Gold Fields Limited

Climate Change Report 2023

Creating **enduring value** beyond mining

Contents

Welcome to our Climate Change Report (CCR) for the year ended 31 December 2023

Send us your feedback

We value your feedback on our reporting suite. To support our efforts to report on the issues our stakeholders care about, please send any feedback and questions to **investors@goldfields.com** or **sustainability@goldfields.com**. You can also visit **www.goldfields.com** and download the feedback form.

Further reading available within this report

linkedin.com/company/gold-fields

@GoldFields_LTD

Further information available online

business.facebook.com/GoldFieldsLTD

instagram.com/goldfields_ltd/

About our cover

The cover photo of our 2023 CCR shows the Khanyisa solar plant at the South Deep mine in South Africa.

CREATING ENDURING VALUE BEYOND MINING

About this report

Welcome to our 2023 CCR. Gold Fields continuously strives to improve our climate change disclosure and in this report – which is based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) – we detail our progress toward the Group's climate change goals, including performance against targets. We also provide insight into the Group's climate change strategy and actions taken to mitigate environmental impacts.

This report includes interactive features for ease of navigation and forms part of the Gold Fields integrated annual reporting suite. Cross-references are made throughout to our Integrated Annual Report (IAR) as well as relevant information on the website.

Our full reporting suite is included in our 2023 IAR.

Reporting boundary and landscape

The reporting boundary is informed by the operational control consolidation approach, and includes the eight mines in Australia, South Africa, Ghana and Peru and excludes the non-managed Asanko joint venture (JV) mine (in which we sold our 45% stake in March 2024). The report further provides updates on the progress of the Salares Norte project in Chile and Windfall project in Canada, but does not include data from these projects. In preparing this CCR, we applied and considered the following frameworks, standards and principles:

- The CDP (Carbon Disclosure Project)
- SASB Metals and Mining Standard
- GRI Universal Standards
- JSE Sustainability and Climate Disclosure Guidance
- ICMM's Sustainable Development Framework and Mining Principles
- World Gold Council (WGC) Responsible Gold Mining Principles
- The IFRS International Sustainability Standards Board's (ISSB) climate-related disclosure standard, which includes the TCFD Recommendations

In addition, in March 2024, the Securities and Exchange Commission (SEC) adopted final rules that will require Gold Fields to disclose certain climate-related information in its annual reports on Form 20-F, including disclosure in relation to climate-related risks, targets and goals and Scope 1 and 2 greenhouse gas (GHG) emissions. Gold Fields is evaluating the rules, which the Company will be required to comply with on a phased-in basis.

PwC Inc. provided an independent reasonable assurance opinion ([RA]) and/or limited assurance conclusion ([LA]) over key sustainability information in this report.

United Nations Sustainable Development Goals

As a responsible gold miner, we believe we can create lasting socio-economic value for our people, host communities and governments. Our purpose is **to create enduring value beyond mining** and our vision is **to be the preferred gold mining company delivering sustainable, superior value.** In pursuit of this, we aim to positively contribute directly and indirectly to 12 of 17 United Nations Sustainable Development Goals (SDGs) to enable meaningful change in our sector.

SHSD Committee Chairperson's endorsement

Every year, the impacts of physical climate change become more pronounced and widespread. Gold Fields, its people and other stakeholders are not immune to these impacts and, as a responsible corporate citizen, we must play our part in both minimising our emissions and building resilience to climate change.

I firmly believe Gold Fields is already a leader in this space. The Group began to roll out renewable electricity at its mines long before it became the norm in the mining industry, and has committed to ambitious targets to cut its carbon emissions by 2030. Notably, after an extensive baseline study in 2023, the Group committed to reducing Scope 3 emissions by 10% by 2030 against our 2022 base.

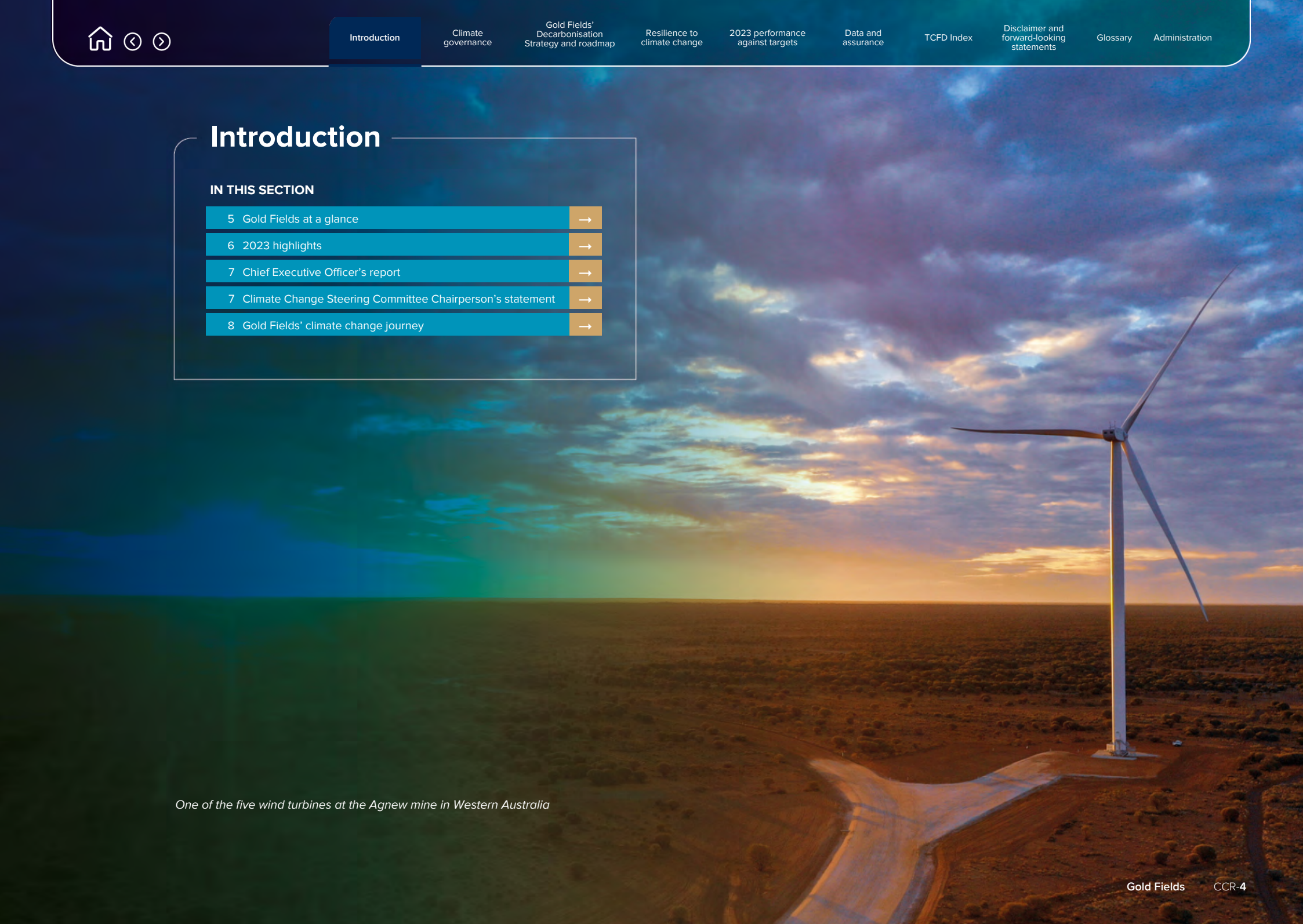
The Safety, Health and Sustainable Development (SHSD) Committee is confident management will continue to drive the Group's Decarbonisation Strategy, as evidenced by plans to expand the role of renewables in the Gold Fields' energy mix. For example, in February 2024, the Board approved the Company's most ambitious renewable energy project yet: a combined solar and wind microgrid at our St Ives mine in Australia.

On behalf of the Board, I fully endorse Gold Fields' 2023 CCR which, when read in conjunction with other relevant reports, provides an accurate overview of the risks and challenges climate change poses to the Group and the measures we are adopting in response.

Terence Goodlace
SHSD Committee Chairperson

Introduction

IN THIS SECTION



One of the five wind turbines at the Agnew mine in Western Australia

Gold Fields at a glance

Peru

Mines: Cerro Corona

239koz managed gold production

1.21PJ[RA] energy consumption

5.04GJ/oz energy intensity

100% renewable electricity

51kt CO_2e[RA] Scope 1 and 2 emissions

2kt CO_2e[RA] emissions avoided

211kg CO_2e/oz emissions intensity (Scope 1 and 2)

2.92GL freshwater withdrawal

83% water recycled/reused

Ghana

Mines: Damang and Tarkwa

704koz managed gold production

5.23PJ[RA] energy consumption

7.43GJ/oz energy intensity

0% renewable electricity

561kt CO_2e[RA] Scope 1 and 2 emissions

11kt CO_2e[RA] emissions avoided

797kg CO_2e/oz emissions intensity (Scope 1 and 2)

2.83GL freshwater withdrawal

89% water recycled/reused

South Africa

Mines: South Deep

322koz managed gold production

1.96PJ[RA] energy consumption

6.09GJ/oz energy intensity

15% renewable electricity

460kt CO_2e[RA] Scope 1 and 2 emissions

93kt CO_2e[RA] emissions avoided

1,428kg CO_2e/oz emissions intensity (Scope 1 and 2)

1.98GL freshwater withdrawal

78% water recycled/reused

Australia

Mines: Gruyere, Granny Smith, St Ives and Agnew

1,223koz managed gold production

5.63PJ[RA] energy consumption

4.65GJ/oz energy intensity

13% renewable electricity

561kt CO_2e[RA] Scope 1 and 2 emissions

95kt CO_2e[RA] emissions avoided

459kg CO_2e/oz emissions intensity (Scope 1 and 2)

1.05GL freshwater withdrawal

42% water recycled/reused

2023 highlights

Sustainability-linked loans

Refinanced our US$1.2bn revolving credit facility and A$500m Australian syndicated credit facility: five-year repayment terms linked to achieving annual climate change and water targets.

Strategic Pillar 2: Build on our leading commitment to ESG	ESG Charter: Climate-related target areas	2023 targets	2023 Group performance	Significant 2023 initiatives and interventions	Targets and future deliverables
	DECARBONISATION: CARBON AND ENERGY	10% reduction in Scope 1 and 2 absolute emission and 4% reduction in net emissions from a 2016 baseline as per our decarbonisation transition plan Developing and committing to a 2030 Scope 3 target	12% reduction in Scope 1 and 2 absolute emission and 4% reduction in net emissions from a 2016 baseline 1,632kt^{RA} Scope 1 and 2 CO_2e emissions – 5% below 2022 656kg CO_2e/oz Scope 1 and 2 emissions intensity – 2% below 2022 201kt^{RA} Scope 1 and 2 CO_2e emissions avoided Developed 2030 Scope 3 target of a 10% reduction from a 2022 baseline 950kt^{RA} Scope 3 CO_2e emissions – 3% below 2022 base 359kg CO_2e/oz Scope 3 emissions intensity	• Full year of Gruyere solar plant performance • Optimised South Deep's solar plant performance • Continued negotiations with national electricity utility on net billing at South Deep • Cerro Corona renewed its I-Rec certification, classifying its hydropower as 100% renewable	• Conduct mid-term review during 2025, which includes a review of processes, technologies and Scope 3 emissions to have a detailed understanding of hotspot categories and emissions from our suppliers • Develop a Scope 3 decarbonisation roadmap, along with detailed regional supplier engagement plans based on identified hot spot categories • 2024: 19% Scope 1 and 2 absolute emission and 6% reduction in net emissions from the 2016 baseline • 2030: 50% Scope 1 and 2 absolute emission and 30% reduction in net emissions from a 2016 baseline • 2030: 10% reduction in Scope 3 emissions from a 2022 baseline • 2030: 423kg CO_2e/oz Scope 1 and 2 and 314kg CO_2e/oz Scope 3 emissions intensities • 2050: Net-zero emissions
		14.3PJ energy consumption 1.2PJ energy consumption savings through initiatives Certify all sites to the ISO 50001 energy management system standard	17% renewable electricity 14.01PJ^{RA} energy consumption 5.66GJ/oz energy intensity All sites apart from South Deep are ISO 50001 certified; South Deep's certification is expected Q1 2024	• Increased the use of renewable electricity as new solar plants delivered full-year performance, with expansions planned for 2024 • Certified Australian operations to ISO 50001	
	WATER STEWARDSHIP	75% water recycled/reused 31% reduction in freshwater withdrawal from a 2018 baseline	74% water recycled/reused 39% reduction in freshwater withdrawal from a 2018 baseline	• Independent assessment of Gold Fields' water stewardship maturity is advanced using the ICMM's Water Stewardship Maturity Framework (WSMF) • Improved efficiencies at Tarkwa	2024: 75% water recycled/reused 31% reduction in freshwater withdrawal from a 2018 baseline 2030: 80% water recycled/reused 45% reduction in freshwater withdrawal from a 2018 baseline
	TAILINGS MANAGEMENT	Conforming with the Global Industry Standard on Tailings Management (GISTM) for high-priority TSFs	Substantially conform with the GISTM – three tailings storage facilities (TSFs) with "very high" consequence ratings at Tarkwa and one TSF with an "extreme" consequence rating at Cerro Corona	• Released the first GISTM Disclosure Reports for Cerro Corona and Tarkwa in August 2023 • Completed climate change resilience and vulnerability studies for the Group's TSFs • Continued transitioning Tarkwa TSFs 1 and 2 from upstream to downstream	2025: All remaining TSFs conform with GISTM 2030: Maintain conformance with GISTM Reduce the number of active upstream-raised TSFs from five to three
	ENVIRONMENT STEWARDSHIP	Zero serious (Level 3 – 5)[1] environmental incidents	Zero serious (Level 3 – 5) environmental incidents	• Undertook a nature baseline risk assessment • Established a committee to oversee improvements to environmental incident prevention, management and disclosure • Adopted the ICMM's Nature Position Statement	Zero serious (Level 3 – 5) environmental incidents

[1] *A Level 3 incident results in limited non-conformance or non-compliance with ongoing but limited environmental impact. Level 4 and 5 incidents include major non-conformances or non-compliances, which could result in long-term environmental harm, with Company or operation-threatening implications and potential damage to Company reputation*

Chief Executive Officer's report

2023 was a defining year in Gold Fields' journey to ensure we have net-zero emissions by 2050. While this is some years away, it is vital to lay the foundations now and for Gold Fields to deliver on its 2030 ESG decarbonisation targets.

Our decarbonisation journey has taken on greater importance given the position the world now finds itself in. The EU's Copernicus Climate Change Service confirmed that the period February 2023 to January 2024 had the first year-long breach of the critical threshold of 1.5°C above pre-industrial levels. The only way to halt the rise in global temperatures is to rapidly reduce GHG emissions, and Gold Fields aims to play its part in achieving net zero by no later than 2050.

It is not only the physical risks of climate change that have become more pronounced, but also the transition risks. In this regard, we are committed to respond to the dynamic reporting landscape, including the US Securities and Exchange Commission's recent release of the climate-related disclosure final rule and the IFRS ISSB S1 and S2 standards.

The Group's journey started in 2016, driven by the need to secure our operations' electricity supply and mitigate rapidly rising energy costs. Our investment in renewable energy microgrids proved the right solution while, at the same time, addressed one of the most critical challenges facing society: climate change. Gold Fields signed the Paris Agreement in 2015.

In the five years that followed, we invested approximately A$121m (US$91m) in renewable electricity at three of our Australian mines and, in 2022, R715m (US$46m) in the 50MW Khanyisa solar plant at South Deep in South Africa. We also installed low-carbon gas turbines at our Ghanaian mines, while Cerro Corona in Peru is completely supplied by hydropower.

We saw the benefits of these investments in 2023: 17% of our electricity was derived from renewable sources, compared to 13% in 2022.

As a result, our Scope 1 and 2 emissions decreased by 5% in 2023 to 4% below our 2016 baseline, while our energy spend per ounce reduced by 1%.

In February 2024, the Board approved the construction of a US$195m solar and wind microgrid at St Ives in Australia. Through this microgrid, 73% of the mine's electricity will be sourced from renewables – reducing the Group's future Scope 1 and 2 emissions by approximately 6% a year. Our other operations continue to investigate the possibility of adding further renewable electricity sources where it makes technical and economic sense to do so.

Our commitment to renewables is critical to achieving our 2030 target of reducing our net Scope 1 and 2 emissions by 30% from our 2016 baseline. The remaining third of this target will depend on achieving further energy efficiencies and, importantly, displacing diesel as the energy source for moving bulk material underground and on the surface. This was given renewed impetus at COP 28, with the agreement to transition away from fossil fuels. Work in this area is still at relatively early stages, but we expect that zero-emission vehicles and other technologies will operate in the future.

The interest payments of two sustainability-linked loans we signed in 2023 are linked to gradually reducing our emissions and improving total water reused or recycled. The long-term incentives paid to our executives are also tied, in part, to meeting our emissions reduction targets.

While Scope 1 and 2 emissions are largely within our control, we would be remiss if we did not address the carbon emissions from our supply chain – that is, Scope 3 emissions. Our baseline study indicated Scope 3 emissions made up 36% of our overall emissions in 2022. In November 2023, we announced our 2030 target to reduce Scope 3 emissions by 10% from our 2022 baseline. Achieving this target will require extensive collaboration with our main suppliers.

This report outlines our climate journey to date, as well as our future strategies, policies and programmes. I am confident that, based on Gold Fields' track record and the commitment and expertise of our people, the Company will play its part to address climate change and its impacts.

Mike Fraser
Chief Executive Officer

Climate Change Steering Committee Chairperson's statement

Climate governance is the foundation of Gold Fields' Climate Change Strategy. In 2022, we established a Group Climate Change Steering Committee to drive the formulation and implementation of our Climate Change Strategy.

The Committee encompasses all climate-related functions within Gold Fields as well as the majority of the Group's executive leaders. Its mandate has three focuses: decarbonisation to net-zero, risk management and enablers.

Decarbonisation was the Committee's primary focus in 2023. Scope 1 and 2 decarbonisation work focused on full operationalisation of the South Deep solar plant and studies on renewables projects at St Ives, South Deep and Salares Norte. We gave significant attention to calculating our Scope 3 emissions baseline, which was critical for setting our Scope 3 target.

The recently approved St Ives renewable project serves as an example of how we have incorporated our climate targets into our business strategy. The project will provide 73% of St Ives' electricity requirements and reduce power costs by approximately 30% a year from the projected 2025 grid costs. Although the return on investment period is calculated at a relatively long 10 years, based on conservative gas price assumptions and no carbon tax savings, the overall supply security and environmental benefits mitigate future energy price risk.

The Committee considers climate change risk and vulnerability, including risks relating to host communities, water security, tailings management and business interruption. Climate finance and communications, investor relations and transparent reporting serve as material enablers to reach net zero by 2050.

Addressing climate change is an imperative for Gold Fields and is embedded in our strategic objectives. The benefits of doing so include a lower carbon footprint, improved energy security and reduced energy costs, as well as enhanced risk mitigation and improved overall resilience.

As a responsible corporate citizen, we strive to play our part in creating the low-carbon future we need. This would not be possible without the committed input of all my colleagues, especially our dedicated operational teams, who make it all happen.

Paul Schmidt
Climate Change Steering Committee Chairperson

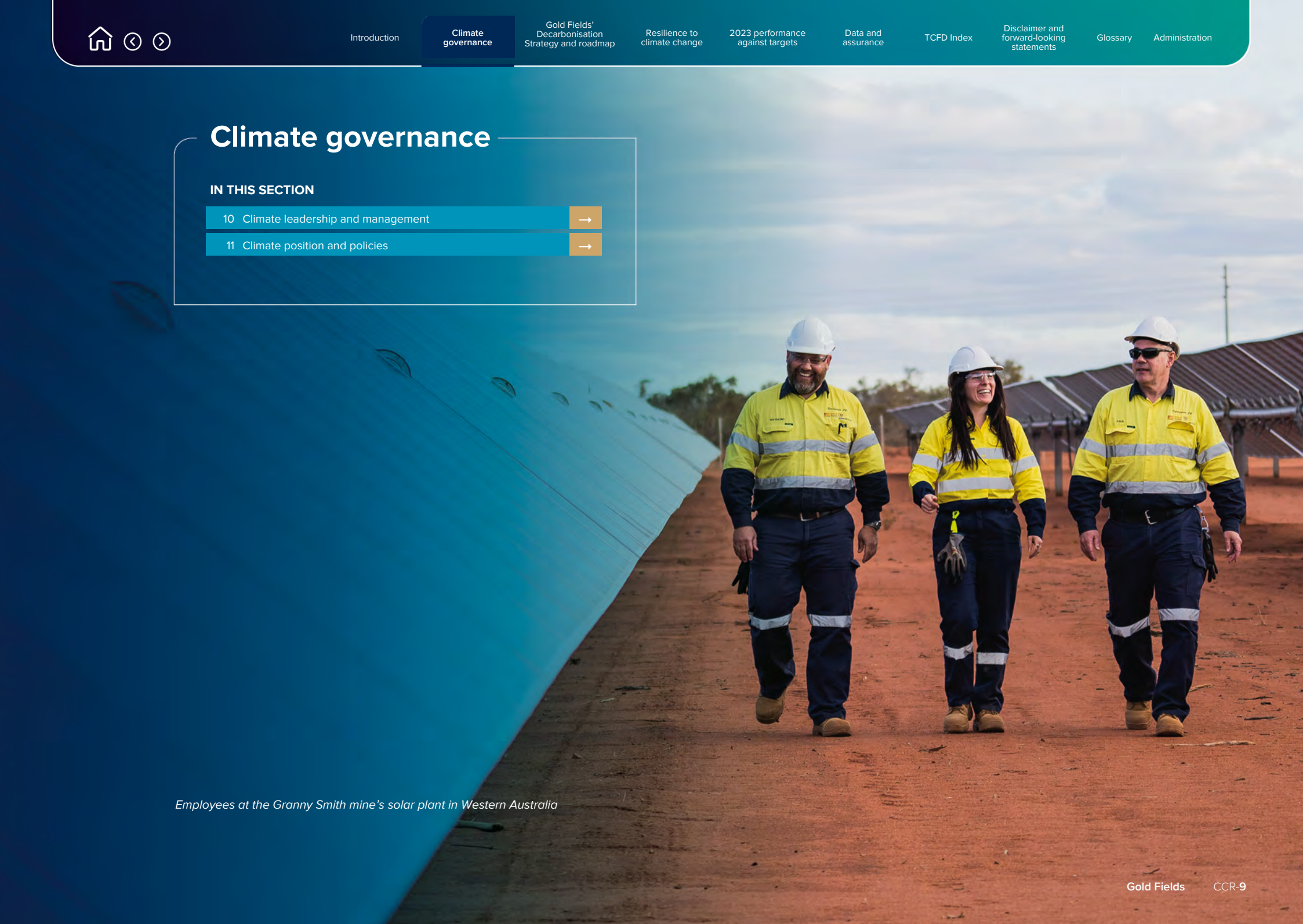
Gold Fields' climate change journey

Key levers of decarbonisation

	2011 – 2015 Foundational	2016 – 2021 Commence implementation	2022 – 2025 Decarbonisation Strategy	2026 – 2030 Preparing for 2030	2031 – 2050 Drive toward net zero by 2050
Governance and strategy	• Developed a Group Energy and Carbon Strategy • Reported carbon emissions in accordance with the CDP	• Assessed site-specific energy security requirements • Assessed regional climate change risks • Adopted climate change reporting based on TCFD recommendations • Set 2030 Scope 1 and 2 emission and water targets (2021) • Signed Paris Agreement, committing the Group to net zero by 2050 (2015)	• Constituted a CCS Committee, chaired by our Chief Financial Officer, to strengthen internal climate change governance • Decarbonisation Community of Practice developed • Commenced ESG SOX project to strengthen ESG-related data governance, disclosure and controls • Introduce an Energy and Decarbonisation Forum	• Develop an offset strategy and regional nature-based solutions • Increase integrated carbon reporting and visualisation, for example fleet management systems and long-term mine planning tools	• Include carbon standards in supplier assessments • Manage and report automated emissions data in real time
Energy efficiency	• Developed energy security assessments and five-year regional plans (2015) • Compiled energy efficiency plans and initiatives	• Started certifying our sites to ISO 50001 • Commencing with visualising and reporting • Established a Group energy forum • Appointed regional energy leads	• Certified all sites to the ISO 50001 standard	• Update reporting and visualisation • Implement technology solutions, such as ventilation on-demand	• Maintain full visualisation of energy in real time
Low-carbon and renewable electricity	• Conducted pre-feasibility and feasibility studies	• Assessed renewable and alternative energy solutions • Implemented the following key projects: – Commissioned low-carbon gas plants at Granny Smith – Built solar/wind microgrid at Agnew • Introduced carbon targets to Gold Fields' long-term incentive plan (LTIP)	• Completed a solar plant at South Deep and a solar and battery plant at Gruyere • Current capital portfolio projects include: – Conducting a wind generation study at South Deep – Implementing a connected renewable grid at St Ives – Expanding Granny Smith and Agnew's renewables plants	• Commence the Windfall project, supplied by hydropower • Planned start of South Deep wind farm • Planned commissioning of St Ives renewables microgrid • Planned expansions of Agnew and Gruyere solar farms	• Ensure full renewable electrical supply by 2050
Decarbonising material movement		• Trialled electric vehicles	• Continue to optimise haulage process and energy efficient technology (motors) • Continued electric vehicle trials	• Introducing electric underground mine vehicles • Leveraging material handling methods and maturing GHG technologies for open-pit mines	• Eliminate the use of diesel vehicles
Decarbonising our supply chain (Scope 3)			• Re-baselined the Group's Scope 3 emissions and set 2030 target • Explore Scope 3 emissions and supplier engagement	• Reduce Scope 3 emissions by 10% • Introduce annual targets for suppliers with short interval control	• Verify carbon offsets • Introduce net-zero targets for all suppliers and products

Climate governance

IN THIS SECTION



Employees at the Granny Smith mine's solar plant in Western Australia

Climate leadership and management

Effective climate governance is key to any climate change strategy, setting targets, implementing initiatives, tracking progress and disclosure. Our Board, its subcommittees and executive management teams provide clear leadership by setting the Group's climate and decarbonisation direction and providing strategic guidance. The Climate Change Governance Framework, as set out below, explains how climate leadership, strategic management and regional implementation function within Gold Fields and across our regions.

Climate Change Governance Framework

Climate leadership

	Board of Directors	Safety, Health and Sustainable Development Committee	Capital Projects, Control and Review Committee	Remuneration Committee	Risk Committee
Direction, approval, capital allocation and funding	Provides direction and guidance on climate-related strategy and implementation	• Oversees the Group's climate-related strategy and its implementation, including climate positioning and policies • Reviewed and approved Scope 3 targets and re-baseline, and monitoring Scope 1 and 2 performance against targets	Oversees climate-related capital allocation and projects	Oversees our Remuneration Strategy and its implementation, including climate-related KPIs included in the Group's Balanced Scorecard and LTIP of executives and management **View our Remuneration Report here.**	Responsible for enterprise risk management, including ESG and, specifically, climate-related risks

Climate strategic management

	Chief Executive Officer	Executive Committee	Climate Change Steering Committee				
Decarbonisation Strategy formulation and integration	Leads the executive and management teams to develop and implement the Group's Climate Change Strategy and embed a climate-conscious culture across our regions	Ensures climate-related strategies and policies are developed and implemented, underpinned by robust risk management	Climate communications, investor engagement and reporting	Climate finance and portfolio management	Decarbonisation Scope 1 and 2	Climate support, growth, Scope 3 and potential offsets	Climate risk and adaptation
			Key focus and action areas • IAR and TCFD-aligned reporting • Investor-related ESG engagements • Scope 3 stakeholder engagements • Societal and stakeholder needs and expectations • Internal reporting	**Key focus and action areas** • Carbon taxes • Internal carbon pricing under consideration • Project funding • Capital allocation, costs and long-term value • Scope 3 financial considerations	**Key focus and action areas** • 2030 strategy execution, roadmap, planning and Project Management Office • Group and regional technology development and adoption, post-2030 readiness	**Key focus and action areas** • Group strategy, policy and various external drivers • Steering Committee support • Offsets and shared value opportunities • Upstream supply chain • Science-based targets • Performance monitoring and carbon intensity	**Key focus and action areas** • Regional climate-related risk and vulnerability assessment, mitigation and adaptation measures • Physical risks • Host community risks • Energy and water • Regional security • Internal capacities of human capital

Climate implementation management

Decarbonisation Programme implementation	Group Energy and Decarbonisation Forum (previously Group Energy Forum)	Group and country decarbonisation leads	Programme scheduled studies and trials	Country decarbonisation programmes	Climate support, growth, Scope 3 and offsets	Participation in industry associations, initiatives and projects, like the ICMM's Innovation for Cleaner, Safer Vehicles (ICSV) initiative and the Electric Mine Consortium (EMC)

Climate position and policies

By being a member of associations like the ICMM and WGC, we strive to embed international climate-related best practice into our Group strategy and support a low-carbon future. As part of this process, we consider climate-related risks and opportunities to our business and actively work toward minimising our negative impacts and increasing our positive impacts on broader society, our host communities and the natural environment surrounding our mines.

The tables below explain our commitments driven by the ICMM's Position Statements on Climate Change, Water Stewardship and Tailings Governance, as well as our relevant Group Policy Statements and commitments. We also highlight key actions taken to meet these commitments.

ICMM commitments	Gold Fields commitments	Key implementation actions
CLIMATE CHANGE		
Scope 1 and 2 emissions target: net zero by 2050	• Objectives and targets in place to reduce carbon emissions, save energy, diversify energy mix and responsibly manage usage	• Ongoing revision of annual Scope 1 and 2 emission targets • Monitoring energy and carbon savings
Scope 3 emissions: targets, management and partnership	• Address Scope 3 emissions as part of our Decarbonisation Strategy	• Re-baselined Scope 3 emissions to align with the Scope 3-related guidelines recently released by the ICMM • Established a 2030 target to reduce Scope 3 emissions
Targets cover all material sources of emissions	• Gold Fields targets include Scope 1, 2 and 3 emissions	• Group targets for Scope 1, 2 and 3 emissions set for 2030
Absolute reductions	• Objectives and targets in place to reduce carbon emissions, save energy, diversify energy mix and responsibly manage usage	• Targets set include: 30% net emission reductions and 50% absolute emissions reductions in Scope 1 and 2 emissions by 2030 from a 2016 baseline, and a 10% reduction in Scope 3 emissions by 2030 from a 2022 baseline
Robust target-setting methodologies; disclose assumptions	• Paris Agreement-aligned targets towards a 1.5˚C future • Independently review science-based targets • Transparent disclosure on progress	• Commissioned independent reviews by the SBTi of Scope 1 and 2 (2021) and Scope 3 (2023) targets and emissions • Follow the Decarbonisation Strategy toward a 1.5˚C future and net zero by 2050
Integrate climate change into decision-making	• Continuously enhance preparedness for climate change, improve performance and increase transparency in public disclosure	• Incorporated decarbonisation into existing mine and business models • Prioritised decarbonisation in the Group's 2030 ESG targets
Adaptation and mitigation	• Regional climate change strategies, including mitigation and adaptation plan	• Included mitigation plans in Decarbonisation Strategy to meet targets • Conducted regional climate change risk and vulnerability assessments, with implementation ongoing
Supporting community resilience	• Collaborate with host communities on climate change policies	• Supporting community water provision and educational projects in Ghana, South Africa and Peru • Working with stakeholders to identify potential climate change resilience-related flagship projects
Transparent disclosure: Scope 1, 2 and 3 emissions; external verification; TCFD-alignment	• Public reporting of GHG emissions footprint and climate-related risks and opportunities	• Matured reporting of Scope 1 and 2 emissions • Set Scope 3 emission reduction targets and extended reporting boundary after extensive research and supplier engagement • Obtaining external independent assurance • Publishing an annual TCFD-aligned CCR

Climate position and policies continued

ICMM commitments	Gold Fields commitments	Key implementation actions
CLIMATE CHANGE		
Engagement	• Collaboration with host communities, governments, peers, investors, non-governmental organisations (NGOs) and business partners	• Being an active member of the ICMM and WGC • Implementing stakeholder engagement programmes at all operations
Innovation and technology	• Support research, innovation and technology development • Renewable, low-carbon energy solutions and energy efficiency initiatives, including carbon offsets	• Ensure our Decarbonisation Strategy is driven by innovation and technology • Implemented detailed renewable energy site designs and roadmap • Active participation in innovative ICMM and other industry projects and initiatives
Carbon pricing	• Transparent carbon providing mechanisms, including CO_2e shadow prices in all new and life-extension projects	• Granny Smith gas power plant earns annual carbon credits from the Australian Emissions Reduction Fund • Continuing with carbon financing and internal carbon tax work
WATER STEWARDSHIP		
Corporate water governance • Approach • Responsibilities and accountabilities • Integrate water into business planning • Public reporting	• Legal, regulatory and voluntary compliance, including ICMM, WGC and ISO 14000 • Corporate water governance: – Responsibilities and accountabilities allocated – Integrate water-related considerations – Public reporting, including CDP Water	• Updated the Group's Water Stewardship Strategy to 2030, including pilot-testing of and independently verified alignment with the ICMM's 2023 Water Stewardship Maturity Framework • Implemented regional Water Stewardship Strategies • Certified all mines to the ISO 14000 standards • Implementing three-year (2023 to 2025) water management plans at all regions
Effective water management • Water balance • Targets and objectives • Water quantity and quality • Management • Access to clean drinking water and sanitation facilities for all employees	• Effective water management: – Social and environmental risk management – Efficient water utilisation solutions – Employee awareness and training – Context-relevant water performance targets – Security of operational water supply for all catchment users, including natural environment • Access to clean drinking water, gender-appropriate sanitation facilities and hygiene at the workplace	• Reduced freshwater withdrawal by 39% from 2018 baseline (from 14.5GL to 8.8GL) – ahead of 2023 business plan and on track to achieve the 2030 target of a 45% reduction • Water recycled/reused was 74% of total water use in 2023, 1% lower than 2022; the Group is on track to meet its 2030 target of 80% • Taking steps to seek to ensure all employees have access to clean drinking water, gender-appropriate sanitation facilities and hygiene at our mines, projects and offices
Collaboration for sustainable water use • Catchment-level risks and opportunities • Engage stakeholders on external water governance • Water stewardship initiatives	• Collaboration: – Proactive engagement with stakeholders, including host communities – Support water stewardship initiatives • Regular updating of risks, including climate-related for operations	• Maintaining site-specific catchment stakeholder engagement • Worked with community and stakeholder relations departments in 2023 to identify potential water-related Group legacy projects at Cerro Corona and South Deep, with our project in Peru being scoped

Climate position and policies continued

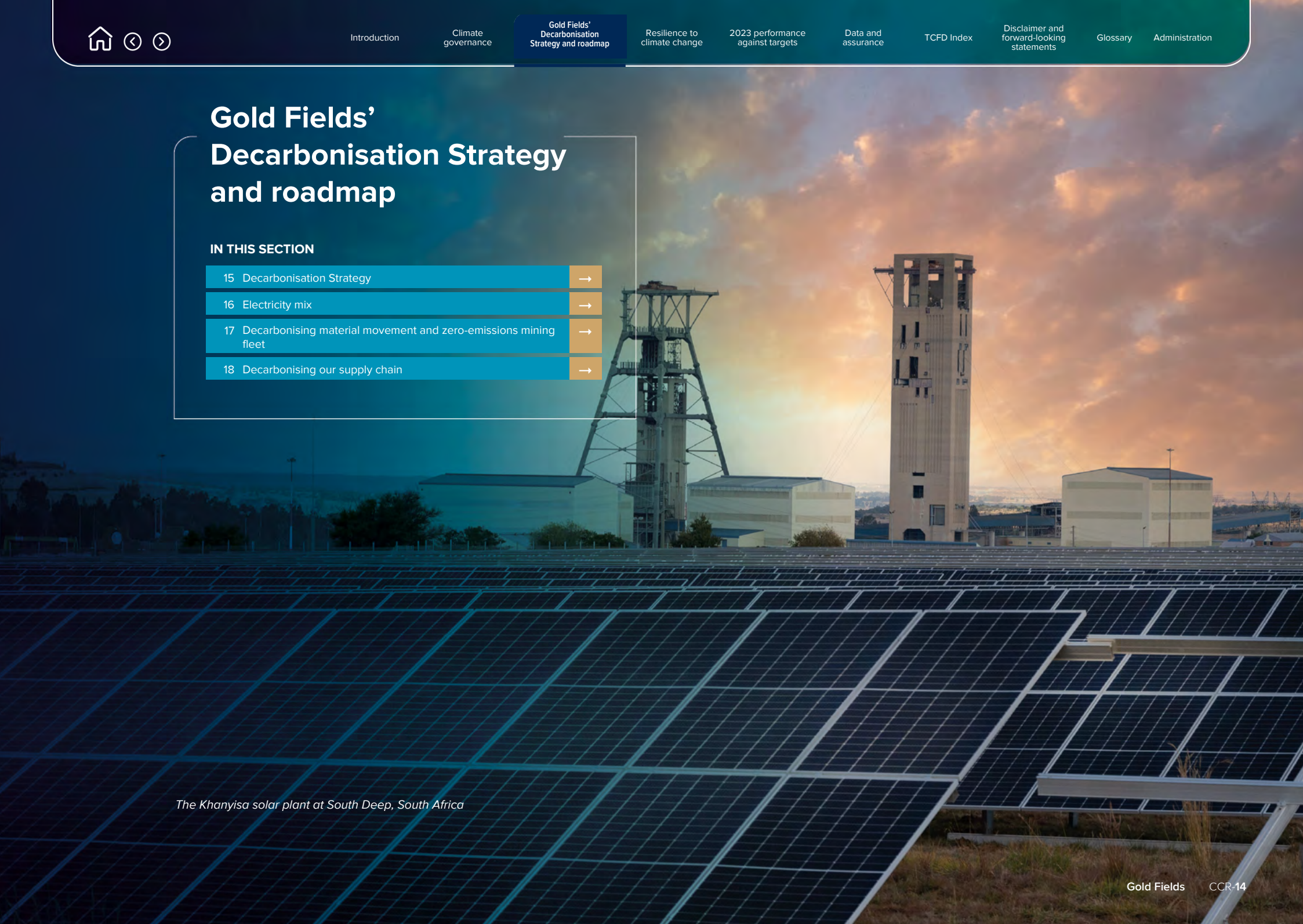
ICMM commitments	Gold Fields commitments	Key implementation actions
TAILINGS MANAGEMENT		
This table sets out the six key elements of the ICMM Tailings Governance Framework		
1. Accountability, responsibility and competency	• Uphold Gold Fields' Vision and Values • Achieve and maintain compliance with best practice standards and practices • Effective governance of our TSFs through clearly defined accountabilities and appropriately qualified personnel appointed to key governance roles	• Regional accountable executives appointed • Engineer of Record firms appointed at all operations to provide technical oversight and design input
2. Planning and resourcing	• Ensure adequate resources to fulfil operational obligations throughout the TSF lifecycle	• Ensures our Tailings Management Policy underpins all systems, information and plans of the current and future TSF lifecycle phases • TSF management and project teams ensure proper definition and full design integration between the different plant, mining, TSF, environmental, social, and sustainable development discipline areas
3. Risk management	• Implement a risk-based approach to the planning, design, construction, operation, closure and rehabilitation of TSFs, which underpins the principles of leading practice tailings management • Tailor plans to effectively manage TSFs over their full lifecycle, with sufficient detail to manage the potential risks within acceptable limits	• Developing a tailings-specific risk management guideline to provide consistent guidance for defensible risk treatment related to tailings
4. Change management	• Managing change, which is critical to safe and responsible tailings management and could be a potential risk • Documenting and implementing processes to manage change to ensure tailings are managed safely and responsibly. In addition, all potential changes are carefully considered to ensure no adverse or unintended consequences are associated with changes	• Reviewing changes impacting TSF risk profiles and evaluating potential impacts by all relevant persons • Following a rigorous quality, risk management and documentation process when changes to the original or current TSF design are proposed
5. Emergency preparedness and response	• Ensure proper emergency preparedness and response planning • Ensure adequate resources for recovery efforts in the unlikely event of a failure	• Conducted site-specific inundation studies for all high-consequence facilities with credible failure modes to identify communities and water bodies that could be impacted in the unlikely event of a tailings incident. This was used to evaluate our design and mitigation strategies and assist with emergency planning and response • Developed and preparing to implement site-specific emergency response plans across all regions for credible failure modes that could lead to emergencies, including catastrophic failures
6. Review and assurance	• Innovative development and implementation throughout the TSF lifecycle, including research and industry participation and collaboration • Multi-criteria alternatives analysis of sites, technologies and strategies • Open and transparent TSF management practices and disclosures	• Conducting independent third-party technical reviews of the design, construction, operation, closure and management of TSFs

Sustainability-linked credit facilities	2023 target	2023 performance[1]
Scope 1 and 2 carbon emissions[2]	• 76kt CO_2e cumulative annual carbon abatement of absolute Scope 1 and 2 carbon emissions through renewable projects since 1 January 2023	• Achieved 75kt CO_2e^{LA} cumulative annual carbon abatement of absolute Scope 1 and 2 carbon emissions through renewable projects since 1 January 2023
Water recycled/reused	• 75% water recycled/reused	• Achieved 74%^{LA} water recycled/reused

[1] *The calculation methodology used was the same as the calculation methodology applied in the 2022 and prior Integrated Annual Reports and Climate Change Reports.*
[2] *Calculated in accordance with the accounting and reporting standards as published by the GHG Protocol Corporate Accounting and Reporting Standard.*

Gold Fields' Decarbonisation Strategy and roadmap

IN THIS SECTION



The Khanyisa solar plant at South Deep, South Africa

Decarbonisation Strategy

Gold Fields is committed to reach net-zero carbon by 2050 in line with the goals of the Paris Agreement, which we signed in 2015. The global realisation of the Paris goals was brought closer at COP 28 held in Dubai in December 2023, where agreement was reached for the first time on the global "transition away from fossil fuels."

Similarly, 2023 heralded a step-change in Gold Fields' Decarbonisation Strategy when we announced our 2030 target to reduce Scope 3 emissions by a net 10% from a 2022 baseline – an approximate 100kt CO_2e reduction. We landed on this target following an 18-month process of working closely with the key suppliers of our mines to establish regional Scope 3 emission baselines.

Our Scope 3 target further builds on our Scope 1 and 2 targets to achieve a 30% net emission reduction by 2030 from a 2016 baseline. Adjusting this target to a hypothetical Group gold production base of 2.8Moz by 2030, our Scope 1 and 2 target equals an effective 50% absolute emissions reduction against the baseline.

To date, our Scope 1 and 2 emissions have decreased by 4% against the baseline, mainly driven by our investment in renewable and low-carbon electricity, and the energy efficiency initiatives implemented. Had we not developed our Decarbonisation Strategy – which is driven by a well-researched programme – our Scope 1 and 2 carbon footprint would amount to 2.4Mt CO_2e by 2030. On an emissions intensity basis, we were already 14% lower at 656kg CO_2e/oz by 2023 against our 2016 baseline, with a target of 423kg CO_2e/oz by 2030. We intend to review our decarbonisation programme in 2025, as well as analyse and review our targets and the efficiency and effectiveness of our related projects and initiatives.

We based our Decarbonisation Strategy on the ICMM's 2021 Climate Change Statement. It comprises 26 projects, six technical trials and seven studies, broadly grouped into three levers and 2030 targets (against a 2016 baseline):

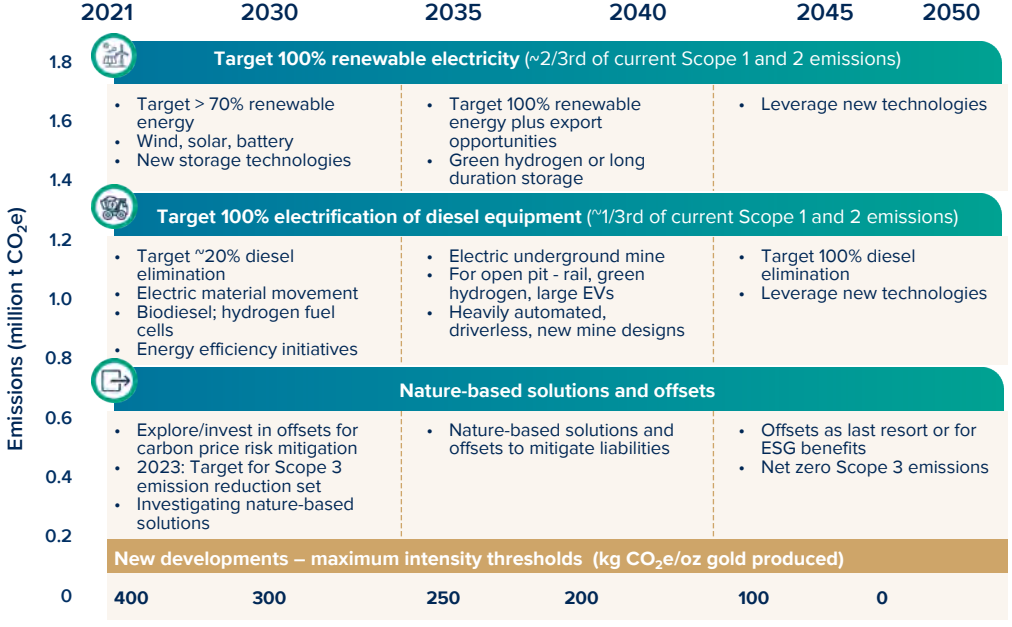
- **Renewable electricity**: 75% reduction achieved from renewables and storage
- **Decarbonising material movement**: 11% reduction from electrification of ore and waste movement
- **Energy efficiency initiatives in relation to the reduction of our Scope 1 and 2 emissions**: 14% reduction from energy efficiencies

The graph to the left below sets out how we plan to achieve our Scope 1 and 2 targets to reach 1.2Mt CO_2e by 2030 compared with the 1.7Mt CO_2e in 2016. About half of our planned reductions will derive from the use of renewables with electrification of diesel equipment, energy efficiency initiatives and transitionary abatement programmes making up the remainder.

The table below shows our decarbonisation journey up to 2050, when we have committed to net zero. It highlights the main targets and initiatives we are considering under our key strategies.

Scope 1 and 2 net emissions transition pathway to 2030 (kt Co_2e)

Pathway to net zero by 2050



Electricity mix

Below, we set out the electricity mix of our mines as at 31 December 2023, as well as the Windfall project in Canada. Salares Norte is expected to start production during April 2024.

South Deep	Agnew	St Ives	Granny Smith	Gruyere
a. Electricity grid – 85% b. 50MW solar – 15%	a. 3.6MW diesel – 1% b. 19MW gas – 48% c. 4MW solar – 6% d. 18MW wind – 45% e. 13MW/4MWh battery energy storage system (BESS)	a. Electricity grid – 100% gas	a. 10MW diesel – 1% b. 33MW gas – 92% c. 8MW solar – 7% d. 2MW/1MWh BESS	a. 3.6MW diesel – 0.1% b. 48MW gas – 91% c. 12MW solar – 9% d. 4.4MW BESS
Future (53% renewable electricity (RE) fraction)	**Future (57% RE fraction)**	**Future (73% RE fraction)**	**Future (73% RE fraction)**	**Future (20% RE fraction)**
a. 42MW wind envisaged	a. 4MW gas approved b. 9MW solar envisaged	a. Grid firming (gas) 27% b. 35MW solar approved c. 42MW wind approved d. 132/33kV RE hub collector substation	a. 11MW solar approved b. 36MW wind envisaged c. 25MW BESS envisaged	a. 10MW solar envisaged
				

Cerro Corona	Salares Norte	Windfall project	Tarkwa	Damang
a. 100% renewable grid electricity	a. 17MW diesel (100%)	a. 100% renewable grid electricity	a. Electricity grid – 3% b. 55MW gas – 97% c. 100kW solar at office	a. Electricity grid – 0.1% b. 27.5MW gas – 100%
Future (100% RE fraction)	**Future (18% RE fraction)**	**Future (100% RE fraction)**	**To be determined**	**Limited options available — short mine life**
	a. 7MW solar		a. 1MW renewable from grid b. Combined cycle for gas plant c. 1.5MW solar (Tarkwa Mine Village) d. Insetting agroforestation	
				

Decarbonising material movement and zero-emissions mining fleet

The diesel equipment used in our mines – particularly our vehicle fleet – contributes approximately one-third of the Group's Scope 1 and 2 GHG emissions. To address this, we initiated several programmes to decarbonise movement of mining material and waste. Our 2030 target is to reduce diesel usage at our mines by approximately 20%.

Most prominently, we initiated trials of battery electric vehicles (BEVs) at various sites in partnership with original equipment manufacturers (OEMs). These trials aim not only to reduce emissions but also enhance productivity, decrease operating costs, improve vehicle safety, and reduce diesel particulate matter (DPM).

Trials conducted thus far have yielded valuable insights. During 2023, we completed trials of four different BEVs at St Ives – loaders, LHDs (load, haul, dump) and tool carriers – which demonstrated limited decarbonisation benefits with variable production performances. Similarly, trials involving light vehicles and haul trucks at Granny Smith and Agnew helped us further develop our understanding of the operational capabilities and potential decarbonisation benefits of BEVs.

St Ives Sandvik 50t battery electric UG truck

The trials indicated that current BEV prototypes are not as technologically advanced as required, resulting in lower availability levels, frequent battery changes or charges, and lower productivity compared with diesel vehicles. Due to the novelty of BEV technology, we also face challenges relating to longer repair times and increased frequency of repairs.

Trials of BEVs were not successful at deep underground levels at South Deep. We observed that underground BEVs could make a material difference when combined with potential energy savings derived from reduced ventilation.

Gold Fields plans to continue deploying and trialling reduced and zero-emission vehicles, including diesel-electric LHDs, e-drive diesel-electric trucks, battery electric light vehicles, and further ancillary trials with OEMs and partners. For example, we are partnering with Epiroc to develop the next generation of electric drive hybrid underground mine trucks, with a prototype scheduled for testing in 2024.

Many of the BEVs required for mine production will only reach maturity stage by 2025 at the earliest and to achieve the benefits of these technologies, full digital infrastructure will have to be developed at our mines. Hybrid diesel-electric vehicles may serve as a short-term solution until suitable zero-emissions alternatives become more mature and cost-effective. Meanwhile, the Group is developing cleaner, safer vehicle Group standards and supporting roadmaps for each of our mines.

Gold Fields is actively involved in the ICSV initiative led by the ICMM, which also includes participation by leading OEMs. The initiative aims to develop zero-carbon solutions for mobile equipment by 2030 for industry-wide adoption by 2040, based on partnerships and non-competitive collaboration. Three specific goals underpin this ambition:

- Developing collision avoidance technology to eliminate fatalities from vehicle interactions
- Reducing emissions of DPMs in underground vehicles and machinery
- Reducing GHG emissions by developing zero-carbon solutions for mobile equipment

The ICMM initiative recognises battery electrification as crucial in decarbonising mining vehicles. Challenges identified include low technology and commercial readiness of available zero-emission vehicles, lack of early adopters, infrastructure installation, inability to retrofit existing equipment, and change management.

Through the initiative, we are exploring and tracking the readiness and maturity of different technologies, including trolley assist, hydrogen fuel cells and hybrid battery solutions. The use of these technologies at our operations will be determined based on best fit, technological readiness and maturity as we continue our net-zero journey to 2050. We are also investigating alternative material movement options such as in-pit crushing and conveying for open pits, as well as emerging technologies like railveyor to move rock out of underground operations.

To address these technology and other challenges mentioned above, the Electric Mine Consortium (EMC) was established to focus on how technology choices are impacting the supplier ecosystem; influencing policy; and communicating the business case. Gold Fields is one of five active mining members of the EMC, in partnership with equipment, batteries, energy and systems suppliers, along with potential funding partners and universities.

Despite the challenges, Gold Fields remains committed to improving BEV technology through collaboration with OEMs, and continued participation in the ICSV initiative and the EMC. The mining industry is actively working toward decarbonising material movement through trials, collaborations, and initiatives aimed at advancing zero-emission technologies. We remain dedicated to sharing learnings and accelerating the development of sustainable electric and zero-emission solutions for the sector.

Decarbonising our supply chain

A critical element in our decarbonisation journey is reducing the emissions in our supply chain. These Scope 3 emissions are accordingly included in the Group's commitment to reach net zero by 2050.

Unlike Scope 1 and 2 emissions, over which companies have considerable control, Scope 3 emissions are generated beyond their direct influence, both upstream and downstream of their operations. Gold mining companies generally have negligible downstream emissions as gold is used primarily as a store of value and volumes are small.

Scope 3 emissions are therefore mostly generated in the supply chain. Gold Fields' most significant upstream contributors are suppliers of fuels, mining services, cement and explosives.

In 2023, after extensive work by our Climate Change and Procurement teams – who were supported by expert consultants – Gold Fields announced its 2030 target of reducing Scope 3 emissions by 10% to 885kt CO_2e from our 2022 baseline of 980kt CO_2e^{LA}. The equivalent carbon intensity target is a reduction from 346kg CO_2e/oz in 2022 to 314kg CO_2e/oz. In 2023, Scope 3 intensity was 359kg CO_2e/oz.

We started our Scope 3 emissions Decarbonisation Strategy by conducting a re-baseline exercise in accordance with the methodology of the GHG Protocol, ICMM and WGC.

The ICMM published a new Scope 3 Target-setting Framework in December 2023.

Guided by this framework, we worked closely with our regional decarbonisation and procurement leads to determine how complete our Scope 3 emissions data was. Each country developed its own Scope 3 emissions baseline according to their specific supply chain before identifying different emission hotspot categories and their key suppliers, products or services. Hotspot categories are those that have the largest impact on emissions in our supply chain.

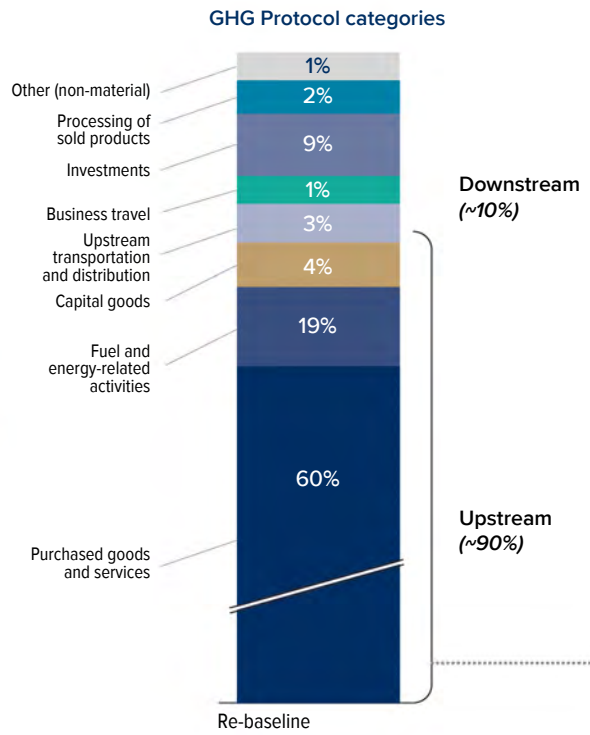
Gold Fields Group coordination

Key Group-level responsibilities

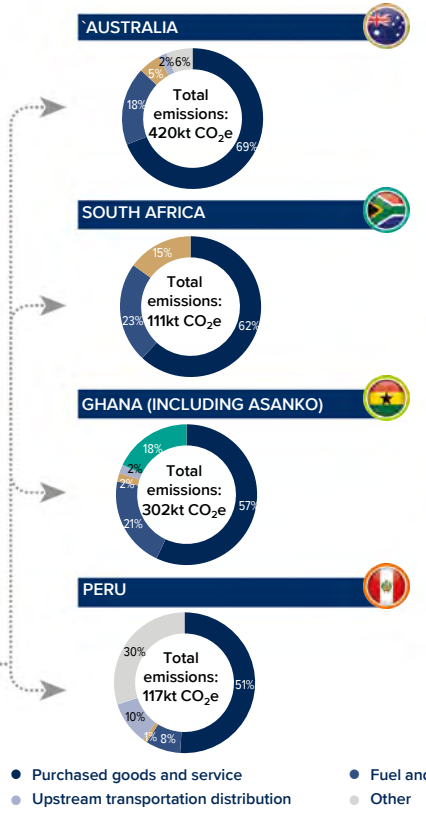
- Establish Group milestones and targets
- Develop emissions calculation and reporting operating model
- Create centralised governance framework for regional execution
- Support regions to achieve targets
- Undertake formal Scope 3 engagement with suppliers

2022 Scope 3 Group emissions baseline

Total emissions: 980kt CO_2e



Country commodity hotspots (2023)



Regional execution

- Establish Gold Fields Decarbonisation Procurement Team capabilities and reporting structures
- Regional data cube Scope 3 calculations
- Regional emission category and supplier-specific engagement plans
- Set regional targets
- Educate suppliers
- Embed Scope 3 emissions into procurement practices
- Emission assessment criteria
- Monitor supplier progress on decarbonisation

Decarbonising our supply chain continued

2022 baseline

Gold Fields established its Scope 3 target after an 18-month process, where we worked with key suppliers to establish a baseline of each mine's emissions profile.

As per the baseline study, Gold Fields' total 2022 Scope 3 emissions amounted to 980kt CO_2e^{LA}. This constituted 36% of the Group's total 2022 emissions of 2,696kt CO_2e – an increase from the 25% reported previously.

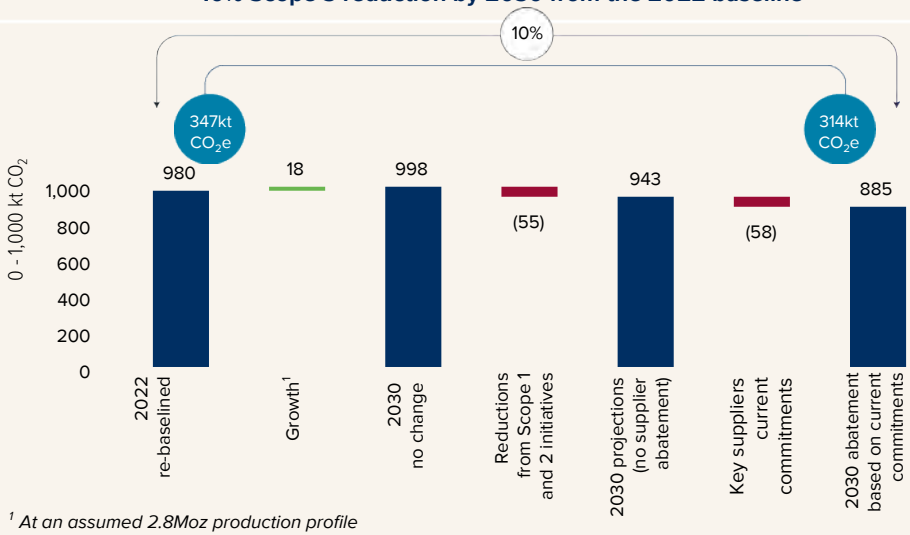
The main reasons for the higher baseline were greater maturity and accuracy of measuring and reporting methodologies applied, supplier-specific information and updated emissions factors, in-depth study of spend data, and exponential development of industry standards and norms.

We summarise Gold Fields' 2022 emissions profile before and after the baseline study in the table below:

Emissions	2022 published kt CO_2e	2022 published % of total	2022 re-stated kt CO_2e	2022 re-stated % of total	% change
Scope 1 and 2	1,716	75%	1,716	64%	
Scope 3	563	25%	980[LA]	36%	74%
Total	2,279		2,696		18%

How we plan to achieve our Scope 3 reduction target

10% Scope 3 reduction by 2030 from the 2022 baseline



[1] *At an assumed 2.8Moz production profile*

● *Energy intensity*

It is critical that we collaborate with our suppliers to ensure they successfully implement decarbonisation initiatives, which will help the Group meet our Scope 3 emissions reduction target.

Gold Fields' supplier engagement focuses on the material upstream contributors to Scope 3 emissions, to target the emissions hotspots and collaboratively reduce emissions.

Our target of a 10% net reduction in Scope 3 emissions by 2030 will be enabled through direct engagement over the next two years with key suppliers who represent 70% of our Scope 3 emissions. The detailed regional engagement by commodity suppliers will evolve based on regional and site-specific requirements.

The graph below left shows that, to achieve the 10% reduction, we will require suppliers to cumulatively reduce emissions by 58kt CO_2e. Successfully reducing our Scope 1 and 2 emissions by 30% by 2030, will translate to an additional estimated 55kt CO_2e in Scope 3 emission cuts.

The ICMM's Scope 3 Target-setting Framework

The ICMM published a Scope 3 Target-setting Framework in December 2023 to assist member companies to set impactful short, medium and long-term Scope 3 emissions reduction targets. The Guidance includes a maturity framework which outlines five dimensions for determining Scope 3 targets, including accounting and reporting; identifying emissions hotspots; business integration and alignment; assessing decarbonisation pathways; and organisational governance.

These dimensions guide a four-stage maturity process for continual improvement. The Foundation State initiates groundwork, while the Consistency State involves multiple rounds of reporting and action on emissions reductions. In the Refinement State, knowledge is honed with improved implementation and reporting, leading to the Evolved State, where high-quality, credible data and reporting are consistently provided, drawing from refined targets and decarbonisation plans.

Gold Fields conducted a self-assessment against this framework, revealing refined accounting and reporting processes, with emissions hotspots identified. Business integration and alignment are consistent, with engagement strategies in place, and decarbonisation pathways are being assessed. Climate governance is at the refinement stage, with commitments, targets, and third-party-reviewed emissions data.

Overall, Gold Fields demonstrates progress across various stages of maturity in addressing Scope 3 emissions.

Resilience to climate change

IN THIS SECTION

The reverse osmosis water plant at South Deep in South Africa

Top climate-related risks and opportunities

Gold Fields has entrenched climate-related risks and opportunities within enterprise risk management systems and strategic processes at Group and regional levels. Our regions conduct climate change risk and vulnerability assessments once every five years, the most recent of which were completed in 2021. We also conducted site-specific climate change risk and vulnerability assessments for the Group's TSFs in line with GISTM requirements. The findings of these assessments were incorporated into the ongoing design and risk management plans of the TSFs at Cerro Corona and Tarkwa since these have "extreme" and "very high" consequence category ratings, respectively. The same approach and methodology are already followed for our remaining TSFs.

Gold Fields is a member of the Large Open Pit Consortium, an industry-sponsored, international research and technology transfer project that commissioned an external review on the potential impact and risk of climate change on open-pit mines and waste dumps. The findings of this review indicated that the main risk associated with climate change on open-pit mines was associated with extended periods of freeze and thaw affecting slope stability. Currently, Gold Fields does not have any operations that are affected by these conditions, and therefore any climate change risks associated with Gold Fields open pits is considered negligible.

Refer to our 2023 IAR for our top 15 Group risks.

Climate-related Group risks

	Risk	Context	Risk implication	Key actions	Opportunities
10 (2022: 8)	ESG-related stakeholder expectations and activism	The combination of high-profile incidents in the mining sector, like tailings dam failures and increased sexual harassment cases, and the rapid evolution of ESG standards and regulations, has raised stakeholder expectations of more extensive and robust ESG reporting by the sector. Specifically, providers of capital and other stakeholders are increasingly focusing on evidence-based ESG performance against targets. Furthermore, nature and biodiversity, and their integration with climate change, Indigenous Peoples and local communities are expected to be included in ESG disclosure.	• Greater demand for investments in ESG projects, competing with other capital investment requirements by the company • Greater scrutiny from investors, communities, NGOs and other stakeholders • Increased market expectation for quality reporting and disclosure	• Maintaining good corporate governance, including active involvement of Climate Change and Stakeholder Steering Committees, and applying SOX processes to ESG reporting and assurance • Aligning with and actively participating in best practice industry associations like the ICMM and WGC • Engaging with stakeholders proactively • Implementing our Decarbonisation Strategy	• Leveraging superior ESG performance and reporting as a competitive advantage to drive stronger licence to operate • Attracting and retaining critical skills • Accessing more affordable capital

Top climate-related risks and opportunities continued

	Risk	Context	Risk implication	Key actions	Opportunities
12 (2022: 11)	Failure to implement climate change mitigation and adaptation measures	Gold Fields is exposed to the impacts of climate change – including physical risks like extreme weather events and transition risks like more stringent climate-related government regulations and policies. We build our resilience to these impacts through adaptation and mitigation actions considering water-retaining structures and stormwater management systems, water, energy and regulatory requirements.	• Increasing scarcity and cost of natural resources • Increasing cost of production (operational and capital expenditure) • Loss of critical infrastructure and production due to extreme weather events • Loss of investor and stakeholder support • Compromised tailings and heap leach structures due to excess rainfall or drought • Pressure on corporate reputation from environmental activism and local communities impacted by climate change	• Being a member of the ICMM and WGC • Adopting and applying best practice, including TCFD and CDP (water) • Integrated ISO management systems (quality, environment and energy) • Maintaining robust climate governance • Conducting regional climate change risk and vulnerability assessments every five years • Implementing regional climate change adaptation and mitigation plans • Implementing the Group Decarbonisation Strategy and implementation plans to achieve Scope 1, 2 and 3 targets • Responsibly using water resources	• Greater resource and energy efficiency • Ensuring energy and water security at our operations • Greater mix of renewable electricity • Leveraging new technologies toward the Gold Fields Mine of the Future • Low-carbon preferred investee company
15 (2022: 13)	Water pollution, security and reduction in freshwater consumption	Access to water is critical to the operations of Gold Fields. Water security can be impacted by multiple factors, including extreme weather events – mainly flooding and drought, water pollution, environmental incidents caused by mining activities and non-renewal or loss of water-use licences.	• Loss of legal and social licence to operate • Suspension or closure of operations • Increased operating costs • Fines or sanctions • Negative engagement with communities, NGOs and other relevant stakeholders	• Implementing regional water stewardship strategies and tactical plans • Implementing environmental management plans • Submission to the Water Disclosure Project • Assessing the resilience of our water infrastructure to climate change	• Ensuring water security for all catchment stakeholders • Building sound relationships with communities and other catchment stakeholders • Cleaner and more resilient catchments and their ecosystems, with improved ecosystem services

Group catastrophic risks

	Risk	Context	Risk implication	Key actions
1 (2022: 1)	Catastrophic TSF embankment failure	Catastrophic TSF failure could lead to the loss of life and environmental, infrastructure and reputational damage. Such failures could be caused by poor design, construction and/or operations, as well as extreme weather events or sabotage.	• Fatalities or serious injuries • Environmental harm • Infrastructure damage • Production and financial loss • Mine stoppage • Reputational harm • Prosecution and/or fines	• Adhering to the Group's TSF Management Policy and Standard • Complying with GISTM requirements • Independent design reviews • External independent compliance audits • Ensuring emergency evacuation procedures are in place • ICMM – Tailings Aspirational goal project • Site-specific TSF projects in alignment with the TSF Management Policy
3 (2022: 3)	Major incident causing loss of life and property damage	Climate change is increasing the occurrence and intensity of extreme weather events, like intense precipitation which causes flooding. This could also result in further negative impacts like complete power failure, mud-rush, and infrastructure destruction or damage.	• Drowning • Destruction of infrastructure and property loss • Environmental damage • Significant reputational impacts, penalties, fines or sanctions • Litigation • Financial loss • Mine stoppages	• Hydrological and flood modelling plans • ICMM's Critical Control Management programme • Climate change risk and vulnerability assessments for operations, TSFs and water infrastructure • Operational risk management process • Operational flood control measures • Emergency evacuation and flooding procedures • Insurance risk engineering surveys and recommendations

Physical risks

Update on 2021 climate change risk and vulnerability assessment

As part of our strategy to identify and reduce our vulnerability to the impacts of climate change, Gold Fields conducts a comprehensive climate change risk and vulnerability assessment (CCRVA) in each of our countries every five years. The second round of CCRVAs was conducted at all our mines during 2021, as reported in our 2022 CCR. The Salares Norte project carried out its first CCRVA that year. The initial assessments followed the ICMM methodology to increase the resilience of Gold Fields, our operations, the value chain and local communities, as set out in the "Adapting to a changing climate" report.

In terms of the methodology, risk is determined by the severity and the probability of an uncertain future event. Vulnerability evaluates the degree to which a system is incapable of coping with adverse effects of climate change. The vulnerability of a system is determined by the exposure to the climate change impact, the sensitivity of the system and its capacity to adapt. We have not conducted any scenario analyses as part of our climate change risk and vulnerability assessments as of yet.

Progress on the adaptation actions that our mines and projects implemented in 2023 is detailed below:

Dimension	Risk	Adaptation action
Australia – Gruyere, Granny Smith, St Ives and Agnew		
Core operations	• Adequacy of flood management and storage capacities to protect people and infrastructure.	■ Aligned flood management protocols to a critical control management approach ■ Designing verification process for flood management ■ Reviewed surge capacity in light of in-pit waste rock disposal ■ Integrated long-term modelling into closure planning for appropriate structures ■ Revise risk to consider impacts broader than flooding, for example high wind, lightning and high temperatures
	• Declining availability of process water in terms of suitable quality and quantity	■ Developing and reviewing water balances for all sites to lift focus on mining activities, linked to water management plans ■ Reviewed life-of-mine water risk assessments for all sites (annually) ■ Included water in strategic plans ■ Concluded water source and capacity studies at all operations
	• Ventilation requirements increase as mines move deeper and ambient temperature rises	■ Implemented the Innovation and Technology strategy, with regular reviews ■ Participated and provided input into the EMC ■ Investigating and trialling BEVs for underground operations ■ Continuing to advance investigations and deployment of remote technologies ■ Investigating ventilation-on-demand technologies
	• Tailings storage facility stability during periods of extreme rainfall	■ Completed buttress works at Granny Smith's TSF ■ Completed drainage works at Gruyere's TSF ■ Utilised in-pit tailings where possible ■ Aligning with GISTM requirements ■ Simulating closure modelling scenarios to include long-term stability assessment and GISTM requirements
	• Bushfire impact on infrastructure, supply and safety	■ Reviewed site Critical Hazard Standards to ensure appropriate coverage of bushfire risk ■ Reviewed site-based fire management plans ■ Reviewed at-risk infrastructure ■ Ensured mutual aid agreements are in place at all sites ■ Implementing weatherzone system and predictive capacity at all sites ■ Participate in the Goldfields Voluntary Regional Organisation of Councils' work on climate change ■ Implemented EMQnet system for crisis management
	• Energy consumption increases to cool equipment and workplaces	■ Aligned with ISO 50001 standard ■ Developed energy management plans for all sites inclusive of a focus on energy efficiency, which are reviewed annually ■ Implementing technology strategy to reduce heat loading ■ Transitioning energy sources to renewable energy

Status

■ Completed ■ In progress ■ Ongoing ■ Planned

Physical risks continued

Dimension	Risk	Adaptation action
Australia – Gruyere, Granny Smith, St Ives and Agnew continued		
Value chain	• Government restricting access to water	■ Implemented water management strategies, which are reviewed annually ■ Broadening water balance focus to mining activity with linked water management plans ■ Identified all potential water sources with a view to obtain regulatory approval ■ Included water in strategic plans ■ Assessing treatment technologies ■ Established water working groups

Broader network Natural and social environment	• Societal pressure to address climate change	■ Mapping out 30% emissions reductions by 2030 aligned to current strategic plans with ongoing reviews including:
		  ■ Approved the St Ives renewables project with a 73% renewable electricity component
		  ■ Assessing feasibility of extending Agnew renewable energy fraction to above 70%
		  ■ Investigating inclusion of additional wind power at Granny Smith
		  ■ Commissioning Gruyere solar plant
		■ Utilising the existing government engagement plan to emphasise Gold Fields' approaches and success on climate change
		■ Participating in the Chamber of Minerals and Energy structures and ensure Gold Fields content within the campaigns
		■ Nature-based strategy and resourcing

South Africa – South Deep		
Core operations	• Increase in intensity and variability of rainstorms resulting in unauthorised discharge into the Leeuspruit river	■ All water dams have been designed to consider one-in-50-year year rainfall events ■ Lining and increasing capacity of the old return water dam
	• Increase in drought periods reducing on-site water • Water flows which result in increased demand for water from the public utility, increasing operational costs • Increase in drought periods could render the public utility unable to supply the required volumes of water	■ Reducing the use of public utility water through reverse osmosis plants ■ Completed 1ML/day of fissure water treatment project after going online in 2022 ■ Increased reverse osmosis plant recovery capacity in 2022 from 1.8ML/day to 2.2ML/day ■ Captured surface water runoff for reuse ■ Convert to thickened tailings as feed to the TSF ■ Increasing and improving water storage capacity on mine ■ Installed ratio and control valves to minimise pressure on the supply line to mining areas ■ Installed underground pressure-reducing valves on the public water pipe in 2022, reducing overall consumption by almost 50% ■ Installing instrumentation on the service water network to enable better monitoring and troubleshooting
Value chain	• An increase in droughts and water stress which could disrupt electricity supply or cause electricity prices to increase	■ Constructed and commissioned a 50MW solar plant ■ Planning additional renewables electricity sources ■ Planning ISO 50001 certification
Broader network Natural and social environment	• Increase in temperatures and heatwaves resulting in increased water demand by Thusanang, which could result in community volatility and increased dependence on South Deep	■ Continuous engagement with the Rand West local municipality ■ Included Thusanang water infrastructure in Rand West City Integrated Development Plan

Status

■ Completed ■ In progress ■ Ongoing ■ Planned

Physical risks continued

Dimension	Risk	Adaptation action
Ghana - Tarkwa and Damang		
Core operations	• Larger volumes of mine water and increased pit flooding and pumping with associated increased operational cost	■ Continuing to mine deeper in the dry season to compensate for limitations during the rainy season ■ Continuing to incorporate impact of weather on operational continuity and annual budgeting for both operations ■ Increasing stockpiling to last approximately 28 days
	• Increased discomfort experienced and risk of heat-related illnesses • Decreased water quality available for processing purposes	■ Providing for increased operating cost from energy usage in hot seasons ■ Hybrid-solar powered air-conditioning units in offices ■ Conducting frequent health checks, especially during hot periods ■ Educating employees on heat stress, malaria and other health issues resulting from climate change impacts ■ Increasing water recycling and treatment to improve water quality and potable water available to local communities and for processing purposes ■ Implementing water saving programmes among workforce and communities
Value chain	• Weather-related delays in transport of materials, critical equipment and spares	■ Ensuring stocking of critical spare parts (especially pumps and dewatering equipment) to minimise operational stoppages ■ Maintaining on-site diesel storage facilities at the required levels ■ Diversifying the energy mix currently used by both mines to include other small scale energy sources (for example, solar panels, heat recovery measures and other energy efficiency methods) ■ Regularly monitor road-side waterways, especially during the rainy season ■ Implement a regional green/sustainable procurement guideline to enhance material use efficiency, reduce wastes and facilitate a circular economy
Broader network Natural and social environment	• Increased vulnerability of host communities due to impacts of climate change, including increased dependency on Gold Fields for service provision and financial support during crises	■ Educating local communities on climate changes and impacts ■ Increasing the adaptive capacity of communities by providing basic services (via the local government or municipality) such as electricity, potable water, sports and health facilities, educational systems, road networks and ablution facilities ■ Rolling-out community malaria treatment programmes ■ Assisting community economy through horticultural education and encouraging youth involvement in agriculture projects ■ Providing continued support and involvement in agricultural activities run by locals – engage with local communities on the potential shift in seasons ■ Increasing consideration for thriving and climate resilient crops
Peru - Cerro Corona		
Core operations	• Increase in intensity of rainfall may affect slope stability	■ Monitor ground water levels, piezometric ground water pressure, pumping capacity, water treatment capacity and tailings storage capacity ■ Slope stability monitoring system in place
	• Operational stoppage caused by interruption of concentrate transport to port due to landslides	■ Increased concentrate storage capacity on-site and at the port
	• Extreme events (floods/droughts) could impact revegetation at closure	■ Ensure a feasible revegetation plan is designed for Cerro Corona's rehabilitation programme ■ Evaluate climate change impact on TSF design
Value chain	• Interruption of provision of supplies	■ Ensured available alternative routes in fairly good condition for the delivery of products ■ Ensured availability of diesel storage, with stock to last up to 10 days ■ Postponed construction works at the dam wall during the rainy season and resumed during the dry season
Broader network Natural and social environment	• Droughts could make local farmers resentful of mine water supplies • Poverty and literacy level may hamper ability of local community to build resilience	■ Implement projects to improve water supply to the local community, including water treatment and harvesting ■ Invest in community education initiatives

Status

■ Completed ■ In progress ■ Ongoing ■ Planned

Transition risks

Governments have responded to the climate crisis in various ways. The table below lists the climate-related policies, legislation and Nationally Determined Contributions (NDCs) in our countries of operation. NDCs are integral to the Paris Agreement and outline each country's targets to reduce national emissions.

Another significant transition risk is the escalating global disclosure and reporting landscape. The final sustainability and climate disclosure standards were released by the IFRS Foundation's ISSB as the global reporting baseline in June 2023. Shortly thereafter, in September 2023, the final Recommendations and Framework of the Taskforce on Nature-related Financial Disclosures (TNFD) were published, which serve as a global guideline for corporates to identify, assess and report on their material nature-related dependencies, impacts, risks and opportunities. A further significant development is the release of the long-awaited US SEC Enhancement and Standardization of Climate-related Disclosures: Final Rules.

Since Gold Fields has been reporting against the TCFD recommendations for some years already, and the above-mentioned standards, frameworks and rules have all incorporated the TCFD recommendations, we are well placed to meet the more stringent disclosure requirements to enable quality decision-making by our shareholders and other key stakeholders.

Key legislation	Policy and regulations	Carbon tax	NDCs	Gold Fields' response
Australia				
• Renewable Energy (Electricity) Act, 2000 • Climate Change Act, 2022 • National Greenhouse and Energy Reporting Act, 2007	• Climate Solutions Package, 2019 • National Hydrogen Strategy, 2019 • Emission Reduction Fund and Safeguard Mechanism, 2014, effective 2023	• No carbon tax per se, but the Safeguard Mechanism acts as an pricing scheme, whereby facilities emitting greenhouse gases above their baseline have to offset these excess emissions	• Target of net-zero emissions by 2050 • Reduce emissions by 43% below 2005 levels by 2030	• Continued implementation of renewable energy at all four mines • Studies on alternative forms of material movement • Participated in EMC • Trialled zero-emission vehicles
South Africa				
• National Climate Change Bill • Carbon Tax Act, 2019	• National Climate Change Adaptation Strategy, 2020 • Sectoral Emission Targets Framework and company-level carbon budget allocation, expected 2024	• Phase 1 of carbon tax regime taxes primary emissions, with no liability to date. R159/t CO_2e applies to entities that breach the 100kt threshold • Phase 1 extended until end-2025 • Pass-through tax on cement	• Fixed-level target range of 398Mt – 510Mt CO_2e reductions by 2025; 350Mt – 420Mt CO_2e reductions by 2030	• Commissioned Khanyisa solar plant in 2022 • Trialled zero-emission underground vehicle • Commenced wind turbine trials
Ghana				
• Renewable Energy Act, 2011	• National Climate Change Policy, 2013 • National Adaptation Plan Framework, 2018 • Ghana Renewable Energy Master Plan, 2019 • Ghana's Framework on International Carbon Markets and Non-market Approaches, 2022	• Emissions Levy Bill, 2023 • When the Bill is assented by the President, the Carbon Dioxide Emission Tax for motorcycles and tricycles will be GH₵75 per year, while motor vehicles, buses and coaches up to 3000cc will pay GH₵150 per year. Cargo cars and articulated trucks will pay GH₵300 per year	• Fixed-level target range of 8.5Mt CO_2e to 16.7Mt CO_2e reduction by 2025 and 24.6Mt CO_2e to 39.4Mt CO_2e reduction by 2030	• Upgraded to combined cycle gas turbines at Tarkwa • Conducted studies into electric fleet and diesel replacement • Started exploring Nature-based climate solutions by completing a carbon stock assessment in 2023 • Collaborated with a local university to establish a 13.75ha arboretum as part of its community initiative and climate adaptation • Collaboration with the University of Ghana's Centre for Climate Change and Sustainability Studies

Transition risks continued

Key legislation	Policy and regulations	Carbon tax	NDCs	Gold Fields' response
Chile				
• Law 20.780, 2014 (green tax on fixed sources of pollutants, including CO_2) • Climate Change Framework Law, 2022 • Promotion of expansion of energy matrix through unconventional renewable energies 2008	• Long-term Climate Strategy, 2021 • National Green Hydrogen Strategy, 2020 • Sectoral mitigation and adaptation plans	• Carbon tax of US$5/t CO_2e will apply to entities that emit 2,500t CO_2e and/or 100t of particulate matter from combustion processes from 2023 onward	• Carbon neutrality by 2050 • GHG emissions that do not exceed 1,100Mt CO_2e between 2020 and 2030, with a peak by 2025 and GHG level of 95Mt CO_2e by 2030	• Salares Norte's 9.9MW solar plant to be commissioned in 2025
Peru				
• Framework Law on Climate Change, 2018 • Energy Efficiency Act, 2007 • Regulation of the Framework Law on Climate Change, 2019	• National Climate Change strategy, 2015 • National Strategy on Forests and Climate Change, 2016 • Voluntary carbon footprint reporting • Pollutants Release and Transfer Register 2021 • National Plan for Adaptation to Climate Change to 2030 and 2050, 2021	• No explicit carbon tax	• Fixed-level target range of 208.8Mt CO_2e (unconditional) and 179.0Mt CO_2e (conditional) by 2030	• Procured renewable energy from national grid • Hydropower allocation classified as renewable energy by the international REC Standard • Updated TSF closure design based on climate change projections for Cerro Corona

2023 performance against targets

IN THIS SECTION

The tailings dam at our Cerro Corona mine in Peru

Energy and carbon management

Almost 100% of Gold Fields' direct (Scope 1) emissions are energy-related (and 100% of our grid electricity (Scope 2) emissions). Managing our energy therefore plays a significant role in decarbonising our carbon footprint and achieving our Paris Agreement-aligned target of reaching net zero by 2050. Other energy priorities include security of supply, cost-effective electricity and reducing energy consumption – all of which require a consistent approach to energy management.

Our operations in Ghana and Peru were certified to the ISO 50001 energy management standard in 2020 and 2019, respectively. During 2023, Gold Fields' Australia operations were also successfully certified to the standard. In doing this, we already experienced energy cost savings, improved energy efficiency, and reduced energy use and emissions across our operations. Maintaining and improving our energy management are underpinned by a robust ISO 50001-based training schedule rolled out across the regions. Each region has its own energy saving targets which are continually tracked and verified. The measurement and verifications models applied are based on the ISO 50001 management system to ensure best practice and consistency across the regions. New energy projects across the regions are reviewed for approval based on the Group Energy Protocol, and progress is captured on the Group reporting platform.

The salient energy and carbon performance measurements compared to 2022 and against targets where applicable are set out below.

	2023 actual	2022 actual	Variance	Target	Comment
Energy performance					
Total energy consumption	**14.0PJ**[RA]	14.1PJ	(0.8)%		
Renewable electricity	**17%**	13%	28%		Commissioning of renewable electricity projects results in step changes in performance. The projects at Gruyere and South Deep, commissioned in 2022, enjoyed a full year of production in 2023
Energy intensity	**5.66GJ/oz**	5.49GJ/oz	3%		
Amount spent on energy and emissions savings initiatives	**US$8m**	US$45m			
Energy savings through initiatives	**1.27PJ**[RA]	1.08PJ	18%		
Energy spend	**US$405m**	US$424m	(4)%		Lower oil prices and increased renewables resulted in reduced energy costs in 2023
Carbon performance					
Scope 1 and 2	**1,632kt CO_2e**[RA]	1,716kt CO_2e	(5)%	Scope 1 and 2 emission reductions from 2016 baseline: 2023: 10% absolute; 4% net 2024: 19% absolute; 6% net 2030: 50% absolute; 30% net	Absolute emissions were 12% below 2016, ahead of the 2023 target. Net emissions were 4% below 2016, on target for 2023, on the back of increased renewable electricity
Scope 3	**950kt CO_2e**[RA]	980kt CO_2e[LA] (restated)	(3)%	2030: 10% reduction from 2022 baseline	
Scope 1 and 2 emissions intensity	**656kg CO_2e/oz**	668kg CO_2e/oz	(2)%	2030: <423kg CO_2e/oz	The emissions intensity was less than the increase in energy intensity due to the increase in the renewable electricity fraction
Scope 1 and 2 emissions reduction through initiatives	**201kt CO_2e**[RA]	302kt CO_2e	(33)%	2023: 172kt CO_2e 2024: 182kt CO_2e	The emissions factors of the electricity plants in Ghana are now higher than the Ghana grid emissions factor. While they continue to provide energy security, they do not currently reduce our emissions against the baseline

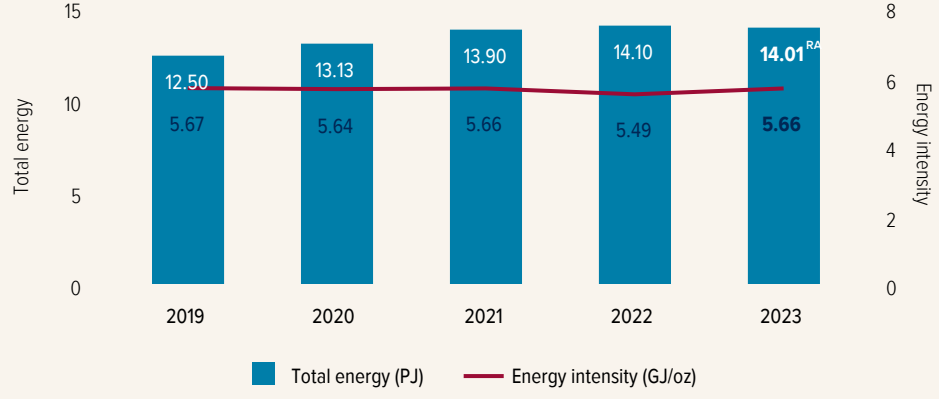
Energy and carbon management continued

Regional energy efficiency projects and initiatives[1]

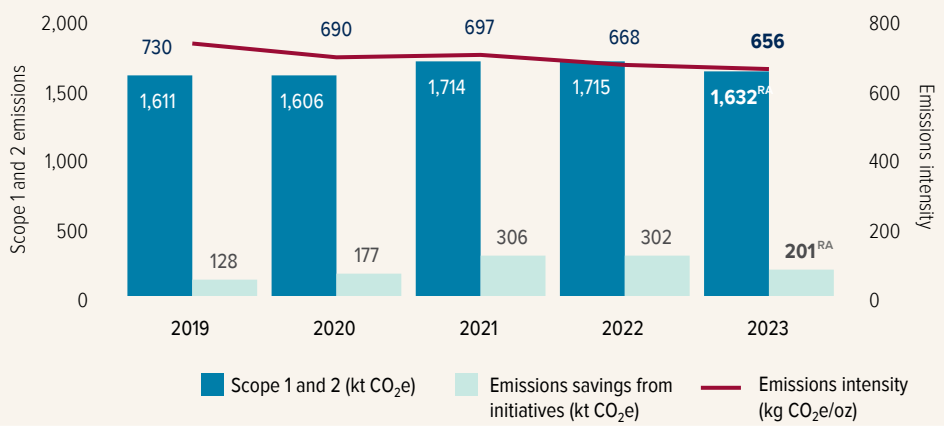
Country and site	Projects and initiatives	Energy saving (TJ)	Carbon saving (kt CO_2e)
South Africa			
South Deep	Clipping South Shaft fans	3.19	0.92
	Automatic dosing in plant – saving on compressed air previously required to operate the plant	16.87	4.87
	Hot water bypass – recirculation of service water reducing pumping requirements	17.65	5.10
	Boiler room upgrade – installation of efficient boilers for the change houses reducing energy required for heating of water	5.05	1.46
Ghana			
Damang	Variable speed drives installation for tailings and ball mill discharge pumps	23.56	4.42
Tarkwa	LED illumination – replace existing lights with LED lights	0.32	0.05
	Electric pumps – fuel switch initiative (fuel-switching initiatives use low-carbon fuels with the same energy output but lower carbon emissions)		0.46
	NG Elution – fuel switch initiative		2.45
	Electrification of tyre shop – fuel switch initiative		0.40
Peru			
Cerro Corona	Optimising haulage process – change of 24 truck fleet to 55 tonnes	21.10	1.58
Australia			
Gruyere	Komatsu 830E roll-out – electric vehicle	19.51	1.36

[1] *Relative asset energy and carbon savings differ because of the differing energy mixes at our assets*

Group energy performance



Group emissions performance



Water stewardship

Access to water is a fundamental human right and vital resource for Gold Fields' mining and ore processing activities. Our host communities, broader environment and other industries in the catchment areas where we operate also depend on a secure water supply. It is therefore essential that we manage our impacts on water users and resources responsibly. We are committed to responsible water stewardship as one of our six core 2030 ESG targets.

We started our water stewardship journey in 2016, which included implementing predictive and dynamic water balances. We then implemented the ICMM Water Position Statement and Water Reporting Guideline during 2017 and 2018. In 2019, we developed Group and regional water strategies for 2020 – 2025, which are supported by three-year regional water management plans. We further developed 2030 Water Stewardship Strategy and Framework.

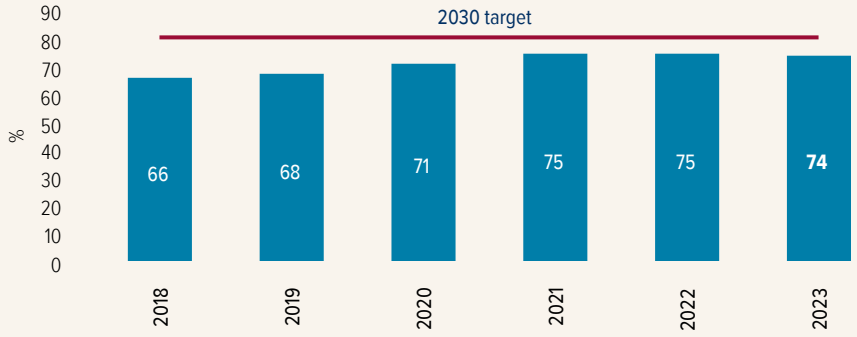
The ICMM published its Water Stewardship Maturity Framework (WSMF) in September 2023 to support leadership in water stewardship by its member companies. In 2023, our operations completed comprehensive self-assessments using the ICMM's maturity tool. We also appointed an independent third party to verify Gold Fields' water stewardship – including our Group and regional water management practices – against the ICMM's framework.

The WSMF comprises five components: governance and strategy, water context, integrate water into business planning and decision-making, performance and management, and transparency and reporting. These components are assessed against three levels of maturity – basic, advanced and leading.

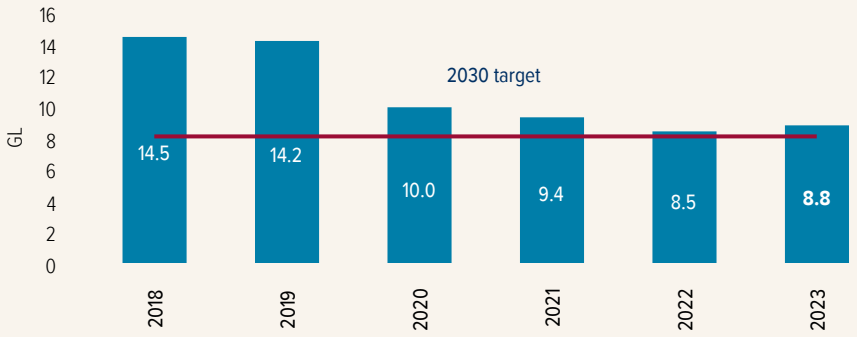
Based on our self-assessments, the maturity of our regions was classified as "advanced" across all five components. This was verified by the independent third party, who also confirmed the maturity of our regions and corporate at "advanced" level. The third party also identified valuable areas for improvement which our regions incorporated into their respective tactical plans for continued improvement.

The two water stewardship targets guide Gold Fields' water efficiency as part of the 2030 ESG targets. These targets are based on a 2018 baseline and are 80% water recycled/reused of total water use and 45% reduction in freshwater use.

Water recycled/reused



Freshwater withdrawal



Water stewardship continued

Regional water stewardship strategies and tactical plans

Country	Peru (Situated in the Jalca zone, with semi-humid cold climate with annual rainfall of 1,400mm)	Ghana (situated within the Ankobra Basin, with high intensity rainfall and excess rainwater)	South Africa (densely populated, highly industrialised semi-arid region with substantial reliance on Vaal River Catchment)	Australia (semi-arid region with low rainfall and high evaporation)
Sites	Cerro Corona	Tarkwa Damang	South Deep	Gruyere, Granny Smith Agnew, St Ives
Water risk profile Low Moderate High	Water quality Social water risk Security of supply Regulatory compliance	Extreme weather (flooding) Water quality and contamination Social water risk Security of freshwater supply Regulatory compliance	Water quality Regulatory compliance Security of supply Social water risk	Water quality sources Extreme weather (flooding) Security of supply Social water risk Regulatory compliance
Goal 1: Water efficiency	a. Water management certification b. International best practices GISTM/ICMM c. Assure water supply for the operation d. Optimise water consumption	a. Maintain recycling and freshwater successes b. Account for all water resources, uses and infrastructure c. Maintain active water balance d. Mitigate long-term, post-closure water management issues	a. Reduce freshwater wastage b. Use fit-for-purpose water for cost effectiveness c. Recycle and treatment where possible	a. Water business case b. Cost-effective use efficiency c. Recycling and fit-for-purpose water use d. Proactive water quality management
Goal 2: Climate adaptation and resilience	a. Manage excess water	a. Climate risk and vulnerability assessments b. Flood modelling and hotspot evaluations c. Restore/manage wetlands, natural courses of streams d. Nature-based climate solutions e. Upgrade drainage and erosion control systems	a. Determine future climatic condition and related risks b. Investigate access to alternative sources of water c. Develop water conservation and demand programme	a. Integrated water management and business planning b. Minimised water risk exposure c. Effective water management systems d. Identify and understand climate vulnerability
Goal 3: Catchment management	a. Socio-environmental aspects in water management and involvement with stakeholders	a. Catchment-based water management action plans b. Consistent and transparent engagement c. Security of supply for downstream users d. Meaningful partnerships to address common catchment risks	a. Transparent communication b. Implement shared value water initiatives c. Facilitate partnership with host communities	a. Transparent engagement b. Develop stakeholder partnerships c. Pursue shared value
Goal 4: Operational compliance and protecting water quality	Protecting water quality a. Water quality management b. Water management in closure plan c. Hydrogeology d. Management of legal obligations and commitments	Operational compliance a. Upgrade Tarkwa treatment plant b. Emergency water management plan c. Assess capacity of existing structures for stormwater and flood management d. Monitor groundwater levels e. Hydrogeological study and calibrated groundwater model	Operational compliance a. Maintain and operate water systems b. Regulatory compliance c. Proactive water management controls d. Pollution prevention	a. The vast majority of the water at our Australian operations is highly saline, and is of limited use and cannot be treated
Projects/ initiatives	a. Construction of TSF spillway for post-closure water management b. Work towards achieving Blue Certificate from Water Authority c. Consideration of green infrastructure and nature-based solutions	a. Reuse process water at Tarkwa Genser gas plant and for mixing chemicals	a. Increase reverse osmosis capacity by 3ML/day to produce 5.2ML/day b. Upgrade old return water dams c. Recycling of treated effluent d. Planned wetland feasibility study	a. Review operational probabilistic water balances b. Review life-of-mine water strategy c. Implement water management plans d. Internal water management audits

Tailings storage facility management

2030 targets:

- All remaining TSFs conform with the GISTM by 2025
- Maintain conformance with the GISTM
- Reduce the number of active upstream-raised TSFs from five to three

Conformance with the GISTM

The ICMM launched the GISTM in August 2020 as part of its vision to improve sustainable development in the mining and metals industry. The GISTM provides a new, international best practice for governance, engineering, environmental and social aspects of tailings management and emphasises the importance of proper and meaningful engagement with affected stakeholders throughout the lifecycle of the tailings facility.

Member companies had until August 2023 to fully comply with the requirements for tailings facilities classified as having "extreme" or "very high" potential consequences, and August 2025 for all other facilities. The GISTM framework comprises six key topics to assist companies in achieving and maintaining safe and stable TSFs throughout their lifecycle, including the design, operation, closure and post-closure.

Golds Fields played an active part in the conceptualisation of the GISTM and fully embraces the step-change in tailings safety that the GISTM will bring about.

Our Cerro Corona TSF has an "extreme" consequence category rating, and Tarkwa's TSFs 1, 2 and 3 are "very high" consequence classification facilities. Consequently, the teams at Cerro Corona and Tarkwa spent the last three years working diligently to conform with the GISTM requirements. Achieving full conformance requires the completion of over 220 physical deliverables and documents, each of which constitutes an independent project. Tarkwa and Cerro Corona achieved 85% conformance with the 219 requirement parts of the GISTM. It is key to note is that all significant dam safety and environmental-related requirements were identified, addressed and effectively managed.

For Tarkwa's GISTM Annual Disclosure Report, refer to https://www.goldfields.com/pdf/sustainbility/sustainability-reporting/gistm/tarkwa-gistm-disclosure-report-2023.pdf and, for Cerro Corona, refer to https://www.goldfields.com/pdf/sustainbility/sustainability-reporting/gistm/cerro-corona-2023-disclosure-report-2023.pdf. Future GISTM disclosures will be made in March each year as part of our annual reporting.

Climate change risk assessment

Gold Fields appointed an independent third party to conduct a baseline meteorological and projected climate change study in 2023, including the development of a climate change risk assessment framework for consistent, but site-specific, application. Data was sourced from site-specific meteorological stations and bolstered with regional and national meteorological data. These records were augmented with climatic gridded models and worldwide physical/mathematical models for the whole planet or a specific region.

The baseline study and resulting data modelling included a few parameters, namely total precipitation, air temperature and dew point temperature, relative humidity, wind speed, short-wave solar radiation and evaporation. The framework enabled Gold Fields to identify and evaluate potential hazards associated with climate change, which could impact existing or planned TSFs and related infrastructure.

Since the Cerro Corona and Tarkwa TSFs are unique in their consequence category classifications, these climate change risk assessment findings were incorporated into the ongoing design and design and risk management plans of the TSFs in accordance with GISTM requirements.

Likewise, the vulnerability (risk) or resilience (margin) in terms of TSF dam safety will be assessed for all remaining TSFs, the findings of which will be incorporated into all new designs and further studies to meet the GISTM deadline of August 2025.

During 2023, Gold Fields commissioned a review of the impact of severe weather on our TSFs and how we can improve them to prevent possible catastrophic failures. The study comprised two phases, namely:

- Phase 1: Developing a framework for evaluating climate change risk that can be applied across all Gold Fields' operations and projects
- Phase 2: Developing a climate baseline and evaluating the effects of climate change on the different sites and infrastructure. New TSF studies and designs are already considering the latest climate change predictions

Nature

There is a growing global realisation, supported by scientific research, that nature is declining. People and the natural environment depend on ecosystems and the services these provide for sustained health and wellbeing, as well as economic prosperity. Accordingly, the loss of nature is a serious global challenge, one closely interlinked with climate change and human development inequalities. Addressing these connected global challenges requires an integrated whole-of-society approach.

As a member of the ICMM, Gold Fields takes guidance from their thought leadership and, specifically, we aim to incorporate the newly released Position Statement on Nature into our governance, decision-making and disclosures going forward. Specifically we will consider the interconnectedness and linkages between climate and nature as we progress with our sustainable development journey. From a practical perspective, Gold Fields chaired the ICMM Working Group that developed the Position Statement.

As part of Gold Fields' undertaking to incorporate the commitments of the ICMM Position Statement on Nature, we are preparing a Group nature baseline risk assessment, which considers Gold Fields' interface with biomes, environmental assets and ecosystem services at a regional landscape level. This assessment will identify high risk, dependency and/or key priority nature-related focus areas and establish the baseline for our nature-related work going forward.

Our climate strategy, including decarbonisation commitments and efforts, water stewardship strategy and stakeholder value creation priorities will systematically incorporate these risks, dependencies and focus areas.

What is nature?

Nature represents all life and existing systems on Earth, which comprise four interdependent physical realms that interact with society, being land, freshwater, oceans and the atmosphere. Biodiversity is the variability or diversity among all living things.

South African biodiversity initiatives

South Deep reviewed and updated its Biodiversity Management Action Plan. Furthermore, the mine initiated a project to introduce bees, establishing an apiary site comprising 500,000 bees (10 beehives) around the controlled area. The project was expanded by introducing 40 additional beehives.

The second phase of the South Deep mini-forest continued with the planting of 1,000 indigenous trees after the successful completion of phase 1, during which 200 indigenous trees were planted.

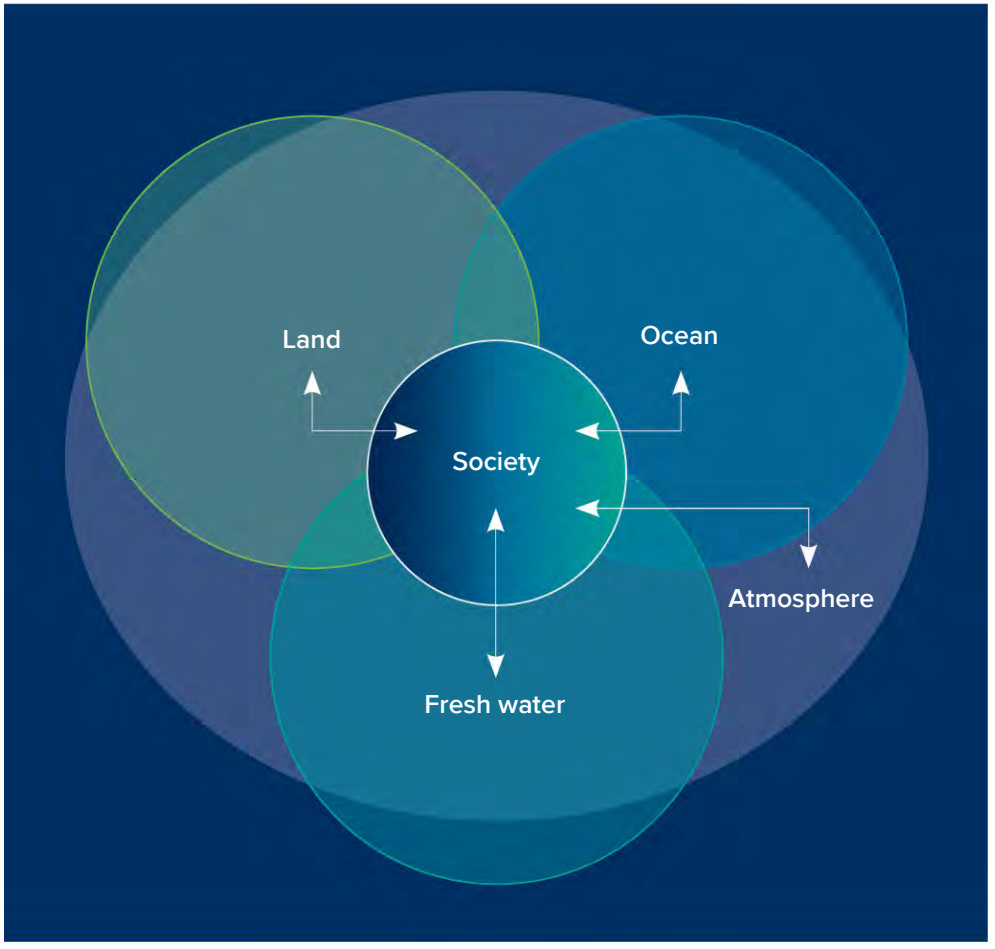
Nature-based solutions

Nature-based solutions are sustainable management actions taken to address issues such as climate change, biodiversity and water security. Gold Fields is incorporating nature-based solutions into its climate change mitigation and adaption strategies.

On all sites, progressive rehabilitation is balanced between increasing biodiversity and community agricultural aspects. With considerable seasonal rainfall events, South Deep, Tarkwa and Damang have constructed wetlands to manage surface water flow and increase biodiversity.

Tarkwa is currently trialling a 21.8ha arboretum of IUCN red-listed and protected tree species to promote conservation and trial carbon sequestration potential. If successful, this programme may be expanded across the area managed by Gold Fields Ghana.

Nature encompasses four physical realms, all interlinked with society



Nature continued

ICMM Position Statement on Nature

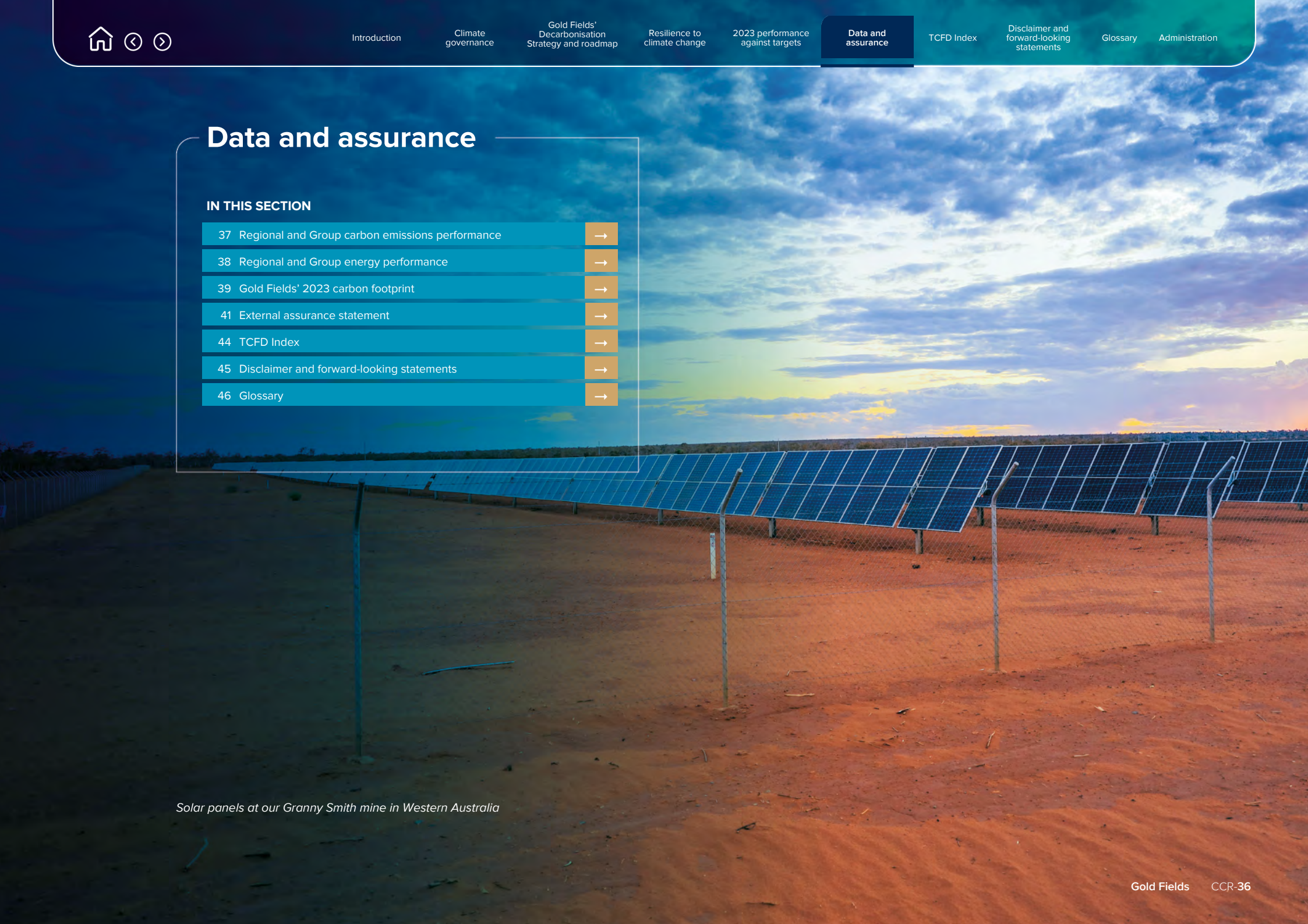
In December 2023 the ICMM released their Position Statement on Nature effective 1 January 2024, which drew on, and is closely aligned with international best practice, including inter alia the Convention on Biological Diversity, the TNFD and the Kunming-Montreal Biodiversity Framework.

The commitments contained in the position statement apply to activities across all four realms of nature, being land, freshwater, oceans and the atmosphere, and cover the four spheres of influence underpinned by good governance and transparent disclosure, as more fully set out in the table below. (Optionality has been incorporated in the landscape and systems transformation commitments to reflect the diversity of member operations, locations and the different means of contributing to a nature positive future.)

Sphere of influence	Description	Summary of commitments
Commitments per sphere of influence		
DIRECT OPERATIONS	Mining and operational activities within Gold Fields' control	Stewardship for positive intergenerational and nature change, including: • Respecting legally designated protected areas and not entering UNESCO World Heritage sites • Assessing and addressing material risks and impacts to biodiversity and ecosystem services
VALUE CHAIN	Upstream supply chain and downstream logistics and use of products	Partnerships in value chain for nature-focused action, including: • Identifying key supplier sourcing locations and product distribution routes with significant nature-related risk • Supporting initiatives or partnerships to help halt and reverse nature loss in the Company's value chain
LANDSCAPE	The ecosystems within which Gold Fields operates	Collaboration and capacity-building with local and regional partners for healthy and resilient ecosystems, including: • Assisting to restore, conserve and regenerate terrestrial, inland water areas and marine and coastal areas under conservation • Supporting and proactively engaging in halting and reversing nature loss in partnership with key stakeholders • Participating in collaborative initiatives repurposing and harnessing value from abandoned or legacy mine sites and mining waste streams
SYSTEMS TRANSFORMATION	The wider systems causing nature loss, and serving as opportunities for nature recovery, such as financial systems and production systems	Enabling environment conducive to wider nature positive change and transformation, including: • Contributing to research initiatives to develop and share solutions to industry-wide nature challenges • Collaborating with data-sharing platforms to progressively increase and responsibly share relevant biodiversity and ecosystem monitoring data • Engaging and partnering with investors, financial institutions and other key stakeholders to support sustainable financing mechanisms
GOVERNANCE AND TRANSPARENCY	Integration of nature into strategy and business processes and transparent disclosure	Integration of nature into business decisions, processes and disclosure, including: • Integrating nature considerations into business decision-making tools and processes • Disclosing material nature-related impacts, dependencies, risks and opportunities for operations in priority locations • Developing consistent and robust metrics for reporting progress with stakeholders toward nature positive outcomes

Data and assurance

IN THIS SECTION



Solar panels at our Granny Smith mine in Western Australia

Regional and Group carbon emissions performance

GHG emissions

Direct (Scope 1) GHG emissions

CO_2e emissions (kt) (Scope 1)	2023	2022	2021
Australia	**452**	438	425
South Africa	**10**	10	9
Ghana	**265**	284	301
Americas	**51**	57	52
Group	**778**	789	787

Indirect (Scope 2) GHG emissions

CO_2e emissions (kt) (Scope 2)	2023	2022	2021
Australia	**109**	106	106
South Africa	**450**	506	493
Ghana	**295**	315	302
Americas	**0**	0	27
Group	**854**	927	928

Scope 1 and 2 GHG emissions

CO_2e emissions (kt) (Scope 1 and 2)	2023	2022	2021
Australia	**561**[RA]	544	531
South Africa	**460**[RA]	516	502
Ghana	**561**[RA]	599	603
Americas	**51**[RA]	57	79
Group	**1,632**[RA]	1,716	1,714

Other indirect (Scope 3) GHG emissions

CO_2e emissions (kt) (Scope 3[1])	2023	2022[2]	2021
Australia	**420**	410	245
South Africa	**111**	99	34
Ghana	**246**	285	209
Americas	**117**	96	54
Other	**56**	89	
Group	**950**[RA]	980[LA]	542

[1] *Scope 1 – 3 includes operations*
[2] *During 2023, Gold Fields undertook a baseline study of its 2022 Scope 3 emissions. This led to a significant rise in the Scope 3 emissions used as our baseline*

Emissions intensity (kg CO_2e/oz) based on Scope 1 and 2

Operations	2023	2022	2021
Australia	**459**	445	465
South Africa	**1,428**	1,574	1,715
Ghana	**797**	786	777
Americas	**211**	218	317
Group	**656**	669	697

Regional and Group energy performance

Electricity purchased (GWh)	**2023**	2022	2021
Australia	**197**	189	189
South Africa	**432**	477	465
Ghana	**472**	492	474
Americas	**152**	153	152
Group	**1,254**	1,311	1,280

Diesel consumption (ML)	**2023**	2022	2021
Australia	**68**	66	64
South Africa	**3**	4	3
Ghana	**94**	100	107
Americas	**18**	20	19
Group	**183**	190	193

Total energy consumption (PJ)	**2023**	2022	2021
Australia	**5.63**[RA]	5.40	5.21
South Africa	**1.96**[RA]	1.88	1.78
Ghana	**5.23**[RA]	5.53	5.69
Americas	**1.21**[RA]	1.29	1.23
Group	**14.01**[RA]	14.10	13.90

Energy intensity (GJ/oz produced)	**2023**	2022	2021
Australia	**4.65**	4.43	4.94
South Africa	**6.09**	5.73	6.10
Ghana	**7.43**	7.27	7.33
Americas	**5.04**	4.94	4.94
Group	**5.66**	5.49	5.66

Total energy costs (US$m)	**2023**	2022	2021 [1]
Australia	**153**	146	124
South Africa	**42**	45	43
Ghana	**240**	188	144
Americas	**42**	44	30
Group	**476**	424	341

[1] *Includes 100% energy costs for Gruyere, previously 50% was included*

Energy spend (% of opex)	**2023**	2022	2021
Australia	**16%**	17%	15%
South Africa	**13%**	14%	14%
Ghana	**27%**	31%	25%
Americas	**18%**	19%	16%
Group	**18%**	21 %	14 %

Gold Fields' 2023 carbon footprint

Scope 1 and 2 emissions (kt CO_2e)

	Scope 1 emissions										
Operation[1]	Diesel: haulage and other	Diesel: power generation	Petrol	Liquefied petroleum gas	Liquefied natural gas for power	Blasting agents	Pipeline natural gas for process	Acetylene	Total Scope 1 emissions	Total Scope 2 emissions	Total Scope 1 and 2 emissions
Australia	181	3		3	258	3	5	0.01	452	109	561[RA]
Gruyere JV	66	0.3		0.02	137	2	2		207		207
Granny Smith	33	1		1	86	0.3			122		122
St Ives	53			1		0.4			55	109	164
Agnew	28	1		0.8	36	0.4	3		69		69
South Africa	10					0.3		0.02	10	450	460[RA]
Ghana	247	7		3		4	5	0.02	265	295	561[RA]
Damang	33	7		3		0.3		0.01	43	88	131
Tarkwa	214			0.3		4	5	0.01	207	207	430
Americas	49		0.06	0.2		1			51		51[RA]
Group total	486	10	0.06	6	258	9	9	0.05	778	854	1,632[RA]

[1] *Excludes corporate and regional offices*

Gold Fields' 2023 carbon footprint continued

Scope 3 emissions (kt CO_2e)

	Upstream						Downstream					
	Purchased goods and services	Fuel and energy-related activities	Capital goods	Upstream transportation and distribution	Business travel	Waste generated in operations	Employee commuting	Downstream transportation and distribution	Processing of sold products	End of life treatment of sold products	Investments	Total
Australia region	**290**	**74**	**23**	**6**	**24**	**1**	**0.3**	**0.03**	**0.2**	**0.4**		**420**[RA]
St Ives	**103**	**23**	**6**	**1**	**0.7**	**0.2**	**0.3**	**0.006**	**0.07**	**0.1**		**135**
Agnew	**43**	**8**	**2**	**0.9**	**6**	**0.7**		**0.007**	**0.05**	**0.09**		**61**
Granny Smith	**59**	**13**	**7**	**3**	**6**	**0.1**		**0.007**	**0.05**	**0.1**		**89**
Gruyere JV	**82**	**24**	**8**	**1**	**5**	**0.1**		**0.006**	**0.06**	**0.1**		**120**
Perth	**3**	**6**		**0**	**6**							**15**
South Africa region	**69**	**26**	**15**	**0.2**	**0.01**	**0.5**	**0.5**	**0.03**	**0.1**	**0.2**		**111**[RA]
South Deep	**69**	**26**	**15**	**0.2**	**0.01**	**0.5**	**0.5**	**0.03**	**0.1**	**0.2**		**111**
Gold Fields Group Services		**0.002**										**0.02**
West Africa region	**172**	**65**	**4**	**4**	**0.3**	**0.3**	**0.7**	**0.09**	**0.1**	**0.3**		**246**[RA]
Tarkwa	**135**	**54**	**3**	**4**	**0.2**	**0.06**	**0.7**	**0.07**	**0.1**	**0.2**		**197**
Damang	**36**	**11**	**1**	**0.02**	**0.04**	**0.3**	**—**	**0.02**	**0.03**	**0.06**		**49**
Accra office		**0**										**0**
South America region	**60**	**10**	**2**	**12**	**0.9**	**0.2**	**0.7**	**12**	**20**	**0.05**		**117**[RA]
Cerro Corona	**60**	**10**	**2**	**12**	**0.9**	**0.2**	**0.7**	**12**	**20**	**0.05**		**117**
Lima		**0**										**0**
Asanko JV											**56**	**56**
Total	**590**	**174**	**43**	**22**	**25**	**2**	**2**	**12**	**20**	**1**	**56**	**950**[RA]

The following categories of Scope 3 emissions are zero:

Category	Comment
Upstream leased assets	Not reported, because assumed not to be material
Use of sold products	This is reported as zero because energy use after refining of gold is assumed to be negligible
Downstream leased assets	Not reported, because assumed not to be material
Franchises	No franchises, therefore zero

Independent Auditor's Assurance Report on the Selected Sustainability Information in Gold Fields Limited Climate Change Report

To the Directors of Gold Fields Limited

We have undertaken an assurance engagement in respect of the selected sustainability information, as described below, and presented in the 2023 Climate Change Report of Gold Fields Limited (the 'Company', "Gold Fields" or "you") for the year ended 31 December 2023 (the Report). This engagement was conducted by a multidisciplinary team including specialists with relevant experience in sustainability reporting.

Subject Matter

We have been engaged to provide a reasonable assurance opinion and a limited assurance conclusion on the selected sustainability information listed below. The selected sustainability information described below has been prepared in accordance with the Company's reporting criteria that accompanies the sustainability information on the relevant pages of the Report (the accompanying reporting criteria).

Reasonable assurance

Nr	Selected Sustainability Information	Unit of measurement	Boundary	Page Reference
Scope - Non-Financial Indicators Gold Fields Group				
1	Total CO_2-equivalent emissions, Scope 1 – 2	$ktCO_2e$	Gold Fields Group	5, 6, 29, 30, 37, 39
2	Total CO_2-equivalent emissions, Scope 3	$ktCO_2e$	Gold Fields Group	6, 29, 37, 40
3	Energy consumption	PJ	Gold Fields Group	5, 6, 29, 30, 38
4	Total CO_2-equivalent emissions avoided from initiatives	$ktCO_2e$	Gold Fields Group	5, 6, 29, 30
5	Total energy saved from initiatives	PJ	Gold Fields Group	29

Limited assurance

Nr	Selected Sustainability Information	Unit of measurement	Boundary	Page Reference
Scope – Non-Financial Indicators Gold Fields Group				
1	Total CO_2-equivalent emissions, Scope 3 – For the financial year ended 31 December 2022	$ktCO_2e$	Gold Fields Group	18, 19, 29, 37
2	Reduction of absolute Scope 1 and 2 carbon emissions (carbon abatement) through renewable projects	$ktCO_2e$	Gold Fields Group	13
3	Percentage of water recycled or reused	Percentage	Gold Fields Group	13

We refer to this information as the "selected sustainability information".

Management's responsibilities

The Executive Vice President: Sustainable Development, representing management and Gold Fields Limited, is responsible for the selection, preparation and presentation of the selected sustainability information in accordance with the accompanying reporting criteria as set out at www.goldfields.com/sustainability-performance.php (the "Reporting Criteria") .

This responsibility includes:

- the identification of stakeholders and stakeholder requirements, material issues, commitments with respect to sustainability performance, and
- the design, implementation and maintenance of internal control relevant to the preparation of the Report that is free from material misstatement, whether due to fraud or error.

Management are also responsible for determining the appropriateness of the measurement and reporting criteria in view of the intended users of the selected sustainability information and for ensuring that those criteria are publicly available to the Report users.

Independent Auditor's Assurance Report on the Selected Sustainability Information in Gold Fields Limited Climate Change Report continued

Inherent limitations

Non-financial performance information is subject to more inherent limitations than financial information, given the characteristics of the subject matter and the methods used for determining, calculating, sampling and estimating such information. The absence of a significant body of established practices on which to draw allows for the selection of different but acceptable measurement techniques which can result in materially different measurements and can impact comparability. Qualitative interpretations of relevance, materiality and the accuracy of data are subject to individual assumptions and judgements. The precision of different measurement techniques may also vary. Furthermore, the nature and methods used to determine such information, as well as the measurement criteria and the precision thereof, may change over time.

In particular, where the information relies on carbon and other emissions conversion factors derived by independent third parties, or internal laboratory results, our assurance work will not include examination of the derivation of those factors and other third party or laboratory information.

Our Independence and Quality Management

We have complied with the independence and other ethical requirements of the Code of Professional Conduct for Registered Auditors, issued by the Independent Regulatory Board for Auditors' (IRBA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. The IRBA Code is consistent with the corresponding sections of the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards).

The firm applies the International Standard on Quality Management 1, Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements, which requires the firm to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our responsibility

Our responsibility is to express either a reasonable assurance opinion or limited assurance conclusion on the selected sustainability information as set out in the Subject Matter paragraph, based on the procedures we have performed and the evidence we have obtained. We conducted our assurance engagement in accordance with the International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE 3000(Revised)), and, in respect of greenhouse gas emissions, International Standard on Assurance Engagements 3410, Assurance Engagements on Greenhouse Gas Statements (ISAE 3410) issued by the International Auditing and Assurance Standards Board. These Standards require that we plan and perform our engagement to obtain the appropriate level of assurance about whether the selected sustainability information are free from material misstatement.

The procedures performed in a limited assurance engagement vary in nature and timing, and are less in extent than for a reasonable assurance engagement. As a result the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

(a) Reasonable assurance

A reasonable assurance engagement in accordance with ISAE 3000 (Revised) ,and ISAE 3410, involves performing procedures to obtain evidence about the measurement of the selected sustainability information and related disclosures in the Report. The nature, timing and extent of procedures selected depend on the auditor's professional judgement, including the assessment of the risks of material misstatement of the selected sustainability information, whether due to fraud or error.

In making those risk assessments we have considered internal control relevant to the Company's preparation of the selected sustainability information. A reasonable assurance engagement also includes:

- Evaluating the appropriateness of quantification methods, reporting policies and internal guidelines used and the reasonableness of estimates made by the Company;
- Assessing the suitability in the circumstances of the Company's use of the applicable reporting criteria as a basis for preparing the selected sustainability information; and
- Evaluating the overall presentation of the selected sustainability performance information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our reasonable assurance opinion.

(b) Limited assurance

A limited assurance engagement undertaken in accordance with ISAE 3000 (Revised) ,and ISAE 3410, A limited assurance engagement undertaken in accordance with ISAE 3000 (Revised) ,and ISAE 3410, involves assessing the suitability in the circumstances of the Company's use of its reporting criteria as the basis of preparation for the selected sustainability information, assessing the risks of material misstatement of the selected sustainability information whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the selected sustainability information. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks. Accordingly, for the selected sustainability information where limited assurance was obtained, we do not express a reasonable assurance opinion about whether the Company's selected sustainability information have been prepared, in all material respects, in accordance with the accompanying reporting criteria.

Independent Auditor's Assurance Report on the Selected Sustainability Information in Gold Fields Limited Climate Change Report continued

The procedures we performed were based on our professional judgement and included inquiries, observation of processes followed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we:

- Interviewed management to obtain an understanding of the internal control environment, risk assessment process and information systems relevant to the sustainability reporting process;
- Inspected documentation to corroborate the statements of management in our interviews;
- Tested the processes and systems to generate, collate, aggregate, monitor and report the selected sustainability information;
- Performed a controls walkthrough of identified key controls;
- Inspected supporting documentation on a sample basis and performed analytical procedures to evaluate the data generation and reporting processes against the reporting criteria;
- Evaluated the reasonableness and appropriateness of significant estimates and judgments made by management in the preparation of the selected sustainability information; and
- Evaluated whether the selected sustainability information presented in the Report are consistent with our overall knowledge and experience of sustainability management and performance at the Company.

Reasonable Assurance Opinion and Limited Assurance Conclusion

(a) Reasonable assurance opinion

In our opinion and subject to the inherent limitations outlined elsewhere in this report, the selected sustainability information set out in the Subject Matter paragraph above for the year ended 31 December 2023 are prepared, in all material respects, in accordance with the reporting criteria.

(b) Limited assurance conclusion

Based on the procedures we have performed and the evidence we have obtained, and subject to the inherent limitations outlined elsewhere in this report, nothing has come to our attention that causes us to believe that the selected sustainability information as set out the Subject Matter paragraph above for the year ended 31 December 2023 are not prepared, in all material respects, in accordance with the reporting criteria.

Other Matter

The maintenance and integrity of Gold Fields Limited's website is the responsibility of Gold Fields Limited's management. Our procedures did not involve consideration of these matters and, accordingly we accept no responsibility for any changes to either the information in the Report or our independent assurance report that may have occurred since the initial date of presentation on Gold Fields Limited's website.

Restriction of liability

Our work has been undertaken to enable us to express a reasonable assurance opinion and limited assurance conclusion on the selected sustainability information to the directors of the Company in accordance with the terms of our engagement, and for no other purpose. We do not accept or assume liability to any party other than the Company, for our work, for this report, or for the conclusion we have reached.

PricewaterhouseCoopers Inc.

PricewaterhouseCoopers Inc.
Director: Oswald Wentworth
Registered Auditor

Johannesburg, South Africa

28 March 2024

TCFD Index

TCFD recommendation	Section in this report covering the recommendation	Linkages with other mainstream filings
Governance		
Disclosures on the JSE's governance around climate-related risks and opportunities		
Describe the board's oversight of climate-related risks and opportunities	Climate leadership and management, p10	IAR, p15 – 19
Describe management's role in assessing and managing climate-related risks and opportunities	Governance and management, p9	IAR, p21 – 23, 25 – 31, 55, 67 – 76, 78
Strategy		
Disclosures on actual and potential impacts of climate-related risks and opportunities on the organisation's business, strategy and financial planning where such information is material		
Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term	Climate risks and opportunities, p21 – 27	IAR, p21 – 23, 25 – 31, 68 – 76
Describe the impact of climate-related risks and opportunities on the organisation's business strategy and financial planning	Decarbonisation Strategy, p15 Electricity mix, p16	IAR, p21 – 23, 25 – 31, 55, 78
Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	Our climate change journey, p8 Decarbonisation Strategy, p15 Physical risks, p23 – 25	IAR, p70 – 72
Risk management		
Disclosures how the organisation identifies, assesses and manages climate-related risks		
Describe the organisation's processes for identifying and assessing climate-related risks	Climate risks and opportunities, p21 – 22 Water stewardship, p31 – 32 Tailings storage facility management, p33 Nature, p34 – 35	IAR, p25 – 31
Describe the organisation's process for managing climate-related risk	Climate risks and opportunities, p21 – 22 Climate-related policies and commitments, p11 – 13 Nature, p34 – 35	IAR, p25 – 31
Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management	Climate risks and opportunities, p21 – 22	IAR, p25 – 31
Metrics and targets		
Disclosures on the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material		
Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process	2023 highlights, p6 Decarbonisation Strategy, p15 Electricity mix, p16 Energy and carbon management, p29 – 30 Water stewardship, p31 – 32 Tailings storage facility management, p33 Nature, p34 – 35 Regional and Group performance, p37 – 38 Carbon footprint, p37 – 40	IAR, p25 – 31, 55, 67 – 76
Disclose Scope 1, Scope 2 and if appropriate Scope 3 GHG emissions and related risks	Energy and carbon management, p29 – 30 Carbon footprint, p37 – 40 Regional and Group performance, p37 – 40	IAR, p11, 55, 67, 70 – 72
Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets	2023 highlights, p6	IAR, p67, 70 – 72

Disclaimer and forward-looking statements

Disclaimer

This CCR contains data on Gold Fields' Scope 1, 2 and 3 GHG emissions. Data for Scope 1 and 2 emissions relates to Gold Fields' own activities and supplied heat, power and cooling, which are measured using data from its own systems and independently assured. Scope 3 emissions relate to other organisations' emissions and are therefore subject to a range of uncertainties and challenges. At present, Scope 3 data is not yet consistently available in many value chains and is calculated, collected or estimated in different ways. Gold Fields' Scope 3 emissions data is determined using the ISO 14064 part 1 standard. As value chain emissions data advances over time, Gold Fields expects to improve the quality of its Scope 3 data and data reporting.

Forward-looking statements

This CCR contains forward-looking statements within the meaning of section 27A of the US Securities Act of 1933 (the Securities Act) and section 21E of the US Securities Exchange Act of 1934 (the Exchange Act) with respect to Gold Fields' environmental (including climate change), social and governance targets, commitments, ambitions and the methodologies we use to assess our progress in relation to these. Such forward-looking statements can be identified by the use of forward-looking terminology, including the terms "believes", "estimates", "plans", "anticipates", "aims", "continues", "expects", "hopes", "may", "will", "would" or "could" or, in each case, their negative or other various or comparable terminology. Forward-looking statements can be made in writing but may also be made verbally by directors, officers and employees of Gold Fields (including during presentations) in connection with this document. Forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future.

These forward-looking statements, wherever they may occur in this CCR, are necessary estimates reflecting the best judgement of Gold Fields' senior management and involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. Consequently, these forward-looking statements should be considered in light of various important factors, including those outlined in this CCR and other filings with the US Securities and Exchange Commission, including in our Annual Report on Form 20-F for the year ended 31 December 2023.

In preparing the climate change-related information contained in this document, Gold Fields has made a number of key judgements, estimations and assumptions, and the processes and issues involved are complex. The climate data, models and methodologies used are often relatively new, are rapidly evolving and are not of the same standard as those available in the context of other financial information, nor are they subject to the same or equivalent disclosure standards, historical reference points, benchmarks or globally accepted accounting principles. In particular, it is not possible to rely on historical data as a strong indicator of future trajectories, in the case of climate change and its evolution. Outputs of models, processed data and methodologies are also likely to be affected by underlying data quality, which can be hard to assess and we expect industry guidance, market practice and regulations in this field to continue to change. There are also challenges faced in relation to the ability to access data on a timely basis and the lack of consistency and comparability between data that is available This means the climate change-related forward-looking statements and climate change-related information discussed in this document carry an additional degree of inherent risk and uncertainty.

In light of uncertainty as to the nature of future policy and market response to climate change, including between regions, and the effectiveness of any such response, Gold Fields may have to re-evaluate its progress towards its climate change ambitions, commitments and targets in the future, update the methodologies it uses or alter its approach to climate analysis and may be required to amend, update and recalculate its climate change disclosures and assessments in the future, as market practice, data quality and availability develop rapidly.

Gold Fields undertakes no obligation to publicly update or release any revisions to these forward-looking statements to reflect events or circumstances after the date of this report or to reflect the occurrence of unanticipated events.

Refer to Gold Fields' comprehensive forward-looking statements on www.goldfields.com

Glossary

This glossary contains key definitions based on the IPCC's Working Group II Report, Summary for Policymakers as contribution to the Sixth Assessment Report (IPCC 2022), the TCFD glossary and the recommendations of the TNFD, September 2023.

Adaptation	Human systems adapt by adjusting to actual or expected climate and its effects to lessen harm or take advantage of beneficial opportunities. Ecological systems adapt by adjusting to the actual climate and its effects, which may be facilitated by human intervention.
Adaptation limits	The point at which the needs of human or ecological systems can no longer be secured from intolerable risks through adaptive actions. Two limits can be distinguished: • Hard adaptation limit: the intolerable risks can no longer be avoided through adaptation actions • Soft adaptation limit: intolerable risk can be avoided through options, but these are currently not available
Atmosphere	The atmosphere is the four realms of nature, and includes the gaseous medium and its suspended particulate liquids and solids above land.
Biodiversity	The variability of living organisms from all sources, which includes the diversity within species, between species and of ecosystems.
Biome	Zones on a global scale, generally determined by the type of plant life they support as a result of average precipitation and temperature patterns, such as savannas or tundras.
Dependencies (on nature)	Those aspects relating to environmental assets and ecosystem services that a person or an organisation relies on to function properly, such as water flow and the regulation of hazards like floods and fires.
Ecosystem	A functional interconnected unit comprising a dynamic system of plant, animal and micro-organism communities and the non-living environment.
Ecosystem services	The services or contributions made by ecosystems that benefit economic and other human activities.
Exposure	The existence of people, economic, social or cultural assets, infrastructure, livelihoods, ecosystems and their functions and the like, in places and settings that could be negatively affected.
Hazard	The potential for the occurrence of a natural or human-induced physical event or trend with adverse effects, such as loss of life, injury or health impacts, loss and damage to property, ecosystems and environmental resources.
Impacts (on nature)	The impact or changes to the state of nature, whether in quality or quantity, and which may lead to changes to nature's capacity to provide social and economic functions.
Land	One of the realms of nature which includes all dry land, and its vegetation cover, nearby atmosphere and substrate, and associated animals and microbes.
Mitigation	The action(s) implemented to reduce the extent of a negative impact.
Nature	Nature comprises all life of Earth, including the geology, water, climate and all other inanimate components of Earth, that is made of four physical realms – land, ocean, freshwater and the atmosphere. Each of these interact with people and society.
Ocean	All connected saline ocean waters, characterised by waves, tides and currents.
Resilience	Any system's ability to bounce back, cope and return to a previous state after a disturbance to maintain its essential function, identity and structure and to still be able to adapt, learn and transform.
Risk	Risk can be used as a valuable framework to understand the interlinked and increasingly severe impacts of climate change on human systems, ecosystems and biodiversity. Risk is the potential for negative consequences for human or ecological systems, cognisant of the array of values and objectives underlying these systems. The interactions between climate-related hazards, and the exposure and vulnerability of affected human and ecological systems gives rise to risk.
Scope 1 GHG emissions	All direct GHG emissions.
Scope 2 GHG emissions	Indirect GHG emissions from the consumption of purchased electricity, heat or steam.
Scope 3 GHG emissions	Other indirect emissions not covered in Scope 2, that occur in the value chain of a reporting company, including both upstream and downstream emissions.
Vulnerability	The tendency, or exposure to be negatively affected, determined by a system's level of sensitivity to harm and its lack of capacity to cope and adapt.

Administration and corporate information

Company Secretary
Anré Weststrate
Tel: +27 11 562 9719
Fax: +27 86 720 2704
email: anre.weststrate@goldfields.com

Registered Office
Johannesburg
Gold Fields Limited
150 Helen Road
Sandown
Sandton
2196

Postnet Suite 252
Private Bag X30500
Houghton
2041

Tel: +27 11 562 9700

Office of the United Kingdom Secretaries
London
St James's Corporate Services Limited
Suite 31, Second Floor
107 Cheapside
London
EC2V 6DN
United Kingdom

Tel: +44 (0) 20 7796 8644
email: general@corpserv.co.uk

American depository receipts transfer agent
Shareholder correspondence should be mailed to:
BNY Mellon
PO Box 43006
Providence RI 02940-3078

Overnight correspondence should be sent to:
BNY Mellon
150 Royall Street, Suite 101
Canton, MA 02021
email: shrrelations@cpushareownerservices.com

Tel: 866 247 3871 Domestic
Tel: 201 680 6825 Foreign

Sponsor
J.P. Morgan Equities South Africa Proprietary Limited
1 Fricker Road
Illovo, Johannesburg 2196
South Africa

Gold Fields Limited
Incorporated in the Republic of South Africa
Registration number 1968/004880/06
Share code: GFI
Issuer code: GOGOF
ISIN: ZAE000018123

Investor enquiries
Jongisa Magagula
Tel: +27 11 562 9775
Mobile: +27 82 562 5288
email: jongisa.magagula@goldfields.com

Thomas Mengel
Tel: +27 11 562 9849
Mobile: +27 72 493 5170
email: thomas.mengel@goldfields.com

Media enquiries
Sven Lunsche
Tel: +27 11 562 9763
Mobile: +27 83 260 9279
email: sven.lunsche@goldfields.com

Transfer secretaries
South Africa
Computershare Investor Services Proprietary Limited
Rosebank Towers
15 Biermann Avenue
Rosebank
Johannesburg
2196
Private Bag X9000
Saxonwold
2132

Tel: +27 11 370 5000
Fax: +27 11 688 5248

United Kingdom
Link Asset Services
The Registry
34 Beckenham Road
Beckenham
Kent BR3 4TU
England
Tel: 0871 664 0300

If you are outside the United Kingdom please call (0) 371 664 0300.

Calls are charged at the standard geographic rate and will vary by provider. Calls outside the United Kingdom will be charged at the applicable international rate. Business is open between 09:00 and 17:30, Monday to Friday excluding public holidays in England and Wales.

email: shareholderenquiries@linkgroup.co.uk

Listings
JSE/NYSE/GFI

Directors: YGH Suleman (Chairperson), MJ Fraser* (Chief Executive Officer), PA Schmidt* (Chief Financial Officer), A Andani[#], PJ Bacchus[†], MC Bitar[@], TP Goodlace, JE McGill[^], SP Reid[^], PG Sibiya, CAT Smit

*South African unless otherwise stated. [^]Australian, [†]British, [@]Chilean, [#]Ghanaian, *Executive director*

www.goldfields.com

Bastion

GOLD FIELDS

Creating **enduring value** beyond mining