



GOLD FIELDS

GOLD FIELDS LIMITED

Climate Change Report 2022

Creating enduring value beyond mining



ABOUT OUR COVER

Solar panels of the Khanyisa solar plant in front of South Deep's Twin Shafts



CONTENTS

About this report	2
TCFD Index	3
Chief Executive Officer's statement	4
SHSD Committee Chairperson's statement	4
Gold Fields' environmental performance	5
Group ESG performance and targets	6

1 Governance and management 8

2 Our climate-related policy statements and commitments

Climate-related standards	9
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3 Strategy

Decarbonisation strategy	12
Renewable energy at our mines	14
Climate risks and opportunity	17
Unpacking physical risks	20

4 2022 Performance

Energy and climate change performance	24
Tailings storage facility management	25
Water stewardship	26

5 Annexures

Regional and Group carbon emissions performance	28
Regional and Group energy performance	29
Gold Fields' 2022 carbon footprint	30
External assurance statement	32
Disclaimer and forward-looking statements	34
Glossary	IBC
Administration and corporate information	IBC

About this report

Gold Fields has released its **fifth Climate Change Report (CCR)** in alignment with the Financial Stability Board's Task Force guidelines on Climate-related Financial Disclosures (TCFD). The report is part of Gold Fields' 2022 suite of reports and can be accessed electronically at <https://goldfields.com/2022-annual-report-suite.php>.

Gold Fields formally started on its climate change, energy and water journey in 2016, but has reported on our climate change performance since 2010, when our first annual submission to the CDP was made. Since 2018, we have aligned to the TCFD to report on our climate change and related performance, strategies, risks and opportunities.

The CCR details Gold Fields' progress towards its climate change goals, including performance against targets and the implementation of relevant projects. The report provides insights into the Company's climate change strategy and actions taken to mitigate environmental impacts.

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	Governance and management, page 8	Integrated Annual Report Page 24 – 25
Describe management's role in assessing and managing climate-related risks and opportunities	Governance and management, page 8	Integrated Annual Report Page 10 – 17, 26 – 31, 73 – 79
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, pages 17 – 23	Integrated Annual Report Page 10 – 17, 26 – 31, 74 – 79
Describe the impact of climate-related risks and opportunities on the organisation's business strategy and financial planning	Diesel replacement, page 16	Integrated Annual Report Page 11 – 17, 26 – 31
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, pages 6 – 7 Decarbonisation strategy, pages 12 – 13 Unpacking physical risks, pages 20 – 23	Integrated Annual Report Page 75 – 77
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, page 17 Water stewardship, pages 25 – 26 Tailings storage facility management, page 27	Integrated Annual Report Page 10 – 17
Describe the organisation's process for managing climate-related risks	Climate risks and opportunities, pages 17 – 23 Climate-related standards, pages 9 – 11	Integrated Annual Report Page 10 – 17
Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management	Climate risks and opportunities, page 17	Integrated Annual Report Page 10 – 17
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	Gold Fields' environmental performance, page 5 2030 targets and net-zero commitments, page 13 Renewable energy at our mines, pages 14 – 15 Energy and climate change performance, page 24 Water management, page 25 Carbon footprint, page 28 Regional and Group performance, page 29	Integrated Annual Report Page 11 – 17, 54, 73 – 79
Disclose scope 1, scope 2 and if appropriate scope 3 greenhouse gas (GHG) emissions and related risks	Gold Fields' environmental performance – page 5 Carbon footprint, page 28 Regional and Group performance, page 29	Integrated Annual Report Page 9, 30, 54, 73, 75 – 77
Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets	Group ESG performance and targets, pages 6 – 7	Integrated Annual Report Page 73, 75 – 77

Chief Executive Officer's statement

Gold Fields' strategy, launched in December 2021, commits the Company to build on its leading commitments to environmental, social and governance (ESG) objectives. I consider that this commitment is nowhere more evident than in our investments in decarbonising our operations.

During 2022, the Company completed the construction and commissioning of the 50MW Khanyisa solar plant at the South Deep mine. The positive impact this plant has on the mine is significant, including reducing our carbon footprint, ensuring security of supply and business continuity and reducing cost. But it is not just the business that benefits: Khanyisa is a beacon of pride for our people improving their job security, and has created jobs in our host communities and paved the way for easier government regulations on self-generated electricity.

Gold Fields is very proud of how we address our climate change impact. Apart from South Deep, we have renewable microgrids at three of our four Australian mines – launching a 12MW project at Gruyere – we use low-carbon gas turbines at our Ghanaian mines and our Cerro Corona operation in Peru is 100% supplied by hydropower. By end-2022, 14% of our electricity was derived from renewable sources.

However, we are acutely aware that there is much to do. The last few months have seen several key developments that have highlighted the need for a rapid, transparent and global approach to decarbonisation. The Intergovernmental Panel on Climate Change's most recent assessment report highlighted the possibility of global warming reaching 1.5°C as early as 2030.

Companies, particularly those in carbon intensive industries like mining, are also facing increased pressure from our communities, NGOs, governments and shareholders.

Closer to home, the impacts of climate-related events are real and immediate. The updated and extensive five-year climate change risk and vulnerability assessments we carried out at all our operations in 2021 provided ample evidence: more intense storms, prolonged droughts and other changing weather patterns adversely affect our operations, our workforce and stakeholders and, in particular, the communities adjacent to our mines. We are actively implementing risk management measures to safeguard our operations by mitigating the impacts of adverse weather conditions.

Gold Fields will be part of the solution. We have committed to reduce our net scope 1 and 2 carbon emissions by 30% and absolute emissions by 50% by 2030 (from a 2016 baseline, assuming growth to 2.8Moz pa), and achieve net-zero carbon emissions by 2050, if not sooner. During 2022, our operations commenced with embedding these targets and are planning to achieve this. In addition, our management teams are being held accountable to ensure that we are implementing energy savings' initiatives and trialling new technologies to help us achieve those targets.

This Climate Change Report 2022 outlines our journey we have taken to date as well as the strategies, policies and programmes we are embarking upon. We have a long way to go, but I am confident that, based on Gold Fields' track record to date and the commitment of our People, the Company will play its role in addressing one of the most critical challenges facing society today.

Martin Preece
Interim CEO



SHSD Committee Chairperson's statement

It is the responsibility of the Safety, Health and Sustainable Development (SHSD) Committee of the Board to monitor and oversee that Gold Fields plays its role in addressing the threats climate change poses to the Company, its people, its stakeholders and society at large. Every year, the impacts of physical climate changes are getting more pronounced and prevalent, and no responsible corporate citizen can absolve itself from playing a role in addressing one of the defining challenges society is facing.

We believe Gold Fields is playing its part and has a leadership role when it comes to the rollout of renewable energies, reducing emissions and meeting targets. The decarbonisation progress made by Gold Fields in 2022 was aligned with plans and the SHSD Committee looks forward to the implementation of further initiatives as management progresses its decarbonisation strategies. However, there is always more that can be done, in particular when it comes to mitigating the risks of climate change events. The SHSD Committee will continue to challenge and encourage the Gold Fields team to continually innovate and improve Company performance.

On behalf of the Board of Directors, I fully endorse the Gold Fields Climate Change Report 2022, which, if read in conjunction with other relevant reports by the Company, particularly the Integrated Annual Report 2022, provides an accurate overview of the risks and challenges climate change poses to the Company and the measures Gold Fields is adopting to address them.

Terence Goodlace
Chairperson Safety, Health and Sustainable Development Committee

Gold Fields' environmental performance

GROUP PERFORMANCE – 2022

2.40Moz

attributable gold-eq production

14.1PJ

energy consumption

5.49GJ/oz

energy intensity

14%

renewable electricity (including hydroelectricity used by Cerro Corona)

1.72Mt CO₂e¹

GHG (scope 1 and 2) emissions

302kt CO₂e

GHG emissions avoided

669kg CO₂e/oz

emissions intensity (scope 1 and 2)

8.51GL

freshwater withdrawn

75%

water recycled/reused

¹ Includes head offices

REGIONAL PERFORMANCE – 2022

AUSTRALIA



Mines: St Ives, Granny Smith, Agnew and Gruyere

1,061koz attributable gold production

5.40PJ energy consumption

4.43GJ/oz energy intensity

12% renewable electricity

544kt CO₂e GHG (scope 1 and 2) emissions

90kt CO₂e emissions avoided

0.45t CO₂e/oz emissions intensity (scope 1 and 2)

0.78GL freshwater withdrawal

39% water recycled/reused

SOUTH AFRICA



Mine: South Deep

328koz attributable gold production

1.88PJ energy consumption

5.73GJ/oz energy intensity

2% renewable electricity

516kt CO₂e GHG (scope 1 and 2) emissions

34kt CO₂e emissions avoided²

1.57t CO₂e/oz emissions intensity (scope 1 and 2)

1.77GL freshwater withdrawal

79% water recycled/reused

GHANA¹



Mines: Tarkwa, Damang and Asanko JV

762koz attributable gold production

5.53PJ energy consumption

7.27GJ/oz energy intensity

0% renewable electricity

599kt CO₂e GHG (scope 1 and 2) emissions

177kt CO₂e emissions avoided³

0.79t CO₂e/oz emissions intensity (scope 1 and 2)

2.89GL freshwater withdrawal

89% water recycled/reused

AMERICAS – PERU AND CHILE⁴



Mine: Cerro Corona
Project: Salares Norte

260koz attributable gold-equivalent production

1.29PJ energy consumption

4.94GJ/oz energy intensity

100% renewable electricity

57kt CO₂e GHG (scope 1 and 2) emissions

1kt CO₂e emissions avoided⁵

0.22t CO₂e/oz emissions intensity (scope 1 and 2)

3.06GL freshwater withdrawal

86% water recycled/reused

¹ Excludes data from Asanko JV

² 10kt CO₂e (28%) of South Deep's 2022 emissions avoided of 34kt CO₂e were derived from electricity generated by the Khanyisa solar plant at South Deep. Consumption data was calculated using temporary meters and the methodology verified by independent, external experts as commissioning was still under way in Q4 2022.

³ Emissions avoided from the installation of gas turbines supplied by a pipeline for Tarkwa and Damang (166kt CO₂e, 94% of the region's total emissions avoided) are included in site, region and Group reporting and recognised as an exceptional continuous project as approved by the Gold Fields Group Head of Energy and Carbon. This Project is of strategic importance to the Tarkwa and Damang operations and the Group, as it is a major change, with significant capital investment, impact, complexity, and stakeholder involvement

⁴ Excludes data from Salares Norte

⁵ 0.1kt CO₂e (10%) of Cerro Corona's 2022 emissions avoided of 1kt CO₂e deviate from the Group guideline definition due to unforeseeable circumstances resulting in a deviation from anticipated performance