

COMMUNITIES

~75%
of workforce based
in local communities
surrounding
our operations

$357m
spent with local
regional suppliers

$14.4m
spent with
16 Aboriginal and
Torres Strait Islander
businesses, up 65%

$4.35m
in corporate
community
partnerships
and donations

$1.65b
in taxes and royalties
paid or payable for FY23

Our business

Whitehaven is the leading Australian producer of high-quality, high-CV thermal coal. Our thermal and metallurgical coal products are exported to premium markets, predominantly in Asia.
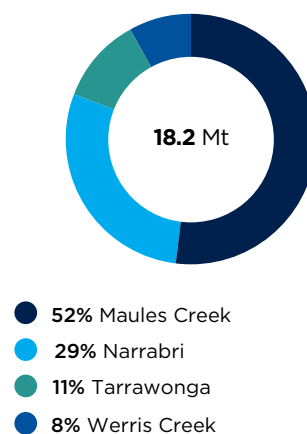
Operating assets

Our operations are located in the Gunnedah Basin in NSW. In FY23, we operated four coal mines and the Gunnedah Coal Handling and Preparation Plant (CHPP).

Early mining of the Vickery coal deposit, which entails a modest capital investment, is expected to commence in mid-CY24. Construction commenced in August 2023 and once ramped up, run-of-mine (ROM) production of up to 1.3 Mtpa is expected. An investment decision on the larger, approved Vickery Extension Project will be made in late 2023.
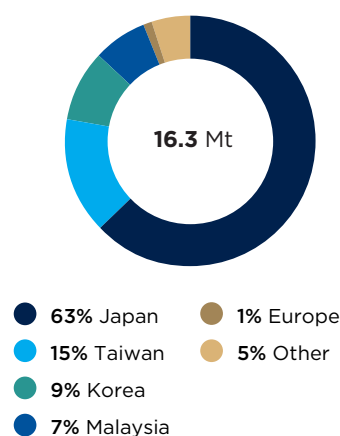
The Werris Creek Mine, which has most recently been in operation since 2005, will ramp down production in FY24.

- ● Open cut mine
- ● Underground mine
- ╫ Rail

All Whitehaven coal is exported from the Port of Newcastle using two export terminal providers, Port Waratah Coal Services (PWCS) and Newcastle Coal Infrastructure Group (NCIG). We have a 26% equity interest in NCIG.

FY23 ROM coal production[1]

18.2 Mt

- ● **52%** Maules Creek
- ● **29%** Narrabri
- ● **11%** Tarrawonga
- ● **8%** Werris Creek

FY23 managed sales[2]

16.3 Mt

- ● **63%** Japan
- ● **15%** Taiwan
- ● **9%** Korea
- ● **7%** Malaysia
- ● **1%** Europe
- ● **5%** Other

Our aspiration is to have a more balanced portfolio of thermal and metallurgical coal.

Our FY23 managed sales were 94% thermal coal and 6% metallurgical coal, compared with an average of 84% thermal and 16% metallurgical coal over the previous five years. This reflects the attractive market pricing for thermal coal during FY23.

While our current coal production is weighted to thermal, our goal is to grow our metallurgical business. Our Winchester South Project will produce a majority metallurgical coal. Full-scale mining of our Vickery Mine would produce high-quality semi-soft coking coal, pulverised coal injection (PCI) coal and high-CV thermal coal.

We will also consider opportunities to grow our exposure to metallurgical coal through acquisitions if such opportunities create value for our shareholders.

Planned future growth projects

Narrabri Stage 3 Extension Project
Will extend the mine from 2031 to 2044
📍 Gunnedah Basin, NSW

Vickery Extension Project
10 Mtpa open cut coal mine
📍 Gunnedah Basin, NSW

Winchester South Project
15 Mtpa open cut coal mine
📍 Bowen Basin, Queensland

1. On a 100% operational control basis. Whitehaven has a 75% equity interest in the Maules Creek Mine and a 77.5% equity interest in the Narrabri Mine.
2. Including third-party purchases and excluding coal reservation sales volumes.
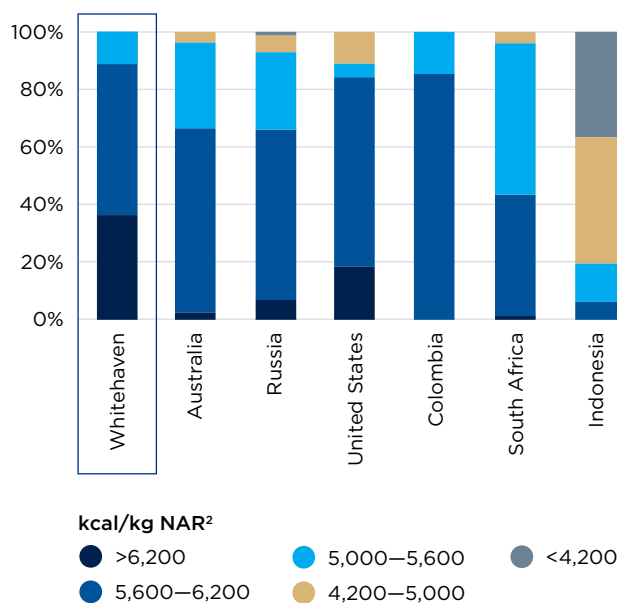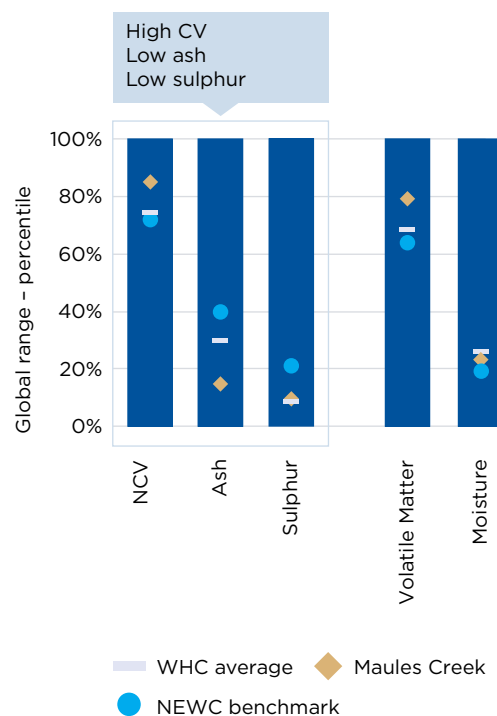
Our business continued

Our mines supply high-quality thermal coal for power generation and semi-soft coking coal and PCI for use in steelmaking.

Our **thermal coal** is high-CV, low ash and low sulphur. High-CV coal has the benefit of requiring less coal to generate the same amount of electricity. The low ash content increases a power station's combustion efficiency, with higher heat output and lower particulate emissions, while the low sulphur content minimises sulphur dioxide emissions from power generation.
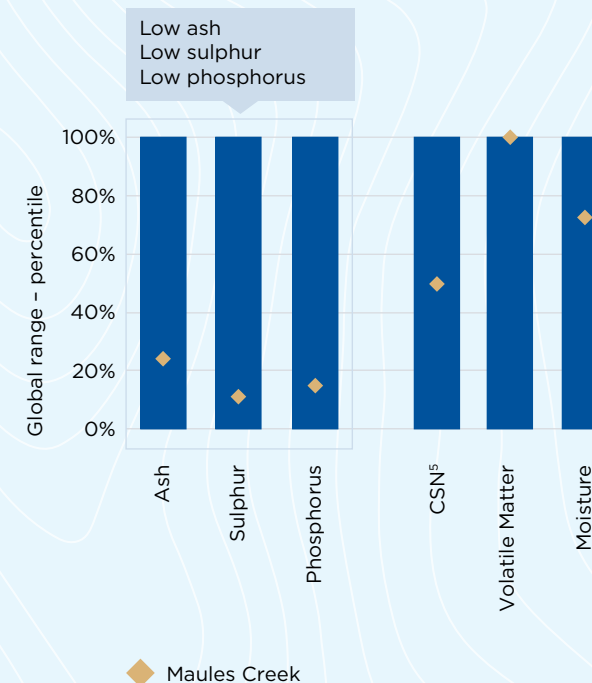
In FY23, the average net Calorific Value (NCV) of our thermal coal exports was about 6,100 kcal/kg[3], with 100% >5,600 kcal/kg and 85% >5,850 kcal/kg. This compares with 67% of Australia's total thermal coal exports and only 6% of Indonesia's coal, which were >5,600 kcal/kg.

Our **metallurgical coal** is low in impurities, specifically ash, sulphur and phosphorus. Our customers use our products in their coke blends to offset impurities in the hard coking coals they purchase. The trend of increasing impurities in hard coking coal, specifically sulphur and ash, is expected to continue, suggesting that demand for our product will remain strong.

FY23 thermal coal exports by NCV[1]

kcal/kg NAR[2]

- >6,200
- 5,600—6,200
- 5,000—5,600
- 4,200—5,000
- <4,200

FY23 thermal coal quality[4]

High CV
Low ash
Low sulphur

- WHC average
- NEWC benchmark
- Maules Creek

FY23 semi-soft coking coal quality[4]

Low ash
Low sulphur
Low phosphorus

- Maules Creek

1. Source: McCloskey Global Thermal Coal Imports & Exports and Whitehaven data for FY23.
2. NAR equals energy on a net as received basis.
3. Managed sales include third-party purchases and exclude coal reservation sales.
4. All quality metrics are on an air dried (ad) basis, except moisture which is on an as received basis (ar).
5. Crucible swelling number (CSN).

How we create value

Our purpose

To support and sustain regional communities by exporting high-quality thermal and metallurgical coal from Australia to the world

PEOPLE
Safe, inclusive and rewarding workplace
We strive to ensure a safe, inclusive, diverse and rewarding workplace to attract, motivate and retain talent.

CUSTOMERS
Supporting energy security and decarbonisation
We supply high-quality coal to customers across Asia, supporting energy security and economic development, while helping meet decarbonisation goals.

ENVIRONMENT
Responsible environmental stewardship
We aim to be responsible stewards of the natural environment by minimising and/or mitigating our impacts and reducing our carbon footprint.

BUSINESS STRATEGY
Strong long-life business
We identify, develop and operate high-quality, cost-efficient and long-life thermal and metallurgical coal assets.

COMMUNITIES
Supporting our communities
We support local and regional communities through job creation, local procurement and direct investment, and by preserving and managing cultural heritage in our operations.

SHAREHOLDERS
Strong financial results
We strive to deliver strong and consistent returns to shareholders and joint venture partners through efficient and effective operations and prudent capital allocation.

CONDUCT
Responsible business conduct
We are committed to conducting our business ethically and with integrity, and maintaining a strong governance framework.

Our values

Our STRIVE Values unite us, direct our decision making and guide our interactions.

Safety
The safety of our people, workplaces and the communities around us comes first. We are committed to Zero Harm

Teamwork
We work collaboratively and support one another

Respect
We foster a diverse and inclusive culture and deal with all stakeholders respectfully

Integrity
We are honest and do the right thing

Value
We create value for shareholders, customers and local communities

Excellence
We deliver on our commitments

Our approach to sustainability

We strive for excellence in executing our business strategy, delivering on our purpose and operating responsibly and sustainably. We recognise that strong sustainability management and performance is vital in creating value for our customers, workforce, communities, suppliers and shareholders.

We embed environmental, social and governance (ESG) matters in our strategic priorities, decision making, action plans and practices, and focus on developing and improving our approach.

We actively engage with our key stakeholders through formal and informal processes and consider their feedback in our decision making, operational plans and sustainability reporting.

Material sustainability topics

We define our material sustainability topics as the sustainability issues assessed as material to the business and our key stakeholders. These reflect the areas of focus of operational activities. We aligned these topics with five of the seven pillars that underpin how we create value (see page 8).

We conducted our first formal materiality assessment to define our material sustainability topics in FY21. This assessment aligned to the AccountAbility AA1000AP Standard and was informed by regular stakeholder engagement.

In FY22, Whitehaven's senior leadership team reviewed the sustainability topics in the context of the organisation's material risks that were identified by our internal risk management processes.

In FY23, we removed the topic 'continuity during COVID-19', as it is no longer a material sustainability topic.

The next formal review of our material sustainability issues will be conducted in FY24, and will integrate the requirements of the new IFRS Sustainability Disclosure Standard *S1 – General Requirements for Disclosure of Sustainability-related Financial Information*.

Pillar	Material sustainability topic	Relevant UN SDGs[1]
BUSINESS Strong, long-life business	• Business model and markets • Climate-related risks and opportunities • Regulation and policy	7 AFFORDABLE AND CLEAN ENERGY / 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
PEOPLE Safe, inclusive and rewarding workplace	• Workforce safety and wellbeing • Talent attraction, development and retention	3 GOOD HEALTH AND WELL-BEING / 5 GENDER EQUALITY / 8 DECENT WORK AND ECONOMIC GROWTH
ENVIRONMENT Responsible environmental stewardship	• Minimising environmental impact of operations • Land rehabilitation and closure	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE / 12 RESPONSIBLE CONSUMPTION AND PRODUCTION / 13 CLIMATE ACTION / 15 LIFE ON LAND
COMMUNITIES Supporting our communities	• Contributing to local prosperity and sustainability • Community engagement	4 QUALITY EDUCATION / 8 DECENT WORK AND ECONOMIC GROWTH
CONDUCT Responsible business conduct	• Business conduct • Responsible supply chain • Cybersecurity and privacy	

1.   United Nations Sustainable Development Goals

About this report

Scope and boundary

The scope of this FY23 report is defined by the sustainability issues we consider material to Whitehaven and to our stakeholders (as outlined on page 9).

We use an operational control approach to reporting our sustainability data, accounting for 100% of joint ventures where we have operational control, irrespective of our equity interest.

In FY23, we operated four mines – Narrabri, Maules Creek, Tarrawonga and Werris Creek – and a coal handling and preparation plant located in the Gunnedah Coal Basin of NSW. The metrics in this report also cover, where relevant, our corporate offices and a small coal haulage business acquired during the year.

Our safety metrics, except where otherwise stated, include employees and contractors.

Reporting standards

We continue to have regard to the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) and the Sustainability Accounting Standards Board (SASB) Coal Operations Standard.

Our TCFD disclosures detail how we consider climate-related governance, strategy, risk management and metrics and targets.

A SASB Coal Standard Index, which indicates where each topic has been referenced in our disclosures, is included on the Sustainability page of our website.

National Greenhouse and Energy Reporting Scheme

The historic greenhouse gas emissions (emissions) and energy data presented in this report are consistent with our reporting to the Clean Energy Regulator under the National Greenhouse and Energy Reporting (NGER) Scheme. This data has been subject to limited assurance by EY for the purpose of NGER reporting.

Looking forward

We have commenced work to enable us to align our future sustainability reporting with evolving global and Australian standards and requirements.

In particular, the IFRS published its first two Sustainability Disclosures Standards in June 2023, *IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information* and *IFRS S2 Climate-related Disclosures.* The Australian Accounting Standards Board (AASB) has indicated it will publish sustainability reporting standards aligned to the baseline of IFRS Sustainability Disclosure Standards, but amended for Australian stakeholders in early 2024.

The Australian Government has recently undertaken public consultation on its proposed policy to mandate climate-related reporting for entities that are required to report under Chapter 2M of the *Corporations Act 2001* (Cth). The policy would apply to large entities – such as Whitehaven – from FY25, and require Scope 3 emissions reporting from FY26.

Additional information

The Sustainability page of our website includes additional information on:

- our contribution to the North West NSW economy
- Workplace Gender Equality Agency reporting
- our industry associations
- the SASB Index.

We publish an annual Modern Slavery Statement as required by the *Modern Slavery Act 2018* (Cth), with our FY23 statement to be published in late 2023.

Sustainability governance

Whitehaven's Board is committed to achieving the highest standards of corporate governance, transparency and accountability. Our corporate governance structures and processes underpin our sustainability approach and progress.

This section focuses on Whitehaven's sustainability governance structure, with the comprehensive disclosure on our corporate governance framework and approach published in our Corporate Governance Statement.

Board oversight

The Board is responsible for approving and monitoring the implementation and execution of our ESG strategy and performance. It is supported by the advice given by the Board Health, Safety, Environment and Community (HSEC) Committee and the Audit and Risk Management Committee.

The HSEC Committee assists the Board in enabling Whitehaven to operate safely, responsibly and sustainably. The committee reviews and provides oversight on:

- actions to deliver on our responsibility to ensure we protect people and the environment
- initiatives to enhance our sustainable business practices
- integration of HSEC in our corporate strategy, risk management framework, and people and culture priorities
- compliance with relevant legal obligations.

The Audit and Risk Management Committee provides oversight of the management and mitigation of sustainability risks, including financial risks associated with climate change.

Both committees meet at least four times a year and provide regular updates to the Board.

The Board considers how climate-related risks and opportunities may drive change and influence our medium-to long-term goals and strategies.

Management responsibility

Whitehaven's Managing Director and CEO, supported by the Executive Leadership Team, is responsible for implementing and managing the strategic approach set by the Board, including integration in operational strategies, action plans and reporting.

The Managing Director and CEO has operational responsibility for sustainability matters. Other Executive Leadership Team members with particular responsibilities relating to sustainability matters include the Chief Financial Officer, Executive General Manager (EGM) – Health, Safety and Environment, the EGM – People & Culture, and the EGM – Corporate, Government & Community Affairs.

The EGM – Operations and operational site leaders are responsible for ensuring compliance with sustainability legislation and regulation, and managing risks and performance outcomes. They are supported by functional specialists. Delegation of day-to-day ESG responsibilities lies with operational managers.

Health, safety and environmental performance is reported to the Board and Executive Leadership Team monthly, and to the Board HSEC Committee quarterly.

In FY23, the Sustainability Working Group transitioned to a Climate Change Working Group, reflecting the key focus area for the group. The Climate Change Working Group, chaired by the EGM – Corporate, Government & Community Affairs, comprises senior leaders from Operations, Sustainability, HSE, Finance and Strategy. The working group provided input into areas of work reported to the Executive Leadership Team and Board.

The climate-related disclosures in this report have been reviewed by the Executive Leadership Team and approved by the Board.

Management remuneration

The Board emphasises the importance of strong safety and environmental outcomes. As such, under Whitehaven's variable remuneration Single Incentive Plan, two strategic targets in these areas each account for 20% of the shared scorecard key performance indicators (KPIs) that determine 80% of executives' performance outcomes. The remaining 20% are based on individual KPIs. These two strategic targets are:

- TRIFR
- environmental compliance (enforceable actions).

The Board also annually reviews how it can best align remuneration to our broader sustainability performance.

A comprehensive description of our executive remuneration structure can be found in the Remuneration Report within our Annual Report.

Sustainability governance continued

Risk management

The Audit and Risk Management Committee provides oversight of Whitehaven's risk management, with ultimate responsibility for the framework resting with the Board.

The Group Risk function reports biannually to the Audit and Risk Management Committee, and annually to the Board, on organisation-wide risks, including climate change transition risks. Group Risk also reports on the physical risks of climate change to the Board HSEC Committee as required.

The Board reviews Whitehaven's Risk Appetite Statement annually or when there is a significant change in financial position or operations.

The identification, evaluation and treatment of sustainability-related risks, including climate change risks, are integrated in our risk management framework. Our framework establishes a standardised company-wide approach to risk management.

Risks are assessed according to the magnitude of consequence and likelihood of occurrence, which are measured based on quantitative thresholds and qualitative factors. Our group risk profile is reviewed at least annually, while material and emerging risks are continually and proactively identified, monitored and assessed.

Climate change is considered a standalone material risk in our framework, with constituent risks relating to operations, policy, reputation and strategy managed by the relevant subject matter experts within the company.

We conduct climate-related scenario analysis on our operating assets as well as part of final investment decisions for new mining projects and acquisitions. This scenario analysis, which includes consideration of a less than 2°C Paris-aligned global warming scenario, supports our risk identification and assessment process.

A summary of our transition and physical climate-related risks and mitigation strategies is included on pages 30–31.

Safe, inclusive and rewarding workplace

- Health, safety and wellbeing
- Attraction, development and retention
- Diversity and inclusion
- Employee relations

Health, safety and wellbeing

We believe our people should expect to go home safe and healthy after work every day.

FY23 performance

4.7

TRIFR[1], a 13% improvement from FY22, and a 24% improvement over the last five years

622

hazards with the potential to cause a serious injury identified, up 85% from FY22

7.3

near miss frequency rate, a 22% decrease from FY22[2]

12,000+

in-field safety interactions undertaken

Zero

fatalities

Safety performance

The health, safety and wellbeing of our people is our first priority and we strive to deliver continuous improvement in our approach and outcomes. Our five-year Health, Safety and Environment (HSE) strategy and key objectives, set in FY21 continue to underpin our key focus areas.

The broadened set of leading safety indicators introduced last year are promoting visible safety leadership and coaching in the field, and are applying a risk-based lens to serious injury prevention by focusing on reporting and learning from incidents that have the potential to result in serious harm. This is further embedding a positive safety culture.

The improved outcomes in our leading and lagging safety metrics demonstrate the positive impact our strategic health and safety priorities are having, including the increased focus on identifying and managing hazards.

The decrease in TRIFR and near miss frequency rate reflects our strong focus on injury management and significant hazard identification.

TRIFR for employees and contractors

	FY19	FY20	FY21	FY22	FY23
	6.2	4.1	5.9	5.4	4.7
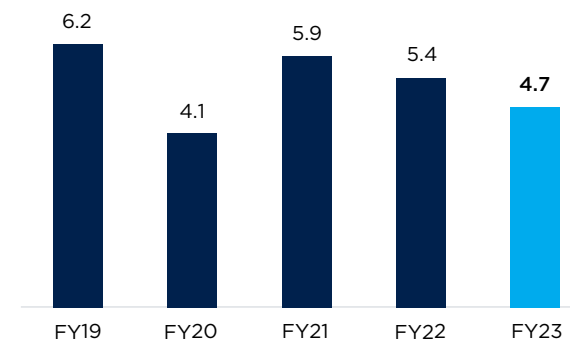
Our TRIFR is well below the NSW coal mining average[3]

With regard to injuries, we drive positive change by focusing our efforts in the areas where we can effect positive change and improvement.

Of the recordable injuries during the year, 50% were musculoskeletal injuries. During FY23, we refreshed our Movement for Improvement program, which focuses on preventing such injuries. We delivered educational and targeted interactive sessions to our workforce to increase awareness and understanding of musculoskeletal risks and mitigation in completing job tasks.

1. Total recordable incident frequency rate per million hours worked for employees and contractors combined.
2. Represents the frequency of events that could have resulted in a serious injury per million hours worked. FY22 reported data restated.
3. https://www.resourcesregulator.nsw.gov.au/sites/default/files/2023-01/mine_safety_perf_report_2021-22.pdf

Health, safety and wellbeing continued

Our approach

Our priorities and focus areas align with the key objectives of our HSE strategy, which aims to adopt the principles of a high-reliability organisation and embed psychological safety in the workplace.

Our approach to health and safety is risk-based, pragmatic and oriented to those areas where we can make a positive impact. We work to systematically identify, assess, report and rectify health and safety hazards that have the potential to cause single or multiple fatalities.

We focus on the controls that are most critical to the health and safety of our people. Our approach to critical control management is consistent with the International Council of Mining and Metals' Health & Safety Critical Control Management – Good Practice Guide. Each operating site's health and safety system must meet our organisation-wide minimum requirements, as defined by our policies, standards and procedures. Our system is supported by a standardised HSE reporting system and assurance program.

Our assurance program, which supports an effective and continuous improvement approach to HSE management, is designed to monitor material risks, ensure effective critical controls are in place and fit for purpose, and underpin compliance and conformance with Whitehaven and regulatory requirements.

The Safehaven Conference

The Safehaven Conference – which we have hosted every year since 2015 – is a key annual event that enables us to collaborate on our annual HSE strategic plans and build safety leadership capability. This initiative continues to improve and grow.

With about 200 conference attendees annually, including employees, contractors and business partners, it provides a valuable opportunity for meaningful engagement and consultation to share and learn from successes and challenges, and integrate improvements in the way we operate.

Our key health, safety and environment objectives

Adopt the principles of a high-reliability organisation

We are focused on strengthening our identification and investigation of safety hazards and incidents that can be precursors to significant incidents by applying learnings to prevent future failures.

This includes adopting a consistent risk-based decision-making approach where material risks are identified, controlled and verified using a consistent and aligned organisation-wide approach.

Establish a mature, interdependent culture founded on wellbeing and psychological safety

We are committed to developing a stronger, more mature HSE culture and aim to be an industry leader in caring for the health and wellbeing of our people.

Our areas of work are focused on shifting from a compliance-based culture to one where our people feel psychologically safe and there is mutual ownership and accountability for HSE outcomes, along with a commitment to safety leadership, engagement and care.

Measure performance using robust and user-friendly systems

We are committed to using robust systems to measure performance across our sites and a standardised approach to support the flow, quality and integrity of information.

Reducing vehicle interaction risks

The interaction between mine haul trucks and smaller heavy equipment and passenger vehicles is one of the most significant safety risks at our open cut mining operations. Reducing this risk has been a key safety improvement effort for several years.

To support our improvement initiatives, we actively participated in industry forums and working groups to leverage best-practice learnings. We also established an internal Vehicle Interaction Steering Team.

During FY23, we implemented the use of vehicle hierarchy road rules at our Tarrawonga Mine after introducing this at Maules Creek during the prior year. The vehicle hierarchy road rules are based on a system where vehicles lower on the hierarchy, such as passenger vehicles, give way to vehicles higher up the hierarchy.

This initiative was delivered through strong engagement with our workforce at all levels of operation. To foster change, we provided training, awareness and coaching sessions to establish an effective learning culture.

Health, safety and wellbeing continued

Reducing vehicle risks related to fatigue and distraction

Fatigue is one of the most significant health hazards for our workers.

To reduce the risks relating to fatigue and distraction, we have been progressively introducing best practice in-cabin operator alertness monitoring systems for off-road truck operators.

To date, the system has been implemented at the Maules Creek Mine, with roll-out planned at Tarrawonga.

The system is supporting injury risk reduction associated with fatigue by alerting the operator using an audible tone and seat vibration, providing early identification of a fatigued worker and enabling immediate actions to be taken. The system is also supporting prevention by improving workers' management of personal fatigue and the identification of potential health or lifestyle risk factors, resulting in proactive worker health risk management.

To support worker management of personal fatigue and risk factors, in FY23 we delivered whole-of-workforce training on fatigue management by an external subject-matter expert. A number of further fatigue related improvement strategies are planned for FY24 including journey management, fatigue assessments, targeted frontline leader awareness sessions and supporting further access to sleep studies.

Health and wellbeing

The mental health and wellbeing of our workforce is integral to achieving a safe workplace.

We strive to reduce psychological hazards in our workplace, build a culture of resilience, and equip our people with positive coping strategies to manage their health and wellbeing. One way we are doing this is through ongoing education of our leaders and workforce, emphasising the importance of mental wellness and healthy lifestyle choices.

During the year, our activities included:

- educating staff on fatigue and improved sleep management
- providing the Mental Health First Aid Program to our leaders, equipping them with skills to support team members
- enhancing the management of psychological hazards to prevent poor mental health
- promoting psychosocial hazard management through the launch of the third pillar of The Complete Miner program.

In FY23, more than 40 leaders participated in our bespoke Mental Health First Aid Program, which we developed in partnership with our employee assistance provider. This program educates our leaders in identifying and managing psychological hazards in the workplace, and helps them support team members who may be struggling with their wellbeing.

The Complete Miner program

The Complete Miner is our holistic health and wellbeing program. Its aim is to increase awareness of risk behaviours, motivate our people to make positive change, and facilitate connections to resources that support health and wellbeing goals.

Delivered through online evidence-based learning modules and supplemented by one-on-one coaching with a qualified psychologist, the program is designed to support behaviour change.

During FY23, we launched the third pillar of the program – 'The connection between your body and mind'. To support the roll-out of this latest learning module, we partnered with mental fitness not-for-profit Gotcha4Life Foundation to focus on early intervention and the power of prevention through connection.

We welcomed Man Anchor founder Steve Gamble to our Narrabri, Werris Creek, Tarrawonga and Gunnedah sites, where he ran valuable sessions on recognising and addressing mental health issues.

Attraction, development and retention

Our people are our best asset. To attract, motivate and retain the talent we need, we aim to build and maintain an inclusive and rewarding workplace where every individual feels safe, supported, and aligned with our values.

FY23 outcomes

1,290
employees

17.3%
female employees, up from 15.3%

1,457
contractors[1]

14.1%
females in leadership roles, up from 10.6%[2]

10.5%
of workforce identify as Aboriginal and/ or Torres Strait Islander

5%
increase in workforce engagement to 6.6 out of 10

1. Full-time equivalent.
2. Leadership roles are defined as anyone with direct reports or those reporting to an Executive General Manager or General Manager.
3. FY22 reported data restated (see page 55).
4. AON Salary Survey, April 2023.

We continue to strengthen our attraction, recruitment and retention strategies, as the skills and talent market continues to be highly competitive. We want to be regarded as a leading employer for those seeking a career in mining. To enhance our employee value proposition, we are working to ensure we have the right culture, reward strategies and development opportunities in place.

In FY23, we increased our internal recruitment capabilities, implemented proactive recruitment initiatives, strengthened our total rewards program, and streamlined and improved the candidate recruitment experience.

To bolster our recruitment of new talent, we increased our Graduate Program intake and international recruitment efforts, and will introduce fly-in, fly-out options for our workforce in FY24. Our Employee Referral Policy introduced in FY22, which provides incentives to existing staff for referring new talent to the business, was successful in attracting a number of new employees during the year.

We maintained quarterly retention bonuses for members of our operational workforce. Pleasingly, our retention initiatives resulted in a reduced employee turnover of 18.5%, down from 19.2%[3] in FY22. This compares to an average employee turnover of 22%[4] across the mining industry in FY23, which has been a function of a tight labour market.

To ensure we retain and develop the talent needed to support our strategic agenda, we continue to convert contractors into full-time employees. In FY23, we hired about 55 of our contractors.

Culture and engagement

To foster a positive and values driven culture, our CEO and senior leadership embarked on an employee roadshow across all sites and offices between September and November 2022, which focused on communicating and embedding our STRIVE Values and the behaviours expected of our workforce. Our values have been integrated into training and performance evaluations.

In response to feedback from our FY22 workforce engagement survey on the need for more recognition in the workplace, a company-wide reward and recognition program linked to our values was launched. Based on nominations from leaders in the business, our STRIVE Awards program recognises and celebrates the efforts of individuals and teams who made outstanding contributions and delivered excellent outcomes that aligned with our values.

A new communication and rewards platform, WHC Connects, was also launched in conjunction with the STRIVE Awards in response to the request for improved communication and recognition. The platform includes workforce communications, and health and wellbeing information and resources.

Workforce engagement survey

In May and June 2023, we conducted our annual company-wide engagement survey, consistent with our approach to seek qualitative and quantitative feedback on our performance in this area. Our last extensive engagement survey was completed in FY21, with a pulse survey conducted in FY22. Ongoing monitoring of the level of engagement helps us measure progress, assess the impact of recent initiatives and guide our action plans to address areas for improvement.

The most recent survey results showed our engagement level increased by 5% to 6.6 out of 10 (compared to the prior year). We had a survey participation rate of 62%. The sentiment of our workforce improved in relation to goal setting, which means our people are clear about their priorities and why their work is important, and management support and recognition, which reflects the positive impact of our STRIVE Values reward and recognition program. We have an opportunity to drive engagement by improving communication about our strategy and connecting our people to business purpose and goals.

Attraction, retention and development continued

Early-career programs

We have a number of early-career programs that seek to attract, develop and retain talent.

Our Graduate Program is a two-year development pathway that delivers a rich learning environment for graduates from a range of disciplines. This program builds their technical skills and core capabilities through on-the-job experience and formal development sessions. Graduates undertake structured rotations around the business and receive coaching from a senior leader in the business to support their development. In FY23, 23 new graduates joined the program, up from eight in the prior year.

Our 24-month Dump Truck Operator Traineeship Program, which offers entry-level employment and a nationally recognised CERT III in Surface Extraction Operations, continued to attract new talent in FY23.

We offer a diverse range of apprenticeships at our operations that provide opportunities to gain nationally recognised Cert III qualifications from a partner registered training organisation, while building required capabilities in trades such as electrical, mobile plant and mechanical engineering, as well as business administration. We currently offer opportunities to 23 apprentices.

Leadership development

We continued to roll out two leadership training and development programs launched in FY22 in conjunction with the Australian Institute of Management.

The Frontline Leader Training Program is a three-day course for existing and high-potential leaders, focusing on self and team leadership, strengthening commercial acumen and incorporating safety leadership concepts with STRIVE Values-based behaviour. The program seeks to build leaders' capability to resolve issues quickly, build trust with their teams and encourage open, two-way communication. The Leadership Essentials course, which covers the fundamentals of leadership, is being delivered to all site leaders. Since their launch, 119 employees have benefited from these programs.

Supporting our Werris Creek workforce through change and transition

With the Werris Creek Mine coming to the end of its life in FY24, we are implementing a tailored program to support our employees affected by the change.

We actively engage in open and transparent consultation with our employees and contractors. We support employees by having one-on-one career conversations to understand their ambitions and preferences, in order to explore redeployment opportunities at our other mine sites. Our target is to redeploy at least 80% of Werris Creek employees to our other operations.

We provide reskilling and/or upskilling training should a suitable alternative role be available, and provide career transition support and planning for employees leaving the organisation. We are keeping our employees and contractors informed by regularly updating them on our closure plans, and sharing details of employee career consultation and support.
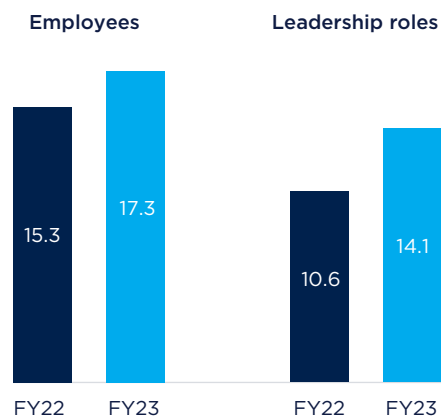
Diversity and inclusion

We believe in equal opportunity for all, and recognise the importance of fostering a diverse workforce and inclusive workplace culture to enable our people to feel safe, do their best work and deliver the best outcomes, as well as attract and retain employees.

Female representation targets

Underpinned by our enhanced Diversity and Inclusion Policy, in FY22 we set measurable targets to increase our gender diversity. In FY23, we made strong progress towards our targets of 20% women employees and 20% women in leadership roles by the end of FY26.

Our targets recognise we have more to do to meet the coal mining industry average and overcome the broader recruitment challenges that we have been facing in North West NSW for some time.

Female representation, %

	Employees		Leadership roles	
	FY22	FY23	FY22	FY23
	15.3	17.3	10.6	14.1

Our diversity and inclusion efforts and targets are underpinned by a number of focused initiatives. We:

- use a recruitment process designed to eliminate unconscious bias, welcome candidates traditionally under-represented in mining, and shortlist women for all senior roles
- provide women's leadership development and mentoring programs and opportunities for senior and emerging talent
- have an industry-leading parental leave policy and a domestic and family violence policy with 10 days paid leave
- prioritise engagement with Aboriginal and Torres Strait Islander peoples, including through employment and cultural awareness
- offer flexible working opportunities.

Industry-leading parental leave policy

Recognising the importance of parental leave in supporting equality and attracting talent, we introduced an industry-leading paid parental leave policy in FY22 that includes 26 weeks of paid leave for primary carers as well as superannuation on unpaid portions of leave. In FY23, 39 employees benefited from the new policy.

We continue to improve our understanding of workplace re-engagement hurdles and are re-designing our policies to ensure we offer primary carers not only the pathway to return to their career but also the opportunity to thrive. One such initiative is the 'There's No Barrier to Part-Time' program, which provides flexibility when our people need it most.

Women leadership development

To support our ambition to improve gender balance in leadership roles, we continue to invest in developing our female talent.

Our progressive and holistic Women's Leadership Development Program aims to inspire and equip high-potential and senior female leaders with the confidence, skills and drive to step up in the business. The annual eight-month program draws on performance psychology and behavioural science to help participants build resilience, increase visibility, improve self-awareness, and develop influencing skills and personal action plans.

As a result of the success of the first cohorts undertaking the Inspire, Senior Women Leaders program and the Aspire, Developing and High Potential Women program, we have renewed our partnership with the Inkling group and added a 2023 Aspire program as well as ongoing activities for the original cohorts. These programs encourage women at Whitehaven to take the next step in their careers. In FY23, 22 women from across the business participated in the two programs.

We are a platinum member of the Women in Mining Network (WIMnet), sponsoring and participating in its Mentoring Program. This year, 15 of our emerging female leaders participated as mentees in the six-month program, and five of our senior leaders participated as mentors.

Diversity and inclusion continued

NSW Women in Mining Awards

At the 2023 NSW Women in Mining Awards, Hollie Sampson, Whitehaven's Aboriginal Community Relations Advisor received the Exceptional Young Woman in Mining award. This is an incredible achievement and the first time a Whitehaven employee has claimed the award.

Leonie Newton from Whitehaven's Maules Creek Mine was also a finalist in the Outstanding Trade, Operator or Technician of the Year category.

READ MORE ›

Employee relations

We have a constructive relationship with our employee representatives and engage regularly and collaboratively in good faith to reach agreements on employment conditions. We respect and support our employees' right to freedom of association and to collective representation.

Whitehaven has nine collective agreements across the business, and approximately 56% of our employees are covered by enterprise agreements.

Our Employee Relations Strategy continues to focus on improving communication and engagement with our workforce, including sharing information on company performance, industry trends and employee recognition.

Employment of Aboriginal and Torres Strait Islander peoples

Our Reconciliation Action Plan sets out our commitment to support the empowerment of Aboriginal and Torres Strait Islander people, with a key focus on employing and training local people.

Company-wide, 10.5% of our workforce identify as Aboriginal or Torres Strait Islander people, compared with 8% in FY15 when we adopted our first Reconciliation Action Plan. This outcome is testament to the strong teamwork between our Recruitment and Aboriginal Community Relations teams, and the efforts of our key contractor partners.

Women make up 15.4% of our Aboriginal and Torres Strait Islander employees, which is modestly below the proportion of women across our whole workforce.

We continue to exceed our ambitious voluntary target to have 10% of roles at the Maules Creek Mine filled by Aboriginal and Torres Strait Islander people.

For the Vickery Extension Project, we have committed to a voluntary target of 10% Aboriginal and Torres Strait Islander employment, mirroring the commitment we have fulfilled at Maules Creek. A Board decision on commencement of full-scale operations at Vickery will be made in late 2023.

We run initiatives to promote roles to local Aboriginal and Torres Strait Islander people. This includes recruiting Aboriginal and Torres Strait Islander students for our Trainee Operator Program, and working with the Clontarf Academy and other education partners to encourage local students to consider a career in mining.

Climate change

- Strategy

- Target

- Emissions

- Decarbonisation roadmap

- Climate-related risks and opportunities

- Climate resilience

- Just transition

Strategy

Our strategy is focused on supporting energy security and economic development in our customer countries in tandem with meeting decarbonisation goals. We help power developed and emerging economies, predominantly in Asia, where there continues to be strong and growing demand for our coal, particularly for use in high-efficiency, low-emissions coal-fired power stations.

Climate change position

Whitehaven aims to play a practical and positive role in the transition towards a lower-carbon future. We do this by supporting global energy security and our customers' decarbonisation goals, and by investing in technologies and initiatives to decarbonise our operations.

We support the aims of the Paris Agreement and recognise the importance of transitioning to a lower carbon economy.

We believe the energy transition will take decades, not years, and that decarbonisation must be considered alongside the need to provide affordable and reliable energy to underpin standards of living and other social and human development goals.

We acknowledge Australia's commitment to net zero carbon emissions by 2050 and will align our decarbonisation ambition and business practices with the emissions reduction obligations set by the Australian Government, which support our national climate targets.

Accordingly, we have set a FY30 Scope 1 emissions intensity reduction target that aligns with our obligations under the reformed Safeguard Mechanism which commenced on 1 July 2023 (see page 25).

We are supporting secure and reliable energy supply and economic development

The shift to a lower-carbon economy is a multi-decade transformation that needs to occur in a responsible and orderly way to support continued global energy security, reliability and affordability.

Global energy supply disruptions over the past two years, driven by a multiplicity of factors, including a number predating the conflict in Ukraine and the imposition of sanctions against Russia, has seen energy security re-emerge as a priority for governments, including in our key customer countries. Central to this is access to reliable and affordable forms of energy, including coal.

According to the Energy Institute and the International Energy Agency (IEA), in 2022 fossil fuels continued to meet about 80% of the world's energy needs despite continued record growth of renewable energy – a proportion that has not changed significantly over the past several decades. In addition, energy consumption from fossil fuels continues to increase, driven by population growth and economic development.

Global coal demand hit a record high in 2022, although the proportion of world energy use it represents has declined to 27% compared with 30% a decade earlier.[1]

While countries have continued to set more ambitious global decarbonisation commitments, ongoing reliance on fossil fuels – including coal – illustrates that energy transition aspirations are out of step with the capacity to deliver them. This capacity is constrained by the limitations of existing alternative technologies and the substantial investment required across all sectors of the economy.

McKinsey estimated 'that the cumulative capital spending on physical assets for the net-zero transition – such as technology, infrastructure, and natural resources – would need to change from today's annual average of $5.7 trillion to $9.2 trillion through 2050... equivalent to 7.5% of global GDP annually on average'.[2]

1.   Energy Institute, 2023 Statistical Review of World Energy.
2.   McKinsey & Company, The net-zero transition: What it would cost, what it could bring, January 2022.

Strategy continued

Demand for thermal and metallurgical coal is expected to remain strong in the short and long term

Coal is expected to continue to play a critical role in underpinning economic activity and energy security for decades. For example, global demand for high-CV coal is forecast to grow by 28% to 2040, while supply is expected to tighten.[1]

As the world decarbonises, Whitehaven's high-quality, high-CV thermal coal will be the last to leave the market. We expect it will be required throughout the multi-decade energy transition to at least 2050, including for reliable baseload energy and potentially co-firing with ammonia, biomass and hydrogen.

Global demand for metallurgical coal is also expected to grow, driven by urbanisation and development that are underway in developing economies, particularly India and Southeast Asia. Steel is essential for economic security and development, and metallurgical coal is a critical component of blast furnace steelmaking. Metallurgical coal will be required in the long term while low-emissions alternatives to steelmaking evolve.

While coal's role in the global energy mix is decreasing modestly, the absolute level of coal consumption has remained relatively steady over the past decade and the contribution of coal-fired power generation to energy supply has increased by 13%.

This increase is the result of higher coal use in developing economies, which depend on reliable and affordable energy to help meet development goals. Coal remains the largest single fuel source for electricity generation, accounting for 36% in 2022.[2]

The IEA forecasts that absolute coal demand will remain at its 2022 record high of 8.3 billion tonnes to 2024, with decreasing demand from the United States and Europe offset by growth from India, China and Southeast Asia.[2]

Under the IEA's Stated Policies Scenario, which is a trajectory based on today's enacted global policy settings, coal demand in Asia Pacific (excluding China) is expected to grow by 13% to 2030, and 7% to 2050 from 2021. This is driven by growth in Southeast Asia, India and Indonesia.[3]

According to Wood Mackenzie forecasts, demand for metallurgical coal will grow by 29% to 2050 in the Asian market. Australia is the world's largest exporter of metallurgical coal and accounted for 56% of global exports in FY23.[4] Australia's proximity to key Asian steelmaking markets reinforces its status as one of the most reliable and cost-competitive suppliers to steelmaking customers.

All our customer countries have Paris-aligned decarbonisation goals

Whitehaven's customer countries are predominantly in Asia and are all signatories to the Paris Agreement or, in the case of Taiwan (ROC), have domestic energy policies that are consistent with the objectives of the Paris Agreement. As such, they have set emissions targets in relation to energy generation and industrial processes that underpin their Nationally Determined Contributions.

Our key customer countries of Japan, Korea, Taiwan and Malaysia, which represented 94% of our managed sales volumes in FY23, all have net zero by 2050 targets.

Japan's Ministry of Economy, Trade and Industry (METI), in conjunction with power generators such as JERA and J-Power, identified levers to achieve the country's targets, which are to:

- suspend and/or close inefficient coal-fired plants before 2030
- implement decarbonised fuels to co-fire with coal in existing power plants such as coal/hydrogen, coal/ammonia, coal/biomass and synthetic fuels.

In addition, about 65% of Whitehaven's export managed sales in FY23 were to customers that have made net zero by 2050 commitments and set interim emissions reduction targets.

Country decarbonisation targets

	2030 emissions targets	Share of renewable energy target	Net zero target
Japan	Reduce by 46% below 2013, and 'continue strenuous effort in its challenge' towards a 50% reduction	Increase to 36–38% by 2030, up from 18% in 2019	by 2050
South Korea	Reduce by 40% below 2018	Increase to 22% by 2030 and 30.6% in 2036, from 7.5% in 2021	
Taiwan	Reduce by 23–25% below 2005	Increase to 20% by 2025 and 60-70% by 2050	
Malaysia	Reduce carbon intensity against GDP by 45% below 2005	Increase to 40% by 2035 from 17% in 2021	
India	Reduce by 45% below 2005 emissions intensity of GDP	Achieve ~50% share by 2030 from non-fossil fuel sources	by 2070
Indonesia	Reduce by 32% on its own or by 43% with international support from its business-as-usual scenario	Increase to 23% by 2025 and 31% by 2050	by 2060

1. Commodity Insights Supply and Demand Balance (Base Case Scenario) for High-CV Thermal Coal, June 2023.
2. International Energy Agency, Coal Market Update, July 2023.
3. We acknowledge other scenarios exist, including the IEA's Net Zero Emissions by 2050 scenario. A scenario is not the same as a forecast, rather it considers possible futures, some of these with dramatic deviations from a base or current case, and with varying degrees of probability.
4. Resources and Energy Quarterly, July 2023.

Strategy continued

Our high-quality, high-CV thermal coal is helping meet decarbonisation goals

High-CV coal, such as that produced by Whitehaven, will achieve superior efficiency and lower emissions intensity than lower quality coals in like-for-like power stations.

The emissions per MWh from the combustion of a typical Whitehaven thermal coal specification, when used in high-efficiency, low-emissions (HELE) electricity generation, are up to 27% lower per MWh than from sub-critical coal-fired plants using lower quality coal.

To reduce emissions and meet the Paris Agreement goals, many coal-reliant countries have committed to retire old and inefficient coal-fired plants and move to newer, lower emissions, more energy-efficient generation technologies.

Over the past two decades to 2022, electricity generation capacity from HELE plants across our key thermal coal end markets of Japan, South Korea, Taiwan and Malaysia has more than doubled, increasing by 46 GW. About 46% of coal-fired power capacity came from ultrasupercritical plants in 2022, compared with 20% two decades ago.

Japan is adding a further 2.9 GW in new HELE capacity that is scheduled to commence in 2023–24, and South Korea has 7.3 GW of new HELE capacity expected to commence before 2025, of which 2 GW will be incremental capacity.

1. Typical Australian plants include: 1.29 for Sub-C lignite at Loy Yang (Victoria), 0.95 for Sub-C black coal at Bayswater (NSW) and 0.89 for SC black coal at Millmerran (Queensland).

Coal-fired power plants – GHG emissions per MWh sent out
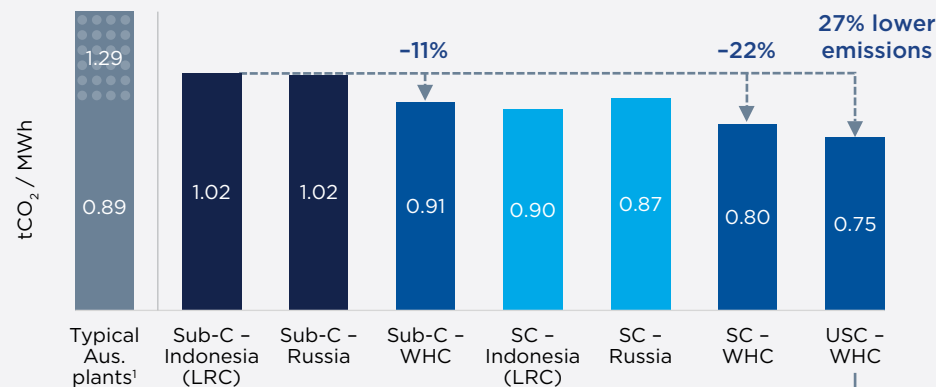
Key	Power plant type	Specifications
Sub-C	Subcritical	16–18 Mpa, <540°C
SC	Supercritical	>22 Mpa, 538–566°C
USC	Ultrasupercritical	25–30 Mpa, 593–610°C

Whitehaven's coal allows USC power plants in Asia to deliver 27% lower emissions than Sub-C power plants in Asia using lower quality coal

Source: Commodity Insights 2023, except for typical Australian plants data.

Installed coal-fired power capacity

Source: Commodity Insights 2023.

Whitehaven Coal Sustainability Report 2023 | 24
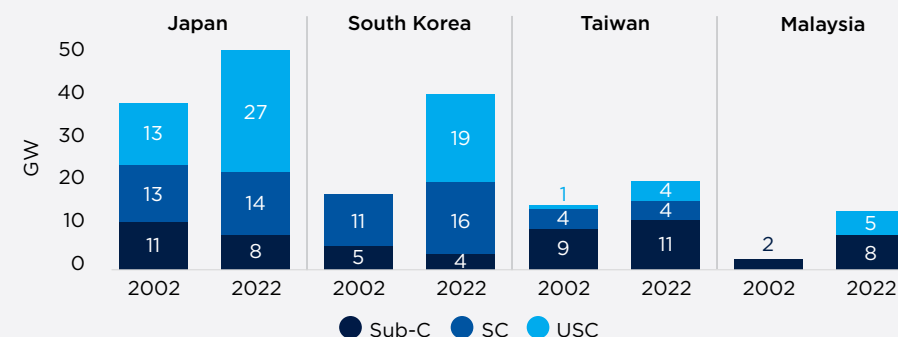
Target

FY30 Scope 1 emissions intensity reduction target

42%

Whitehaven's FY30 net Scope 1 emissions intensity reduction target is aligned with the Safeguard Mechanism emissions intensity reduction obligations that are applicable to our Narrabri and Maules Creek mines.[1] Under the scheme, only Narrabri will be required to reduce its emissions intensity by FY30, compared to FY23.

In FY23, Narrabri and Maules Creek together accounted for 89% of Whitehaven's total Scope 1 emissions.

Our emissions intensity reduction target will be achieved through a combination of site-specific emissions abatement initiatives and the use of carbon offsets (see pages 27–29).

We will update our Scope 1 emissions intensity target to align with any future revisions to the Safeguard Mechanism, with the Australian Government's review of the scheme design scheduled for 2026–27. Our Scope 1 emissions intensity target is also subject to any significant change in our mine portfolio.[2]

Safeguard Mechanism emissions intensity reduction obligations

In March 2023, the Australian Government introduced measures to implement reforms to the Safeguard Mechanism that came into effect on 1 July 2023.

The Safeguard Mechanism applies to large industrial facilities that emit more than 100,000 tonnes CO_2-e per year, which includes our Narrabri and Maules Creek mines. From FY24, the reformed scheme requires Safeguard facilities to reduce their 'baseline' emissions intensity by 4.9% p.a. to FY30.

Existing coal facilities' baseline emissions intensity transitions from being 95% weighted towards their historic site-specific emissions intensity in FY24 to being 50% weighted to the coal industry average emissions intensity by FY30. This results in an individual coal mine's effective annual decline rate diverging from the scheme's overall decline rate, with a favourable or unfavourable divergence depending on whether a mine's emissions intensity is below or above the industry average.

Narrabri's baseline emissions intensity will be required to decrease by 67% from FY23 to FY30. This equates to an annual decline rate of 9.5%, which is nearly twice the scheme's decline rate of 4.9%.

This high decline rate reflects:

- the inherent variability of fugitive emissions across longwalls at Narrabri that resulted in higher fugitive emissions in FY23 than in the prior five-year period, which was used to set its Safeguard Mechanism site-specific emissions intensity (FY18 to FY22)
- the mine's higher emissions intensity compared to the industry average, with the industry average skewed towards the lower emissions intensity of open cut mines which comprise more than two-thirds of Safeguard-covered coal mines.

Maules Creek will not need to decrease its baseline emissions intensity by FY30, reflecting its relatively low-emissions intensity compared to the industry average.

Safeguard Mechanism baseline

Existing facility baseline = production x emissions intensity (based on hybrid baseline) x decline factor (4.9% p.a.).

A mine's **site-specific** emissions intensity is calculated based on the average of the middle three values in the period FY18 to FY22.

The coal **industry average** emissions intensity is 0.0653 tonnes CO_2-e per ROM coal tonne.

Coal sector hybrid emissions intensity baseline

Legend: Site-specific emissions intensity; Industry average emissions intensity
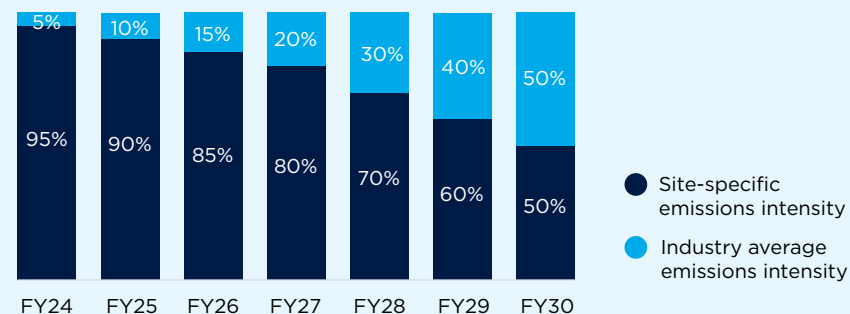
1. Excludes any benefit of a reduced annual decline rate received as a Trade Exposed Baseline Adjusted facility which is contingent on the scheme's cost impact.
2. Target assumes early mining of Vickery and closure of the Werris Creek Mine by the end of FY24.

Emissions

Scope 1 emissions

1,172kt CO$_2$-e

up 29%

Scope 2 emissions

~100%

offset by purchasing carbon neutral electricity certified by Climate Active

Scope 1

In FY23, our Scope 1 emissions increased by 29% compared to FY22, due to higher fugitive emissions from the Narrabri Mine.

The main sources of Scope 1 emissions are from the release of fugitive gas from coal seams and diesel consumption during mining operations. Fugitive emissions accounted for 67% of Scope 1 emissions, with nearly all of these from the Narrabri underground mine.

Scope 1 emissions intensity across our mine portfolio was 0.064 tonnes CO$_2$-e per ROM tonne, compared with 0.046 tonnes in FY22.

There is natural variability in fugitive emissions across a mine's coal seams driven by its geology. The increase in fugitive emissions at the Narrabri Mine reflects this natural variability and the shift from mining the northern longwall panels for most of FY23 to commencing mining at the southern longwall panels, which are demonstrating higher levels of methane.

Multiple initiatives are underway and under investigation to abate fugitive gas at the Narrabri Mine (see pages 27–29).

Scope 2

In FY23, we offset about 100% of our Scope 2 emissions through purchasing Climate Active certified carbon neutral electricity. We have been purchasing carbon neutral electricity since October 2021.

We also completed a feasibility study for a solar farm at the Narrabri Mine, and commenced the regulatory approval application process in August 2023 (see page 29).

Emissions
(kt CO$_2$-e)

Use of NGER default emissions factor for Maules Creek ← | → Use of site-specific fugitive emissions for Maules Creek

	FY19	FY20	FY21	FY22	FY23
Total	1,621	1,593	921	1,012	1,266
Scope 2	106	106	105	102	93
Scope 1	1,515	1,487	816	910	1,172

- Scope 1
- Scope 2 (location-based)[1]
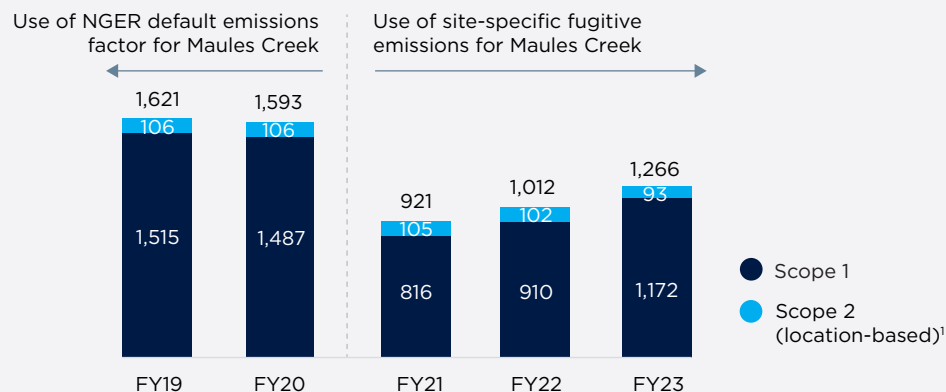
FY23 Scope 1 emissions by location

1,172 kt CO$_2$-e

- 67%
- 22%
- 6%
- 4%
- 1%

- Narrabri
- Maules Creek
- Tarrawonga
- Werris Creek
- Other
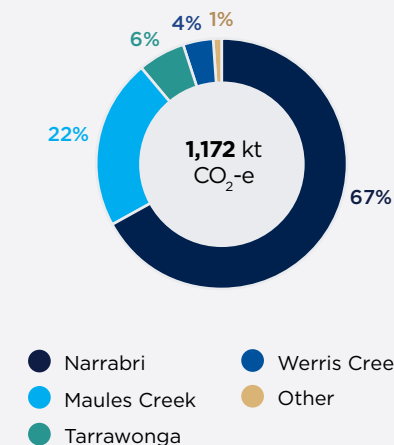
Scope 1 emissions by source
(kt CO$_2$-e)

	FY21	FY22	FY23
Total	816	910	1,172
Other	8	5	1
Diesel consumption	416	383	382
Fugitive emissions	392	522	789

- Fugitive emissions
- Diesel consumption
- Other
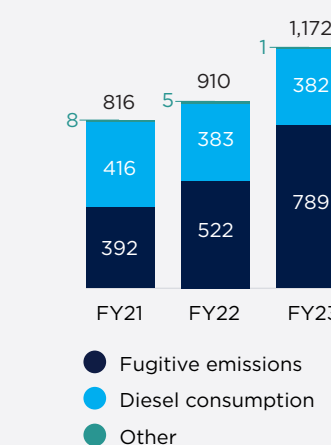
1. The location-based method reflects the average emissions intensity of grids on which energy consumption occurs.

Decarbonisation roadmap

Our decarbonisation roadmap outlines our current and potential site-based levers to reduce our Scope 1 and 2 emissions footprint.

This roadmap will evolve as emerging or breakthrough emissions abatement technologies become available and financially feasible, and as we complete investigations and explore potential decarbonisation opportunities. In addition, carbon offsets will continue to be an important part of our Scope 2 abatement efforts and will be a key lever to meet our Scope 1 emissions reduction obligations under the Safeguard Mechanism (see page 25).

Current and potential site-based decarbonisation levers

	FY24-FY30	FY30-FY40	FY40+
Scope 1 Underground mine fugitive emissions	● Enhance longwall sealing of goafs ① ● Flare pre-mining drainage methane ② ● Methane separation concept study ● Gas sequestration concept study ③	● Ventilation air methane (VAM) abatement ④ ● Biological CCU technologies ⑤	
Diesel emissions	● Truck fleet diesel reduction technologies ⑥ ● Improve operating efficiency	● Low-carbon haulage fleet ⑦ ● Electrified mining equipment	
Scope 2	● Solar farm at the Narrabri Mine ⑧		

● Being implemented   ● Post feasibility   ● Existing technology being investigated   ● Technology under development or not currently suitable   ○ Further details on levers 1 to 8 are on pages 28–29.

FY23 Scope 1 emissions

0.4% 67% 33% **1,172** kt CO$_2$-e

● Fugitive emissions
● Diesel consumption
● Other

Scope 1 abatement hierarchy

Our priority is to reduce Scope 1 emissions by implementing site-based initiatives where suitable technology abatement solutions are feasible.

We will use carbon offsets or credits approved under the scheme – Australian carbon credit units (ACCUs) and Safeguard Mechanism credits (SMCs) – where feasible abatement initiatives are not meeting our regulatory emissions reduction obligations under the Safeguard Mechanism.

Carbon offsets
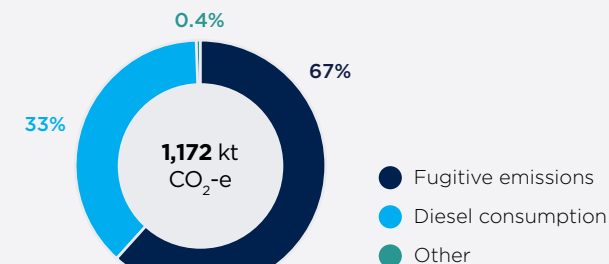
We offset about 100% of our Scope 2 emissions by purchasing carbon neutral electricity that is certified by Climate Active from our electricity supplier, and have been doing so since October 2021.

To meet Narrabri's Safeguard Mechanism emissions intensity decline rate of 9.5% p.a. to FY30, we will need to purchase carbon offsets approved under the scheme (ACCUs and/or SMCs), with viable solutions not currently available to abate most of our emissions.

ACCUs are carbon offsets issued by the Clean Energy Regulator for eligible, registered projects which deliver emissions reductions or carbon sequestration and meet relevant rules. SMCs are issued to a Safeguard facility that emits less than its baseline and can be sold to, and used by another Safeguard facility that emits more than its baseline.

In addition, we continue to consider options for generating nature-based offsets.

Decarbonisation levers

Underground mine fugitive emissions

Surface to in-seam (SIS) pre-mining boreholes to mobile extraction units capture gas

VAM is emitted via the main ventilation fans and vent shaft

Following mining, the collapsing roof section forms a goaf that emits gas to mobile extraction units

VAM from the longwall is constantly pumped throughout the mining process to avoid explosion risk

Goaf drainage borehole

Underground to inseam (UIS) gas drainage

Coal seam

Direction of mining

Goaf

1 Enhance longwall sealing of goafs

Abatement potential: minor

We adopt proactive goaf strategies to manage safety risks from gas leakage which includes the sealing of goafs.

With the cessation of mining operations within the northern area of the Narrabri Mine, we have identified an opportunity to improve the sealing of goafs in this area, which will decrease the release of fugitive emissions.

Work to enhance sealing of these goafs will be completed by FY25.

2 Flaring pre-mining drainage methane

Abatement potential: minor

Underground coal mines emit fugitive emissions that typically comprise a high proportion of methane (CH_4). Flaring of pre-drainage gas is widely adopted to burn the CH_4, which converts the gas to predominantly CO_2 and water vapour.

As methane is considered to have a global warming potential that is 28 times higher than CO_2, flaring reduces CO_2-e emissions. Flaring 1 metric tonne of CH_4 produces about 2.6 metric tonnes of CO_2, resulting in a nearly 10-fold reduction in emissions.

While technology for flaring pre-drainage gas where the CH_4 concentration is above 30% is well established, the CH_4 concentration levels at Narrabri have historically been below this level.

In late FY23, mining at Narrabri moved to a new longwall series at the southern end of the mine. This area has slightly higher CH_4 concentration levels, which will enable flaring to be implemented at some areas of the mine. It is expected to be operating by FY25.

3 Gas sequestration

Abatement potential: significant

We are at the early stage of exploring the suitability of CCS at Narrabri. This would involve capturing and then injecting gas underground, which is completely sealed in a geological layer.

4 Ventilation air methane abatement

Abatement potential: no existing suitable technology

The majority of Narrabri's CH_4 emissions are emitted via the main ventilation fans. The very low CH_4 concentration in the ventilation system is however insufficient to support existing VAM mitigation technology. This technology would require CH_4 levels four to eight times higher than current levels.

However, suitable technology may become available in future years.

Decarbonisation levers continued

(5) Biological CCU technology

Abatement potential: subject to further assessment

We are exploring emerging biological carbon capture and use technologies to reduce Scope 1 emissions and are a significant investor in one such process owned by Hydrobe Pty Limited (Hydrobe).

Hydrobe has a world-patented process to run industrial emissions through chambers of specially selected microbial algae and bacteria that turn CO_2 into saleable products including fertiliser, green hydrogen and syngas. We are considering the application of this technology to Narrabri and to our products' end users.

The difference in the Hydrobe approach to decarbonisation is that the company's patented biological process converts CO_2 without generating new CO_2. That is, Hydrobe's energy requirements are generated from biological reactions.

In FY23, Hydrobe commenced engineering testing of a bench scale pilot plant to convert algal biomass to green hydrogen and co-products, and commenced detailed design for a demonstration pilot plant.

(6) (7) Reducing mine haulage fleet diesel emissions

Abatement potential: modest before 2030 and significant after 2030

We are investigating technologies to reduce mine haulage fleet diesel emissions in the short term, and are engaging with OEM suppliers in relation to their low-carbon truck technology development pathways.

Based on this engagement, we do not anticipate low-carbon truck electrified solutions suitable for our open cut mines to be commercially available before 2030.

(8) Narrabri Mine solar farm

Abatement potential: More than one-third of Narrabri's Scope 2 emissions

In FY23, we completed a feasibility study to consider the implementation of a solar photovoltaic electricity generation system at our Narrabri Mine, which is the largest user of electricity in our portfolio.

In August 2023, we commenced the approval application process for a 26MW solar farm at Narrabri and are undertaking additional studies to support this process.

Initial studies indicate the proposed solar farm, expected to cost about $43 million, would provide more than one-third of the site's electricity needs.

Low Emissions Technology Australia

Whitehaven continues to invest in carbon capture technologies through funding for Low Emissions Technology Australia (LETA), contributing $5.0 million to LETA over the past five years.

LETA invests in technologies that reduce or remove carbon emissions from energy and other heavy industries. These projects include the Carbon Transport and Storage Company Project, which is designed to demonstrate the capacity and performance of large scale and permanent capture and storage of emissions in southern Central Queensland.
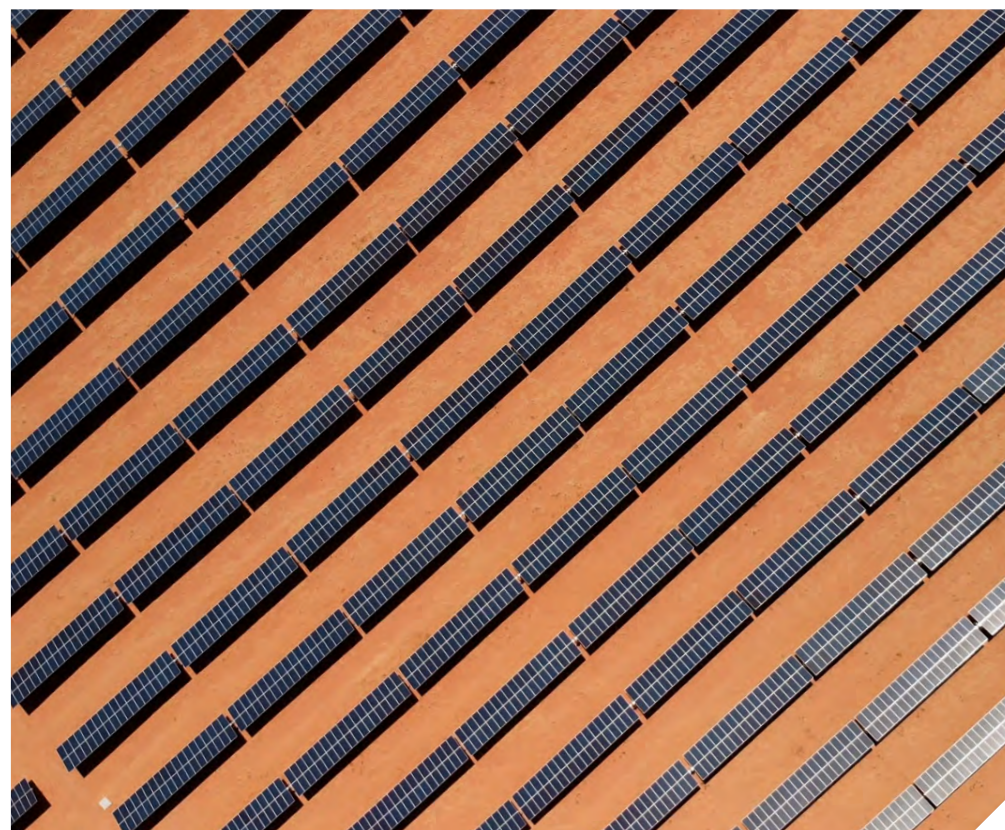
Climate-related risks and opportunities

Risk timeframe	Short term	0–5 years	We define short-term based on our five-year forecasting cycle, and long term based on the life of our mines which typically extend to 20 years or more.
	Medium term	5–20 years	
	Long term	20+ years	

Transition risks

Category	Risk description	Mitigation activities	Timeframe
Policy	Changes in domestic policy, such as the reformed Safeguard Mechanism, may increase operating costs and decrease earnings.	• Actively engage with domestic policymakers to advocate for balanced policy outcomes. • Investigate and implement site-based decarbonisation opportunities where feasible. • Monitor domestic policy and regulatory changes and impacts.	Short term
	Changes in policy in key customer countries, such as more stringent climate and environmental requirements may reduce the future demand trajectory and market price for coal.	• Strategic focus on high-quality, cost-efficient coal assets and ambition to achieve a balanced portfolio of metallurgical and thermal coal. • Diversified customer countries. • Monitor global market and customer country policies and trends.	
Legal	Litigation against companies and governments to accelerate climate change action or seek compensation for potential climate change impacts may adversely affect our operating costs and reputation, and delay mine approvals or commencement of new projects.	• Engage with stakeholders, and monitor litigation trends and risks via risk management framework. • Seek legal advice on litigation matters when required.	Medium term
Market/ technology	Advances in energy generation or steelmaking technologies may reduce demand trajectory for coal in our export markets.	• Conduct scenario analysis and identified risks considered in the context of strategic investment decisions and required return metrics. • Actively engage with customers in regard to their future plans. • Invest in low-emissions Scope 3 technology solutions, for example LETA and Hydrobe.	Medium term
Reputation	Changing sentiment towards the role of coal across the community may lead to increased activism, impacts on project approvals, workforce attraction, and operations or infrastructure access.	• Proactively engage with community and workforce, and regularly monitor community sentiment. • Advocacy efforts, including through industry associations. • Regularly review and improve employee value proposition, including to ensure competitiveness of benefits. • Conduct regular security updates, and implement increased security during times of protest action in close cooperation with local police.	Short term
Capital market and insurance	More stringent climate-related policies and activism among capital market participants may adversely impact funding options for future developments and investment opportunities, and increase cost of capital.	• Continue to advocate for central role of high-quality thermal coal in the energy transition and to reduce global emissions and metallurgical coal as a critical input for steelmaking. • Development projects are focused on producing primarily metallurgical coal. • Explore alternative source of funding.	Short term
	ESG factors could result in the withdrawal of insurance capacity for the coal industry.	• Explore alternative sources of insurance and establishing an Insurance Captive for self-insurance purposes. • Participate in an industry-wide feasibility assessment for establishing an Insurance Mutual for the industry (with possible government and financial backing).	

Climate-related risks and opportunities continued

Physical risks

We have identified the following climate-related physical risks as having the highest potential impact.

Category	Description	Monitoring and mitigation	Timeframe
Acute	**Extreme weather events**		
	Access to operations by operations personnel is limited by fire or flooding.	• No reasonable mitigation controls as access is cut on public roads. Transport of core operational personnel by helicopter was undertaken during FY23 flooding event.	Medium term
	Disruption to port and rail infrastructure from extreme weather events.	• Have access to dedicated stockpile capacity at port which allows significant pre-railing in the event of supply chain disruption. • Engage regularly with supply chain partners to ensure they comply with Australian standards for all procedures.	Medium term
	Disruption to access critical inputs for production, such as diesel due to extreme weather events.	• Engage regularly with supply chain partners to ensure they comply with Australian standards for all procedures.	Medium term
Chronic	**Water scarcity**	• Our water strategy includes options to improve drought security and redundancy by sharing water between operations.	
	Inability to access sufficient external water for our operations due to changes in average rainfall.	• Our water balance model assesses 132 years of historical climate data, including BOM-predicted impacts to rainfall and evaporation over our operations. Whitehaven's Life of Mine Water Balance model is integrated into life-of-mine plans for future infrastructure planning.	Medium term

Climate-related opportunities

Despite countries continuing to set more ambitious global decarbonisation commitments, the continued growth in demand for coal and fossil fuels illustrates that energy transition aspirations are out of step with the capacity to deliver them. Our high-quality, high-CV thermal coal delivers among the lowest emissions per MWh of energy sent out when used in HELE coal-fired plants and is expected to be the last to leave the market.

The demand for seaborne metallurgical coal is also expected to remain strong, particularly in Asia, to meet growing demand for steel, driven by population growth and economic development.

For information on how we are well placed to take advantage of the continued high demand for coal, and on the continued strong demand for high-quality, high-CV coal, see pages 22–24.

Climate resilience

We have been conducting annual scenario analysis of our operating mine portfolio since FY19. The most recent resilience stress-testing was completed in FY22, with its details provided in the 'Climate' chapter of our *Sustainability Report 2022*.

In light of rapid and dramatic recent shifts in coal prices and the actual and potential impact of recent policy developments at the state and federal level, we will reconsider our approach to scenario analysis in FY24.

These policy developments include the reformed Safeguard Mechanism and the NSW Government's proposed changes to the rate and method for collecting coal royalties. Our FY24 analysis will leverage updates to our life-of-mine costs and production models.

Just transition

The Paris Agreement requires national plans on climate change to consider the need for a just transition of the workforce and the creation of decent work and quality jobs. The Australian Government has announced the establishment of the Net Zero Authority, which will support workers in emissions-intensive sectors to access new employment, skills and support as the net zero transformation continues.

We acknowledge the low carbon energy transition needs to happen in a way that is fair to workforces, communities and consumers. This means workers, communities and other stakeholders who are currently working in industries that may be adversely impacted must be given a fair opportunity to transition into new, sustainable livelihoods. Equally, this means that energy affordability, reliability and accessibility as stated in the United Nations SDG 7 must be a central consideration.

Whitehaven's strategy is aligned with supporting global energy security during the multi-decade transition to a low-carbon economy. We expect demand for our high-quality coal in our export markets in Asia to continue for decades to come.

Coal mines by their nature have a finite life dictated by their reserves and regulatory approvals, with the future closure of each mine planned at its approval stage. We work to support our workforce, communities and other stakeholders as future mine closures draw near. Refer to pages 18 and 37 for information on how we are supporting our employees and consulting with the local community as we approach the planned closure phase of the Werris Creek Mine in FY24.

Responsible environmental stewardship

- Environmental management and compliance

- Water stewardship

- Land use and biodiversity

- Rehabilitation and mine closure

- Waste and recycling

- Air quality and noise

Environmental management

Our approach to environmental management is focused on mitigating unavoidable impacts, rehabilitating disturbed areas, and offsetting residual impacts that cannot be addressed.

Each of our operational sites and development projects must adhere to our organisation-wide environmental management standards and procedures, as well as site-specific commitments and regulatory requirements.

Mining is a highly regulated industry and our operational sites and development projects, based in NSW and Queensland, are therefore subject to strict environmental controls. For each stage of a project – from construction and operations to rehabilitation and closure – environmental assessments, environmental management plans and extensive stakeholder consultation are required.

Environmental assessments are undertaken by independent subject matter experts. Their advice forms the basis of our plans for managing any potential impacts to surface water, groundwater, flora and fauna, Aboriginal cultural heritage, historic heritage, air quality, noise, agriculture and geochemistry.

Our adherence to these plans is monitored and independently audited every three years. Our environmental assessments, management plans, monitoring and audits for each of our sites are available for all stakeholders to access via our website.

We actively engage and consult on environmental issues with our local community at each stage of a project, and have a centrally managed formal complaints and grievance mechanism at each site. Refer to the 'Community engagement' section on page 42 for further information.

We aim to continually improve our approach to environmental management and compliance with environmental legislation and regulations. In FY23, our key focus areas included:

- enhancing proactive risk management at operations through coaching in critical control monitoring and material risk evaluation for operational compliance
- continued integration of our compliance requirements into operational processes, including through fostering regulatory capability and enhancing our environmental management plans
- implementing improvements in rehabilitation and disturbance monitoring activities
- improving identification of hazards associated with environmental, regulatory and reputational risk.

Compliance

Zero

environmental enforcement actions[1]

We aim to deliver strong performance in compliance with environmental legislation and regulations, and have strategic targets in relation to environmental enforcements linked to executives' remuneration incentive opportunity.

Pleasingly, in FY23 we received no Environmental Enforcement Actions, compared with four in FY22. This demonstrates the benefit of our sustained efforts to strengthen leadership and capability in environmental management.

Where non-compliances occur, we always seek to work cooperatively with relevant regulators and take steps to address all controllable factors that contributed to the non-compliance.

1. Environmental Enforcement Actions include penalty infringement notices, enforceable undertakings, suspensions, prevention notices and prosecutions.

Water stewardship

Water is an essential input for our operations, with water used to wash coal in our Coal Handling and Preparation Plants (CHPPs) and for dust suppression during mining and hauling.

We share water resources with adjoining landholders, farmers, businesses and residents.

In FY23, the Gunnedah region continued to experience above average rainfall, including a flooding event in the Namoi River and its tributaries after the wettest August to September period on record the prior year. This was reflected in the significantly elevated level of mine water run-off captured at our operations.

The flooding caused access issues to some of our operations, however the mine sites' water management infrastructure was able to manage inventories to mitigate the impact to operations, and there were no water-related non-compliances.

Water strategy and management plans

We recognise our responsibility to have effective protocols in place to manage water risks. To achieve responsible water management, we have a water strategy in place that applies to all our operating mine sites. The Group Manager Water and Property is responsible for implementing the strategy.

Each of our operating mines has a Water Management Plan that is approved by the regulator and sets approval conditions related to water quality management and monitoring.

We do not operate any mines in areas with high or extremely high baseline water stress as defined by the World Resources Institute.

FY23 activities

This year saw significant improvements in our water management systems, including:

- decommissioning of dams and the re-establishment of a natural drainage line at Maules Creek in accordance with an enforceable undertaking
- the installation of evaporation fans at Narrabri and Tarrawonga to manage excess water accumulated from a period of record rainfall, and
- construction of a new 400 ML brine dam at Narrabri.

During periods of high rainfall, we employ initiatives that minimise operational impacts while maintaining compliant water management. The measures implemented during the year to manage excess water included increased use of dust suppression, irrigation, treatment to discharge and employment of mechanical evaporators.

While above-average rainfall over the past few years has shifted the focus from scarcity to surplus, we also continue to work on future-proofing our operations by using life-of-mine water balance models to forecast future water needs.

Water withdrawal and recycling

During the year, 9,569 megalitres (ML) of water was withdrawn of which 22% came from water allocation licences, with the remainder from surface water run-off.

We own 11,788 ML of water allocation licences, with allocations from groundwater (bore water and 'passive take') and the Namoi River.

During FY23, our operations used 2,096 ML under their water allocation licences. The majority of this use (71%) was covered by the licensing of 'passive take' into the mine workings, with the remainder from licensed extraction points (bores and river pumps). This represents around 18% of our total licensed water allocation.

A system of drains and dams collects clean water run-off from undisturbed areas and diverts water around mining operations into existing water courses. During FY23, Maules Creek diverted approximately 200 ML through its clean water management system in compliance with its environmental protection licence.

Rainfall run-off from disturbed areas of our mining operations is collected within open pits and onsite dams.

We look to recycle water where we can. The prime operational area for water recycling is the CHPPs, where about 70% of water is recycled. This equates to 35% of total water use.

Where possible, our water is also beneficially reused. The Werris Creek Mine has an 18-hectare pivot irrigation system used by a local farmer, with 56 ML used to irrigate crops in FY23.

When licensed water allocations are not used in our operations, we can and do trade these for irrigation purposes. About 2,800 ML was traded to local farmers.

Water use in North West NSW

In FY23, 253,247 ML of water from the lower Namoi River was allocated or made available to licensed water users in the region

2.1%
of available water was allocated to Whitehaven

1.7%
of available water was allocated to other water users

96.2%
of available water was allocated to irrigation
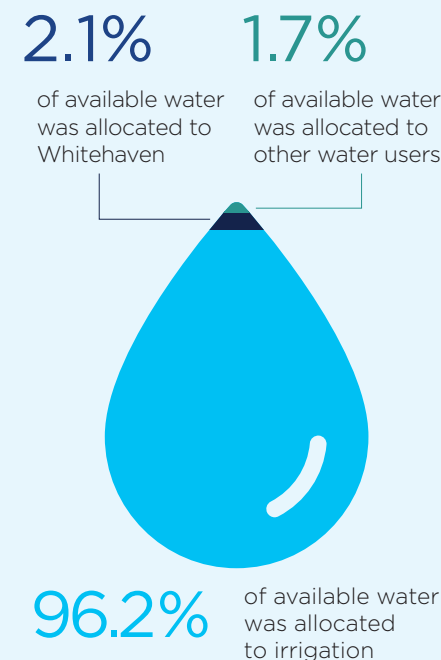
Whitehaven generated

$1.35 million
of revenue per megalitre of water used in FY23

This is a significantly greater economic return than other industries.

Land use and biodiversity

We are committed to being responsible stewards of the natural environment and maintaining strong land management and biodiversity practices through all stages of our operations life cycle.

6,822 ha

of cumulative revegetation completed over the past six years across land managed for biodiversity

8:1

ratio of land managed for biodiversity compared with land disturbed for mining operations

We aim to ensure there is no net loss in biodiversity values through our operations. Where biodiversity impacts cannot be avoided or mitigated, we offset these residual impacts with biodiversity-managed areas such as biodiversity stewardship sites and those under conservation agreements as offsets.

We select and incorporate offset areas into our biodiversity estate based on advice from independent subject matter experts. These areas are approved by the NSW and Australian governments. Approved offsets ensure that like-for-like or better biodiversity values are maintained and conserved into the future.

Whitehaven's Biodiversity Standard sets our minimum requirements and expectations in relation to biodiversity management, including to meet regulatory requirements.

Biodiversity management plans are in place at each of our operations and consider key risks to threatened, endangered and/or critically endangered species and communities that are known to occur within offset areas. Approved Whitehaven offset areas are secured in perpetuity, protecting and enhancing biodiversity values, including threatened ecological communities and species.

We implement feral animal management, fire management, weed management and revegetation programs throughout our biodiversity-managed areas. To monitor our progress and ensure survival rates from tree planting activities is as high as possible, we collect biodiversity management metrics from our fencing, pest animal and weed control activities, and assess survey data from our flora and fauna monitoring programs.

Over the past six years, we have provided $1.5 million in funding to the Australian National University, the NSW Department of Planning and Environment, and BirdLife Australia to undertake research and share information on the Regent Honeyeater, Swift Parrot and South-eastern Long-eared Bat. This funding is part of the federal conditions of approval for the Maules Creek Mine.

## Showcasing the benefits of our revegetation efforts

In June 2023, Whitehaven's Biodiversity team hosted members of the NSW Biodiversity Conservation Trust, including CEO Dr Erin Giuliani for a tour of the areas we have under Conservation Agreements for Offsets connected to our mine sites, These areas total more than 20,000 hectares.

This was an opportunity for members of the trust to observe and understand how we are managing areas that are subject to ecological restoration and conservation management.

In particular, our team showcased the landscape connectivity being achieved with surrounding remnant vegetation and NSW reserves, and the benefits of land conservation practices such as fire management and ecological burns, habitat augmentation of nest boxes, vertebrate pest animal control and weed management.

Land use

We aim to contribute to a diverse local economy by putting to productive use the land owned by Whitehaven but not required for our mining operations or managed for biodiversity. To that end, 48% of Whitehaven's land, equivalent to 41,250 hectares, is leased to local farmers for agricultural activities such as grazing and cropping.

86,433 ha
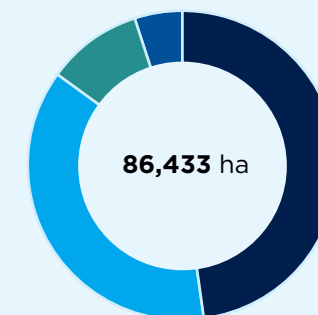
48% leased for **agriculture**

37% managed for **biodiversity**

10% associated with operations but **not disturbed for mining**

5% involved in **mining** activities

Rehabilitation and mine closure

Rehabilitation is an integral part of the life cycle of a mine and, as temporary custodians of the land, we take our responsibility to rehabilitate the land seriously.

41%
of land disturbed for mining has been rehabilitated to date

107 ha
of land previously used for mining activities was rehabilitated in FY23

Our rehabilitation plans form part of the approval process for mining and are undertaken in accordance with those commitments, and Whitehaven's rehabilitation standard which outlines our minimum requirements for rehabilitation and closure planning.

Rehabilitation takes place progressively throughout the life of a mine and well after it has closed. The objective is to ensure the resulting final landform is safe, stable and non-polluting, and reflects the surrounding landscape, or improves on it – such as enhancing the cover and connectivity of native woodland.

We consider the views of the local community and stakeholders in developing our rehabilitation strategy and in closure planning, and our rehabilitation activity is carried out in consultation with the traditional custodians of the land, the Gomeroi people of North West NSW. Closure plans are regularly reviewed and updated.

We strive to continuously improve our rehabilitation methods, including by adopting innovative technologies. For example, at the Maules Creek Mine the quality of rehabilitation is monitored using a method developed by CSIRO, which provides indicators of rehabilitation success and assessment of ecosystem sustainability.

Progressive rehabilitation at Maules Creek

At the Maules Creek Mine, we have to date rehabilitated 16% of the land disturbed from mining activities. Progressive rehabilitation at the site aims to minimise any adverse impacts on the potential habitat of local species such as the Regent Honeyeater, Swift Parrot and Greater Long-eared Bat and minimises areas exposed to dust generation.

Rehabilitation will see the site ultimately become a native forest and woodland of more than 1,600 hectares. To date, approximately 275 hectares have been seeded to achieve a Box Gum woodland mix and tube stock seedlings have been planted over a 125-hectare section of the rehabilitation area.

The vast majority of the site will use geomorphic design – a best-practice landscape design process that encompasses a landscape's natural features to move water through the rehabilitation area and produce more natural looking landforms.

Werris Creek rehabilitation and closure planning

Our Werris Creek Mine, which has been in operation since 2005, is expected to commence its closure phase by the end of FY24.

Rehabilitation at Werris Creek aims to re-establish an open Box Gum woodland landscape that is safe, stable, non-polluting and sympathetic to the surrounding landforms. As at 30 June 2023, 235 hectares of the 584 hectares of land disturbed by mining had been rehabilitated.

The rehabilitation of the mine also forms part of the broader strategy to improve local biodiversity outcomes by integrating the rehabilitated mine landforms and vegetation types with our vegetation conservation and improvement activities. Revegetation will provide a combination of sustainable grazing, woodland vegetation and habitat corridors.

The post-mining land use has been determined through consultation and agreement with landowners and relevant stakeholders. To that end, Whitehaven has commenced engagement with potential future land holders, with a view to set up a new local industry.

Waste and recycling

We aim to minimise waste generated by our operations, maximise re-use and recycling opportunities, and ensure waste is managed appropriately.

9.3 kt

non-mineral waste generated

60%

non-mineral waste recycled

100%

hazardous waste recycled

We investigate and implement feasible opportunities to minimise the waste generated at each of our sites, and track and report on waste.

Each of our operated assets manage waste to meet site-specific waste management plans, Whitehaven's waste management standard and state and federal environmental regulatory requirements. We segregate, store, transport and dispose of waste to mitigate the risk of adverse impacts on the environment.

Our mine sites generate various types of waste during exploration, construction, operation and closure activities.

Mineral waste

The majority of our mineral waste includes overburden and interburden, which consists of waste rock and materials overlying the coal seams. Other types of mineral waste are drill cuttings and coal-rejects resulting from washing coal such as coal fines, soil, sand and rock.

Whitehaven generated 203 million tonnes of waste rock and 3.2 million tonnes of tailings during the year.

Overburden is used to backfill open cut pits onsite where possible. We also look for opportunities to re-use mineral waste for construction purposes such as haul roads and hardstand areas.

Coal-rejects (tailings) are co-disposed of within overburden emplacements at each relevant mine site. The waste emplacements are appropriately designed by internal and third-party subject matter experts and managed to be safe, stable and non-polluting, and are progressively shaped by dozers to enable land rehabilitation. We do not operate any facilities that meet the definition of a tailings storage facility under the Global Industry Standard on Tailings Management.

While mineral waste is typically non-hazardous, we undertake geochemical tests to determine if it presents any risks as a source of pollution. Where such risks are identified, mineral waste is monitored and managed as required under our approvals to ensure appropriate encapsulation and non-polluting outcomes are achieved.

Non-mineral waste

Our mines' non-mineral waste streams include non-putrescible and putrescible general waste, sewage and effluent, hazardous waste (such as waste hydrocarbons), industrial waste (such as waste tyres), construction and demolition waste, and used mining equipment.

Hazardous waste is classified, managed and disposed of in accordance with relevant Australian Standards and regulatory requirements and are periodically removed from our operations by licensed contractors. The primary type of hazardous waste generated by our operations are waste oils, all of which are recycled.

Licensed contractors collect and process recyclable materials and dispose of non-recyclable waste at municipal waste disposal facilities.

Waste generated (kt)

	Non-hazardous waste	Hazardous waste	Total
FY22[1]	7.7	1.8	9.4
FY23	6.6	2.7	9.3

● Non-hazardous waste
● Hazardous waste

1. FY22 reported data restated.

Air quality

We aim to minimise our impact on air quality, and understand air quality is an important issue to the local communities around our operations.

Air emissions may occur at our operations through the generation of dust and particulate matter from activities such as drilling, blasting, excavating and the use of vehicles.

To limit air quality disturbances and minimise the generation of dust, we have a range of measures, including implementing procedural controls and using real-time air quality and meteorology monitoring systems.

We implement dust suppression measures such as by using:

- water carts on mine roads
- dust suppressants on mine roads and stockpiles
- sprays on stockpiles
- dust suppression on drills
- water suppression on overburden dumps prior to active use.

In adverse weather conditions, such as strong winds or dust storms, we modify our onsite activities to minimise the generation of dust. We also progressively rehabilitate mined land to minimise exposure to dust generation.

All our operational sites monitor air quality in real time. These systems set trigger levels for air quality – below approved criteria – to allow us to respond in advance and to ensure criteria levels are not exceeded. We implement approved protocols in response to visual and monitored dust levels.

During FY23, there were no exceedances of regulatory air quality criteria associated with our operations.

Compliance monitoring data is publicly available on Whitehaven's and NSW Environment Protection Authority's websites. We also report on air quality via our Community Consultative Committees and mine site annual reviews.

Noise

We manage our noise impacts to comply with NSW Government requirements through Noise Management Plans for each operating site.

These aim to ensure our operations do not exceed approved limits at any residence on privately owned land, or in agreements negotiated between Whitehaven and relevant landholders.

Our plans operate to minimise our noise impacts through a range of measures, including using:

- predictive meteorological systems to plan our operations
- real-time monitoring, allowing us to adopt our activities
- sound attenuation on mining mobile equipment and infrastructure.

Supporting our communities

- Community contribution
- Community engagement
- Empowering Aboriginal and Torres Strait Islander people
- Community investment

Community contribution

~75% of workforce based in local communities surrounding our operations	**$266m** paid in salaries and wages
$357m spent with regional suppliers[1]	**$14.4m** spent with 16 Indigenous businesses
$4.35m in corporate community partnerships and donations	**$1.65b** paid or payable to federal, state and local governments in taxes and royalties relating to FY23, which benefits our local communities directly and indirectly

We believe our local communities should be the main beneficiary of our presence.

We are focused on promoting local prosperity, building local community capacity and ensuring our regional towns thrive, so the benefits of our presence go beyond our workforce and beyond the life of any single asset. Our compact is to leave a positive economic and social legacy that outlives our mining operations, and delivers ongoing benefits in the areas of education, skills and infrastructure.

We support our local communities through:

- job creation, and hiring local people wherever possible
- partnerships with local suppliers to provide them with new opportunities, including to build economic capacity
- direct investment in local people and organisations
- our work with local community groups.

The employment, development and procurement opportunities we provide mean that, alongside other industries such as agriculture, our presence builds a more diversified and skilled economy.

We are equally committed to responsible environmental stewardship, and we engage proactively with the community on our activities and intentions.

Our community and social compact

Identify, develop and operate high-quality, long-life, lower-cost coal projects	Promote local economic growth and sustainability through permanent job creation and local procurement	Help build local community capacity and viability through direct and indirect intergenerational investment in education, health, skills and infrastructure	Instill community trust through responsible environmental stewardship and community partnerships	Leave an economic and social legacy that outlives mining operations

1. Includes suppliers across North West NSW and Central Queensland.

Community engagement

We seek open, meaningful and respectful engagement with our community stakeholders and work to build positive long-term relationships.

Community stakeholders include our neighbours, local Aboriginal communities, community groups and local residents, businesses, and council and government representatives.

Our approach to community engagement is modelled on the best-practice International Association for Public Participation framework. We engage with communities to provide updates on our activities and intentions, address grievances and complaints, and consult on planning applications and modifications.

We conduct regular stakeholder engagement activities, including through one-on-one meetings, consultation groups, Community Consultative Committee meetings, and mines tours, and aim to have a presence at community events. We regularly provide operational and development updates to local councils and business chambers, and through other local forums and continue to work to improve community understanding of our operations.

Community Consultative Committee meetings are held for each of our mine sites and the minutes are published on our website.

The outcomes of environmental monitoring, assessments and audits are also available on this platform. Other channels of communication include newsletters and factsheets. In FY23, we continued to improve the frequency and transparency of communication via our community newsletter.

Members of the public are invited to seek information or provide feedback online, by phone, or in person at our Gunnedah community shopfront, which is open Monday to Friday.

We seek to address all concerns, complaints and grievances we receive through our community engagement channels, and make improvements where possible. Complaint and grievance mechanisms are in place across each of our operating assets. In FY23, we received eight complaints across our assets, compared with 28 in FY22. These complaints largely focused on operational impacts such as noise, vibration and lighting. A Community Complaints Register for each of our assets can be found on our website.

Sharing information about developments and modifications is an important part of our community engagement process. In FY23, we continued to engage with a range of stakeholders on:

- our intention to seek approval for the continuation of the Maules Creek Mine which will support the continuation of operations to approximately 2043
- an application to modify the closure and rehabilitation plan for our Werris Creek Mine, to provide better long-term environmental outcomes
- an application to seek approval to extend the haulage hours from Tarrawonga Mine to the Gunnedah CHPP
- the Winchester South development, which is progressing through the Queensland Government's approval process.

Whitehaven Community Open Day

Whitehaven opened its doors to the community by hosting an open day in April 2023. The open day, held at the Boggabri Showground showcased our technical and operational teams and heavy mining equipment, and featured a variety of fun activities.

To facilitate a deeper understanding of our operations, we ran a series of bus tours to the Maules Creek Mine throughout the day. The guided site tours provided valuable insight into our day-to-day coal mining operations and provided the local community with the opportunity to engage with our teams.

Community engagement continued

Listening to our communities

Whitehaven conducts independent community research to understand community views of our sector, the business and our communications and engagement activities approximately every 18 months. This research helps us understand what is working well and what needs to be improved so that we can adapt our plans. It was central to informing our Stakeholder Engagement and Community Investment Strategy 2021-23.

The latest survey, completed in 2023, indicated a clear trend of improved sentiment towards Whitehaven both since 2014 and our previous survey in 2022.

The proportion of survey participants who hold a positive view of the company increased to 51%, from 44% in 2022 and 42% in 2014. Only 18% have a negative opinion, compared with 21% last year and 35% in 2014. These positive results reflect our efforts in the local communities to improve community understanding of our operations and increase awareness of our community investment initiatives.

More than 75% of people polled believe that mining jobs are essential for the local economy, and nearly 60% believe coal mining will be important to the local economy for at least the next 20 years compared with 50% last year.

During FY23, we continued to build on our response to local communities' feedback on wanting to know more about our environmental strategies, current and future plans, commitment to local employment and community investment.

We provide this information through a variety of communication channels, including our annual and quarterly reports; open days and site tours; Community Consultative Committees; social media channels, such as Facebook and LinkedIn; the print media; our website; and fact sheets.

Local community sentiment toward Whitehaven

Legend:
- — Positive sentiment
- — Negative sentiment
- — NET sentiment
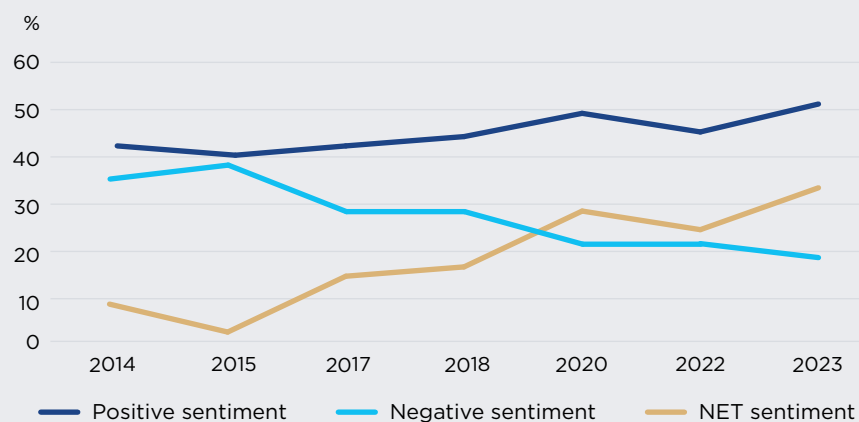
Source: Independent quantitative research conducted by SEC Newgate Research. Base: All participants who are aware of Whitehaven: 2023 (n=590), Tamworth (n=142), Gunnedah (n=150), Narrabri (n=151), Liverpool Plains (n=147). 2022 (n=575), 2020 (n=561), 2018 (n=568), 2017 (n=565). 2015 (n=574), 2014 (n=569).

Whitehaven in conjunction with the Dorothea Mackellar Memorial Society, hosted the Kurrumbede Open Day at the State Heritage Register listed Kurrumbede Complex.

READ MORE >

Empowering Aboriginal and Torres Strait Islander people

Our operations in North West NSW take place on Gomeroi Country, also known as Kamilaroi, Gamilaroi and Gamilaraay. Our proposed Winchester South Project in Queensland's Bowen Basin is located on Barada Barna Country.

We adopt a holistic approach to help empower local Aboriginal and Torres Strait Islander communities

Employment

10.5%

of workforce identify as Aboriginal and/or Torres Strait Islander people

Procurement

$14.4m

spent with 16 Aboriginal and Torres Strait Islander suppliers, up 65% from FY22

Community programs

$183,000

donated to Aboriginal and Torres Strait Islander organisations, including through our long-term partnership with the Clontarf Foundation focused on education and training

Cultural awareness

All new employees and contractors completed our e-learning Cultural Awareness Training

34

on Country cultural awareness training participants

We acknowledge Aboriginal and Torres Strait Islander peoples as the First People of Australia. We recognise the Gomeroi People of North West NSW and the Barada Barna People of Central Queensland as the Traditional Owners of the land on which we operate, and acknowledge their role as custodians of the land and water.

We also recognise the challenges many Aboriginal and Torres Strait Islander communities face, and support First Nations people and organisations in areas where we can make a substantial and sustainable difference to create a stronger future together.

In partnership with Aboriginal and Torres Strait Islander peoples, we work to improve employment and career progression opportunities for First Nations people in our operations, and promote and support Aboriginal and Torres Strait Islander businesses through our Indigenous Procurement Strategy. Through our community investment and support program, we also invest in developing skills of local First Nations people to shape positive futures.

Reconciliation Action Plan

Our current *Reconciliation Action Plan* (RAP) *September 2021 – September 2024* is our third overall and second Stretch RAP and seeks to embed and strengthen our existing reconciliation activities and make them 'business as usual'. The current Stretch RAP outlines our commitments and deliverables to improve and increase our activities to promote reconciliation, including through mutual respect and understanding.

Our RAP working group, chaired by our Managing Director and CEO, is responsible for implementing our RAP and developing future RAPs.

Our reconciliation efforts are underpinned by input from our Board, management team and employees; members of the local community; and Local Aboriginal Land Councils within our areas of operation and their peak representative bodies, such as the NSW Aboriginal Land Council, elected representatives, business leaders, Reconciliation Australia and other stakeholders.

Our vision for reconciliation

Whitehaven's vision for reconciliation is to ensure Aboriginal and Torres Strait Islander peoples stay connected to Country, community and culture by obtaining economic independence through long-term and rewarding careers in our mining operations.

Overview   People   Climate   Environment   **Communities**   Conduct   Data

Empowering Aboriginal and Torres Strait Islander people continued

Promoting employment opportunities

As the largest private sector employer in the Gunnedah Basin, we have a unique opportunity to meaningfully contribute to our vision for reconciliation by providing stable, rewarding and long-term employment. Since we launched our first RAP in 2015, the proportion of our workforce that identify as Aboriginal and/or Torres Strait Islander people has increased from 8% to 10.5% in FY23. Read more at 'Diversity and inclusion'.

Procurement

Through our targeted procurement program, in FY23 we spent $14.4 million with 16 Aboriginal and Torres Strait Islander businesses. This is an increase of 65% from the prior year and reflects our team's sustained efforts in targeted engagement with local businesses.

We also connect local Aboriginal and Torres Strait Islander–owned businesses to other organisations that support business establishment and development, and that offer advice on how to supply the mining industry.

Community sponsorships and donations

We continue to invest in programs that support and empower communities through partnerships across education and training, healthcare, and sponsorship of representative-level sport. In FY23, we donated about $183,000 to Aboriginal and Torres Strait Islander organisations, including the Clontarf Foundation.

Supporting Indigenous businesses and employment

As part of our commitment to Indigenous procurement, we host an annual procurement workshop aimed at developing and growing local Indigenous businesses.

SJT Concreting & Civil (SJT), a small, family-run Indigenous-owned business was invited to participate in our most recent workshop in December 2022.

The learnings from the workshop enabled the business to win concreting work at our Narrabri Mine. The small crew at SJT poured a concrete foundation for a workshop, dozer washdown and coal reject pit at the mine in early 2023.

SJT had commenced operations only two years before and had experience in pouring foundations for medium scale residential developments. The mining industry was a new proposition. The Narrabri concreting project gave its team new insights into more complex work, and an appreciation of the mining industry's stringent regulations and safety requirements.

Improving socio-economic outcomes

We are a National Partner of the Clontarf Foundation, which seeks to improve the education, discipline, life skills, self-esteem and employment outcomes of young Aboriginal and Torres Strait Islander men, and support their transition from school into further study or employment.

We continue to support the Clontarf Academies at Narrabri, Tamworth and Quirindi High Schools, with Clontarf now established at Gunnedah High School.

Whitehaven Coal Sustainability Report 2023 | 45

Empowering Aboriginal and Torres Strait Islander people continued

Protecting cultural heritage

Our engagement with First Nations people is built around the principles of respect, unity and historical acceptance, and a belief that mining should empower and support their rights to pursue cultural and socio-economic fulfilment.

Management practices informed by respect for culture and knowledge support recognition of culturally significant heritage and responsible minerals development.

In NSW, the government's Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 looks to ensure that free, prior and informed consent of Aboriginal and Torres Strait Islander people is achieved. We support efforts to develop aligned requirements at a national level.

We conduct a range of activities to preserve and manage culturally significant sites, including performing due diligence assessments prior to disturbance to land and annual inspections of previously identified sites of cultural significance.

Agreements with First Nations peoples

We have two Native Title Agreements in place:

- the Narrabri Underground Native Title Agreement, and
- the Maules Creek Native Title Agreement.

We also have a Cultural Heritage Management Agreement with the Barada Barna people, the Traditional Owners of the land in Central Queensland where the Winchester South Project is located.

> We have no reserves near Indigenous land, based on the definition of 'Aboriginal community' from the Australian Bureau of Statistics adopted by Whitehaven.

Increasing knowledge and understanding through cultural learning

We strive to foster an inclusive workplace where our workforce understands and respects the importance of Aboriginal and Torres Strait Islander people's connection to the land. One way we do this is through cultural awareness induction training and periodic on-Country cultural immersion for senior leaders.

This approach to cultural awareness recognises the importance of knowledge of sites, places and objects that are significant to the stories of First Nations people.

Building strong cultural understanding

In May 2023, members of the Board and Executive Leadership Team and leaders from across the business gathered in the Piliga Nature Reserve and the Timallallie National Park for a Cultural Awareness Training Day to learn more about Gomeroi Country and culture.

Starting with a smoking ceremony, respected local Elders took the Whitehaven team on a guided tour of the Sandstone Caves and Sculptures in the Scrub. Our team was also joined by local Clontarf Academy staff and students, providing an opportunity to build and strengthen relationships and share experiences. A traditional song and dance performance by a young Aboriginal group was followed by a lunch and learn.

This cultural immersion experience provided a holistic opportunity for our senior leaders to learn about the history of Aboriginal people in the Gomeroi area and a range of traditional, historical and contemporary cultural practices.

Community investment

Through our community investment, we seek to deliver tangible and broad benefits to our local and regional communities across health, education, and economic and environmental sustainability.

$4.35m
contributed to community causes and projects in FY23
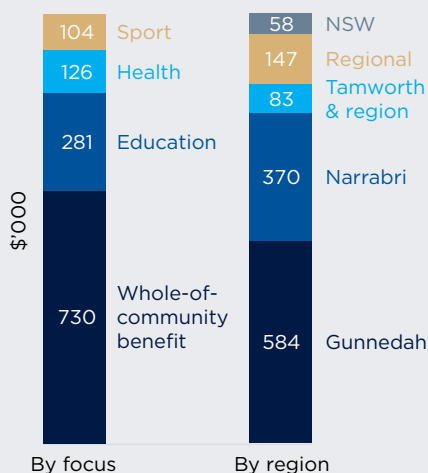
$4.18m cash
$0.17m in kind

$2.0m
to Koala Sanctuary

$1.11m
in local emergency flood support

$1.24m
in other donations and sponsorships:

By focus
- 104 Sport
- 126 Health
- 281 Education
- 730 Whole-of-community benefit

By region
- 58 NSW
- 147 Regional
- 83 Tamworth & region
- 370 Narrabri
- 584 Gunnedah

$'000

Our approach to community investment is focused on making a lasting impact by building long-term capacity and resilience as well as helping communities in areas of immediate need or concern. We do this by supporting a range of not-for-profit organisations and charities.

We aim to focus our resources where we can have the greatest impact. Our community investment contributions are balanced across:

- long-term community partnerships
- donations and sponsorships administered by a community-based committee
- land and environmental trusts
- emergency relief or assistance in times of need, within or outside our local communities.

In addition to our community investment, we also support the community via voluntary planning arrangements.

Our community investment initiatives aimed at empowering Aboriginal and Torres Strait Islander peoples are integrated with our RAP priorities, and aim to reduce disadvantage and create strong families and futures for First Nations people in our local communities (see page 45).

In FY23, our key community partners included:

- **Clontarf Foundation** – as long-time national partner, we support Clontarf academies, which harness the power of sport to support school retention and improve Year 12 graduation rates among Aboriginal and Torres Strait Islander boys. They also support the boys' transition from school into further study or employment.

- **Westpac Rescue Helicopter Service** – Whitehaven matches employee donations to this vital community service dollar for dollar, and has supported the organisation since 2009.

- **Little Wings** – This new partnership launched in June 2023 will help bring the Medical Wings program to North West NSW. The program will deliver around 16 free pop-up medical clinics that will provide vulnerable children and their families with access to specialist health care.

In addition to community partnerships, we support local charities and community organisations through our $200,000 annual donation and sponsorship program. The program is overseen by a Community Investment Committee that includes an Indigenous representative, one general community representative and one representative each from the Narrabri, Gunnedah and Liverpool Plains local government areas. The committee meets four times a year to review and determine applications for donations and sponsorships, with $50,000 available per round.

Contributing to conservation through a $2 million investment in Gunnedah's new Koala Sanctuary

Whitehaven has made a significant financial contribution to the establishment of a new world-class Koala Sanctuary in Gunnedah, which commenced construction in late 2022. The sanctuary will create a new hub of wildlife conservation in North West NSW, attract visitors to the region and create a positive environmental and economic impact for years to come.

The sanctuary will reinforce Gunnedah Shire's position as the 'Koala Capital of the World' with the development featuring a range of wildlife and tourist attractions – all focussed on the awareness, education and preservation of koalas, now recognised as an endangered species.

Responsible business

- Ethical business conduct
- Regulation and policy
- Responsible supply chain
- Cybersecurity and privacy
- Tax transparency

Ethical business conduct

We are committed to operating ethically and with integrity. Responsible business conduct and practices are central to how we operate, and are embedded in our operations.

Our STRIVE Values of Safety, Teamwork, Respect, Integrity, Value and Excellence set the foundation for how we work and the behaviours we expect of our people in interactions internally and with external stakeholders.

Our Code of Conduct defines the standards of behaviour we expect from all our employees and people working for, or on behalf of, Whitehaven – this includes our contractors, consultants and directors. The code guides how we act and work – with honesty, integrity and fairness, and treating others with respect and dignity. All employees sign up to our Code of Conduct.

A comprehensive range of policies guide our people in how to apply the Values. These include 'Speak Up', workplace behaviour, anti-corruption, and health, diversity and inclusion, and safety and environment policies, among others. We clearly communicate our policy framework via our induction training.

We maintain and implement appropriate measures to prevent bribery and corruption. Our Anti-Corruption Policy establishes our standard of behaviour of integrity, honesty and transparency, which applies to anyone representing Whitehaven. Whitehaven's Company Secretary is responsible for implementing the policy and reviewing its effectiveness.

We take breaches of our code and policies seriously, and this may result in action being taken, up to and including termination of employment or engagement.

Speak Up

Our Speak Up Policy encourages anyone to speak up with information about potential misconduct and to report that information. This includes any improper state of affairs or circumstances in relation to the Company. The policy outlines how to report concerns relating to business conduct, the processes we follow to respond to reports, and the protections a reporter receives.

In addition to internal reporting channels, our independent whistleblower hotline, operated by Navex Global, gives individuals the opportunity to anonymously report potential misconduct. All reports made are received and treated sensitively and seriously, and are dealt with promptly, fairly and objectively.

Board oversight and conduct

The Board, with the assistance of the Audit and Risk Management Committee, is responsible for internal compliance and control frameworks and reviews. It also oversees over our codes of ethics and conduct, and legal and regulatory compliance.

A Code of Ethics and Values applies to Board members and requires them to act with the utmost integrity and carry out their duties with the highest possible ethical standards. This means complying with the spirit and principles of this code as well as the law.

Regulation and policy

We participate in policy development and advocacy to seek consistent and balanced policy settings that support a globally competitive and sustainable mining sector.

We engage in discussions with elected and non-elected representatives at all levels of government, and respond to government public policy consultations that are relevant to our business and industry. Participation in government consultations may also occur through our industry association representatives.

Key policy development consultations on which we actively engaged with government during FY23, and in early FY24, included the:

- NSW coal reservation scheme
- Federal Government's reformed Safeguard Mechanism
- NSW review of coal royalty rates.

Memberships and industry associations

We are an active member of numerous industry associations and bodies, including business chambers and councils that are relevant to the communities in which we operate.

Industry associations play an important role in advocating on public policy positions and matters that affect our sector and in helping Australia's minerals sector sustainably deliver benefits to our communities and the economy.

We also participate in industry associations to contribute to the development of industry standards and regulations, advance best practice, and share technical knowledge and new ideas.

There can be differences of views on some matters across members which is an inevitable part of any member-based organisation, and we always seek to work constructively to progress areas of common ground and achieve consensus outcomes.

Whitehaven's key memberships of industry associations and bodies are included on the Sustainability page of our website.

Political contributions

In line with our Political Contributions Policy, we may make political donations that are approved by Whitehaven's Managing Director and that comply with applicable legislation. In FY23, we made zero disclosable political donations.
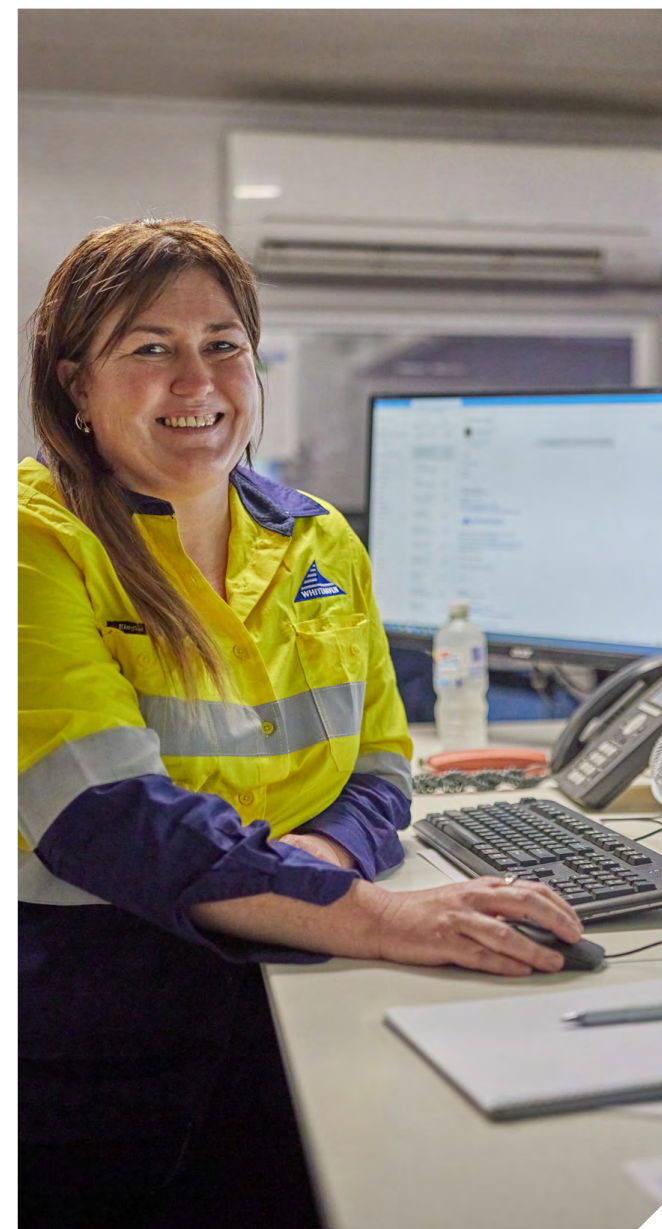
Responsible supply chain

Our approach to sustainability practices in our supply chain aligns with our approach to responsible conduct, social priorities and STRIVE Values.

We expect all our suppliers and contractors to share our commitment to ethical conduct and integrity. All contracted and on-site suppliers are required to comply with our Code of Conduct, policies and procedures. This includes meeting all Whitehaven's health, safety and environment policies and procedures.

We procure goods and services from suppliers through various types of arrangements, which range from short- and long-term procurement agreements managed by our centralised Procurement function, to purchase order terms and conditions for low-value purchases that are managed by our operations.

When selecting new suppliers and contractors, our processes include assessing sustainability criteria, which includes safety and environmental performance, modern slavery and Indigenous employment.

Our social priorities include a proactive approach to promoting Indigenous procurement, which is underpinned by our Indigenous Procurement policy and RAP commitments. We also actively work with key contractor partners to promote Aboriginal and Torres Strait Islander contractors in our workforce.

We support Australian small businesses by offering 21-day payment terms to our small and medium-sized local suppliers in the areas around our operations, and report in compliance with the Payment Times Reporting Scheme.

Modern slavery risk

We are committed to protecting internationally recognised human rights as embodied by our Values, Code of Conduct and policies, and expect our suppliers to work in a way that is consistent with our approach.

We seek to prevent modern slavery practices in our supply chain and continue to develop and strengthen our approach to assess and manage this risk. As reported in our Modern Slavery Statement 2022, in FY22 we completed a comprehensive modern slavery risk assessment of our top 250 direct suppliers which accounted for about 96% of total procurement spend and undertook due diligence on selected suppliers.

In FY23, we completed due diligence on our key third-party labour hire providers through a comprehensive self-assessment questionnaire. In all cases, we found no evidence of modern slavery practices in our supply chain. Our Modern Slavery Statement 2023 will be published in late 2023.

Cybersecurity and privacy

Avoiding cybersecurity incidents and maintaining the security of our information and confidential data is a high priority and important to protect our business, customers and other stakeholders.

Whitehaven's Chief Information Officer is responsible for managing risks related to cybersecurity and the protection of our data, and for developing and implementing continuous improvement plans and controls to manage this risk. This was a newly created role in FY23 to strengthen our in-house information technology capabilities.

The Board Audit and Risk Management Committee oversees, monitors and reviews cybersecurity and information loss risks and the adequacy of controls.

We undertake continuous improvements to strengthen our security and responsiveness to changes in the threat landscape that could potentially impact our technical infrastructure and data security. Our approach aligns to best practises and recognised frameworks, including the National Institute of Standards and Technology (NIST), ISO 27001 and the Australian Cyber Security Centre's 'Essential Eight'.

In FY23, we conducted an assessment of our cybersecurity approach against NIST and identified some areas for improvement. As a result, in FY24 we intend to expand our cyber capabilities and commence a number of improvement initiatives starting with an external operational technology audit.

Third-party cybersecurity specialists continuously monitor the security of our system, conduct regular penetration testing and assess security controls. Cyber response plans are also simulated and integrated into our Crisis Management response teams.

Tax transparency

Whitehaven strives to maintain open, honest, transparent, and cooperative relationships with all taxation authorities.

Whitehaven is listed on the ASX and has mining operations located only in Australia. We have no foreign subsidiary companies, which means transfer pricing is not a tax issue for the Group. We pay various taxes to federal, state and local governments, and collect various tax payments on behalf of the federal and state governments.

Tax governance and approach

We adopt a conservative approach in relation to tax. Our culture of compliance and transparency is apparent in our policies, strategies, resources, procedures and controls, and in our constructive relationships with tax authorities including the Australian Taxation Office (ATO), state revenue offices and local governments.

There is comprehensive Board oversight of tax via the Audit and Risk Management Committee. A tax governance and tax risk management framework sets out the management and resourcing of our tax functions across the business in respect of all taxes payable and collected.

The framework has been prepared referencing the ATO's public guidance, which seeks higher levels of tax transparency, governance and accountability across all taxes for Australian taxpayers, and formalises and captures our prudent approach to taxation matters.

We maintain management systems and resources to:

- actively monitor, identify and manage tax risk
- comply with Australian taxation laws and reporting standards
- lodge all taxation returns and documentation on time
- collect and pay the calculated amounts of federal, state and local taxes, royalties, levies, duties, rates and imposts when they fall due
- maintain, with each revenue authority, Whitehaven's standing as an organisation of integrity.

Taxes paid

In FY23, Whitehaven contributed $1.38 billion to federal, state, and local governments in the form of income tax, royalties, payroll tax, and council rates.

Corporate income tax was the largest component of taxes paid. The amount paid in FY23 includes the FY22 top-up of $552 million together with Pay As You Go (PAYG) instalments of $124.2 million paid in respect of FY23. A further instalment of $53 million was paid in late July 2023 and a top-up payment of over $800 million is estimated to be payable in early December 2023. The total liability in respect of FY23 is estimated to be over $1 billion.

Coal royalties to the NSW Government represent the second largest component of taxes paid. The royalties are ad valorem, calculated on gross sales less limited deductions. They are payable via monthly installments throughout the financial year, with a balancing payment made in July to reflect the final royalty liability for that financial year.

The key driver of the increase in taxes paid between FY22 and FY23 was an increase in the average realised coal price, which resulted in significantly higher income tax and royalty payments.

Taxes collected

The largest component of taxes we collect on behalf of the Australian Government is in respect of employees. This includes PAYG withholding tax from employees' salaries and wages. In FY23 the Group collected and remitted $74 million of PAYG to the Australian Government.

Taxes collected and paid by the Whitehaven Group and its JV partners in FY23 ($m)

Royalties	611.4
Corporate income tax	676.2
Payroll tax	13.5
Stamp duty	3.8
Employee payroll taxes (PAYG)	73.9
Fringe benefits tax	1.5
Other taxes	1.9
Total	**1,382.2**

All amounts are stated in 100% joint venture terms, excluding corporate income tax.

The total royalties and taxes paid or payable in relation to FY23 is $1.65 billion. Approximately $0.6 billion of taxes and royalties in relation to FY22 was paid during FY23, and approximately $0.9 billion of taxes and royalties in relation to FY23 will be paid in FY24.

Tax transparency continued

Income tax

The following information has been derived from the audited financial statements prepared for FY23 available on our website.

Effective income tax rate

The effective rate is the income tax expense for the income year divided by the accounting profit before tax, as set out below. Whitehaven's effective tax rate for FY23 is 29.8%, broadly equivalent to the Australian corporate tax rate.

Reconciliation of accounting profit to income tax expense ($m)	FY23[1]	FY22[1]
Statutory profit before tax	3,801.5	2,765.9
Income tax expense using the Company's domestic tax rate of 30%	(1,140.4)	(829.8)
Non-deductible expenses:		
Share-based payments	(3.6)	(2.8)
Other non-deductible expenses	(1.0)	(7.1)
Recognition of tax losses	–	21.8
On-market share purchases by employee share scheme trust reimbursed by the Group	12.0	3.9
Adjustments for tax of prior periods	(0.3)	0.0
Total income tax (expense)/benefit	(1,133.4)	(813.9)
Whitehaven's effective income tax rate		
Statutory profit before tax	3,801.5	2,765.9
Income tax (expense)/benefit	(1,133.4)	(813.9)
Effective tax rate (%)	29.8	29.4

1.   May not add due to rounding.

Data

- People
- Environment
- Emissions and energy
- Communities

People

Safety	FY23	FY22	FY21
Fatalities – employees	0	0	0
Fatalities – contractors	0	0	0
Total recordable injury frequency rate (TRIFR)	4.7	5.4	5.9
Near miss frequency rate	7.3	9.4[1]	
Hazards with potential to cause serious injury identified	622	336	
In-field safety interactions	>12,000		

Workforce profile	FY23	FY22	FY21
Employees	1,290	1,227	1,171
Contractors – full-time equivalent	1,457	1,229	1,363
Total workforce	2,747	2,456	2,534
Age of employees (%)			
< 30 years, male	12		
< 30 years, female	5		
30–39 years, male	25		
30–39 years, female	5		
40–49 years, male	23		
40–49 years, female	4		
50+ years, male	22		
50+ years, female	3		
Diversity and equity (%)			
Female employees	17.3	15.3	12.4
Females in leadership roles	14.1	10.6	0
New female hires	32.1	20.0	19.0
Females on the Board	57.1	33.3	28.6
Male to female base salary ratio	0.94		
Proportion of workforce identifying as Indigenous	10.5	11.8	9.1
Employee retention			
Employee turnover (%)	18.5	19.2[2]	22.0
Average length of service (years)	4.7		
Industrial relations			
Number of collective bargaining agreements	9	8	8
Employees covered by collective bargaining agreements (%)	56	62	65

1. FY22 data is restated to align with revised reporting methodology.
2. FY22 data is restated due to an error made in reporting.

Environment

Events resulting in enforcement action (number)	FY23	FY22	FY21
Enforcement action	0	2	1
Pending	0	2	1
Total[1]	**0**	**4**	**2**
Land use, rehabilitation and biodiversity (ha)			
Land owned in NSW and Qld	86,443	84,769	84,406
Land leased out in NSW and Qld	41,943	41,943	42,581
Land leased out for agriculture in NSW and Qld	41,250	41,250	42,158
Land involved in mining activities – cumulative	4,121	4,014	3,920
Land rehabilitated in financial year	107	228	267
Land rehabilitated – cumulative	1,676	1,569	1,341
Land managed for biodiversity	31,617	27,616	27,322
Trees planted on land managed for biodiversity	24,645	23,989	58,633
Area revegetated in land managed for biodiversity	382	423	898
Biodiversity credits retired towards approvals (credits)	370	1,318	
Waste (kt)			
Non-mineral waste generated	9.3	9.4[2]	
Non-mineral waste recycled	5.6	5.9	
Hazardous waste generated	2.7	1.8	
Hazardous waste recycled	2.7	1.7	
Tailings produced	3,194	3,430	
Waste rock generated	202,734	212,051[2]	
Air quality (t)			
SOx emissions	Not available until Dec-23	2.9	3.2
NOx emissions		4,684	5,055
Particulate matter (PM10)		12,356	12,523
Volatile organic compounds		345	369
Mercury		0.007	0.007

Water (ML)[3]	FY23	FY22	FY21
Water licence allocation			
Upper Namoi Alluvial	1,622	1,622	1,572
Gunnedah Oxley Basin	4,448	4,448	4,448
Great Artesian Basin - Southern Recharge	248	248	248
River water	5,440	5,440	5,440
Other	30	30	30
Total	**11,788**	**11,788**	**11,738**
River/bore water extraction			
Bore extraction	365	237	479
River extraction	248	736	541
Passive take (groundwater)	1,483	1,417	1,310
Total	**2,096**	**2,389**	**2,330**
Water used			
CHPP (Gross)	3,913	4,628	3,511
Dust suppression	2,294	1,929	2,648
Other	1,932	627	423
Total	**8,139**	**7,184**	**6,582**
Water withdrawal by source			
Groundwater	1,848	1,654	1,789
River water	248	736	541
Surface water (mine water runoff)	7,473	8,344	5,050
Total	**9,569**	**10,733**	**7,380**
Water exported for irrigation	56	55	60
Water recycled			
Water recycled	2,824	3,240	2,458
Water recycled / water used (%)	35	45	37
Water recycled / water withdrawn (%)	30	30	33

1. Environmental enforcement actions include penalty infringement notices, enforceable undertakings, suspensions, prevention notices and prosecutions.
2. FY22 data is restated due to an error made in reporting.
3. May not add due to rounding.

Emissions and energy

Emissions (kt CO_2-e)	FY23	FY22	FY21
Scope 1	1,172	910	816
Scope 2 (location-based)	93	102	105
Scope 1 by source			
Fugitive emissions	789	522	392
Diesel use	382	383	416
Other	1	5	8
Scope 1 by mine			
Narrabri	787	520	384
Maules Creek	258	266	305
Tarrawonga	73	67	65
Werris Creek	43	47	49
Other	11	10	13
Emissions intensity			
Scope 1 emissions intensity (t CO_2-e/ROM t)	0.064	0.046	0.040
ROM production (kt)	18,190	20,003	20,555
Energy			
Net energy consumed (terajoules)	6,019	6,108	6,610
Intensity – net energy consumed (GJ/ROM t)	0.332	0.305	0.322

Communities

Economic contribution ($m)	FY23	FY22	FY21
Total wages and salaries paid	266	233	210
Spend with regional suppliers	357	353	344
Spend with all suppliers	2,048	1,664	1,456
Spend with Indigenous-owned suppliers	14.4	8.7	5.2
Corporate community partnerships and donations	4.35	1.53	0.39
Voluntary planning agreements expenditure	4.54	0.86	0.71
Taxes and royalties paid	1,382[1]	461	189

1. Includes $0.6 billion in taxes and royalites paid in relation to FY22 and excludes $0.9 billion in taxes and royalties in relation to FY23 which will be paid in FY24.