

GOLD FIELDS LTD  
Form 20-F  
March 29, 2019  
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As filed with the Securities and Exchange Commission on 29 March 2019

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

**Form 20-F**

**(Mark One)**

**REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g)  
OF THE SECURITIES EXCHANGE ACT OF 1934**  
**or**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934**  
**For the fiscal year ended 31 December 2018**  
**or**

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934**

or

**SHELLCOMPANY REPORT PURSUANT TO SECTION 13 OR  
15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
Date of event requiring this shell company report**

**For the transition period from            to**

**Commission file number: 1-31318**

**Gold Fields Limited**

**(Exact name of registrant as specified in its charter)**

**Republic of South Africa**

**(Jurisdiction of incorporation or organisation)**

**150 Helen Road**

**Sandown, Sandton, 2196**

**South Africa**

**011-27-11-562-9700**

**(Address of principal executive offices)**

*with a copy to:*

**Taryn L. Harmse**

**Executive Vice-President: Group General Counsel**

**Tel: 011-27-11-562-9724**

**Fax: 011-27-86-720-2704**

**Taryn.Harmse@goldfields.com**

**150 Helen Road**

**Sandown, Sandton, 2196**

**South Africa**

**(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)**

**and**

**Thomas B. Shropshire, Jr.**

**Linklaters LLP**

**Tel: 011-44-20-7456-2000**

**Fax: 011-44-20-7456-2222**

**One Silk Street**

**London EC2Y 8HQ**

**United Kingdom**

**Securities registered or to be registered pursuant to Section 12(b) of the Act**

<b>Title of Each Class</b>	<b>Name of Each Exchange on Which Registered</b>
<b>Ordinary shares of no par value each American Depositary Shares, each representing one ordinary share</b>	<b>New York Stock Exchange* New York Stock Exchange</b>

\*Not for trading, but only in connection with the registration of the American Depositary Shares pursuant to the requirements of the Securities and Exchange Commission.

**Securities registered or to be registered pursuant to Section 12(g) of the Act**

**None**

**(Title of Class)**

**Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act**

**None**

**(Title of Class)**

**Indicate the number of outstanding shares of each of the issuer's classes of capital or**

**common stock as of the close of the period covered by the Annual Report**

**821,532,707 ordinary shares of no par value**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act: Yes No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes No

Note Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of large accelerated filer, accelerated filer, and emerging growth company in Rule 12b-2 of the Exchange Act.

Large accelerated filer	Accelerated filer	Non-accelerated filer	Emerging growth company
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If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

The term new or revised financial accounting standard refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP	International Financial Reporting Standards as issued by the International Accounting Standards Board	Other
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If Other has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow: Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

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Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes No

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**Gold Fields Operations**

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Gold Fields Limited (Gold Fields or the Company) is a South African company and, in fiscal 2018, 7 per cent., 36 per cent., 42 per cent. and 15 per cent. of Gold Fields' operations, based on managed gold-equivalent production, were located in South Africa, Ghana, Australia and Peru, respectively. Its books of account are maintained in South African Rand. The reporting currency of the Gold Fields consolidated financial statements is the U.S. dollar. The Group's annual and interim financial statements are prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board and as prescribed by law (refer to the *Basis of preparation* section of the accounting policies to the consolidated financial statements).

Except as otherwise noted, the financial information included in this annual report has been prepared in accordance with IFRS and is presented in U.S. dollars, and for descriptions of critical accounting policies, refer to accounting policies under IFRS.

For Gold Fields' consolidated financial statements, unless otherwise stated, statement of financial position item amounts are translated from Rand and A\$ to U.S. dollars at the exchange rate prevailing on the date that it closed its accounts for fiscal 2018 (Rand 14.63 per U.S.\$1.00 and U.S.\$0.70 per A\$1.00 as of 31 December 2018), except for specific items included within shareholders' equity and the statement of cash flows that are translated at the rate prevailing on the date the relevant transaction was entered into, and income statement item amounts are translated from Rand and A\$ to U.S. dollars at the weighted average exchange rate for each period (Rand 13.20 per U.S.\$1.00 and U.S.\$1.00 per A\$0.75 for fiscal 2018).

In this annual report, Gold Fields presents the financial items all-in sustaining costs (AISC), all-in sustaining costs per ounce, all-in costs (AIC), and all-in costs per ounce, which have been determined using industry standards promulgated by the World Gold Council (WGC) and are non-IFRS measures.<sup>1</sup> The WGC standard was released by the WGC on 27 June 2013. Gold Fields voluntarily adopted and implemented these metrics as from the quarter ended June 2013. An investor should not consider these items in isolation or as alternatives to cost of sales, profit before tax, profit for the year, cash flows from operating activities or any other measure of financial performance presented in accordance with IFRS. While the WGC provided definitions for the calculation of AISC and AIC, the calculation of AISC, AISC per ounce, AIC and AIC per ounce may vary significantly among gold mining companies, and by themselves do not necessarily provide a basis for comparison with other gold mining companies. See *Further Information Key Information Selected Historical Consolidated Financial Data*, *Additional Information on the Company Glossary of Mining Terms All-in sustaining costs* and *Additional Information on the Company Glossary of Mining Terms All-in costs*.

Gold Fields also presents net cash flow, free cash flow margin and adjusted EBITDA in this annual report, which are non-IFRS measures<sup>1</sup>. An investor should not consider these items in isolation or as alternatives to cash flow from operating activities, cash and cash equivalents or any other measure presented in accordance with IFRS. Net cash flow is defined as net cash flow from operations less the South Deep dividend, net capital expenditure (additions to property, plant and equipment less proceeds on disposal of property, plant and equipment), and environmental trust fund and rehabilitation payments, as per the consolidated statement of cash flows. Free cash flow margin is defined as adjusted all-in costs adjusted for non-cash share-based payments, non-cash long-term employee benefits, exploration, feasibility and evaluation costs outside of existing operations, non-sustaining capital expenditure for growth projects only, realised gains or losses on revenue hedges and taxation paid (excluding royalties) expressed as a percentage. Adjusted EBITDA is defined as profit or loss for the year adjusted for interest, taxation, amortisation and depreciation and certain other costs. The definition for the calculation of net cash flow, free cash flow margin and adjusted EBITDA may vary

<sup>1</sup> These non-IFRS measures have been defined and reconciled to IFRS in the Management's discussion and analysis of the financial statements.

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significantly between companies, and by themselves do not necessarily provide a basis for comparison with other companies. See *Additional Information on the Company* *Glossary of Mining Terms* .

**Market Information**

This annual report includes industry data about Gold Fields' markets obtained from industry surveys, industry publications, market research and other publicly available third-party information. Industry surveys and industry publications generally state that the information they contain has been obtained from sources believed to be reliable but that the accuracy and completeness of such information is not guaranteed. Gold Fields and its advisers have not independently verified this data.

In addition, in many cases, statements in this annual report regarding the gold mining industry and Gold Fields' position in that industry have been made based on internal surveys, industry forecasts and market research, as well as Gold Fields' own experiences. While these statements are believed by Gold Fields to be reliable, they have not been independently verified.

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**DEFINED TERMS AND CONVENTIONS**

In this annual report, all references to the Group are to Gold Fields and its subsidiaries. On 18 February 2013 (the Spin-off date), Gold Fields completed the separation of its wholly-owned subsidiary, Sibanye Gold Limited, trading as Sibanye-Stillwater (Sibanye-Stillwater), formerly known as GFI Mining South Africa Proprietary Limited (GFIMSA), which includes the KDC and Beatrix mining operations (the Spin-off).

In this annual report, all references to fiscal 2014 are to the 12-month period ended 31 December 2014, all references to fiscal 2015 are to the 12-month period ended 31 December 2015, all references to fiscal 2016 are to the 12-month period ended 31 December 2016, all references to fiscal 2017 are to the 12-month period ended 31 December 2017, all references to fiscal 2018 are to the 12-month period ending 31 December 2018, and all references to fiscal 2019 are to the 12-month period ending 31 December 2019. In this annual report, all references to South Africa are to the Republic of South Africa, all references to Ghana are to the Republic of Ghana, all references to Australia are to the Commonwealth of Australia, all references to Chile are to the Republic of Chile, all references to Peru are to the Republic of Peru, all references to the Philippines are to the Republic of the Philippines and all references to the United States and U.S. mean the United States of America, its territories and possessions and any state of the United States and the District of Columbia.

In this annual report, all references to the DMR are references to the South African Department of Mineral Resources, the government body responsible for regulating the mining industry in South Africa.

This annual report contains descriptions of gold mining and the gold mining industry, including descriptions of geological formations and mining processes. In order to facilitate a better understanding of these descriptions, this annual report contains a glossary defining a number of technical and geological terms. See *Additional Information on the Company Glossary of Mining Terms* .

In this annual report, gold production figures are provided in troy ounces, which are referred to as ounces or oz , or in kilograms, which are referred as kg . Ore grades are provided in grams per metric tonne, which are referred to as grams per tonne or g/t . All references to tonnes or t in this annual report are to metric tonnes. All references to gold include gold and gold equivalent ounces, unless otherwise specified or where the context suggests otherwise. See *Additional Information on the Company Glossary of Mining Terms* for further information regarding units of measurement used in this annual report and a table providing rates of conversion between different units of measurement. AIC, net of by-product revenue, and AISC, net of by-product revenue, are calculated per ounce of gold sold, excluding gold equivalent ounces. See *Annual Financial Report Management's Discussion and Analysis of the Financial Statements All-in Sustaining and All-in Costs* .

This annual report contains references to the total recordable injury frequency rate (TRIFR) at each Gold Fields operation which was introduced in 2013. The TRIFR at each operation includes the total number of fatalities, lost time injuries, medically treated injuries (MTI) and restricted work injuries (RWI) per million man hours. A lost time injury (LTI) is a work-related injury resulting in the employee or contractor being unable to attend work for a period of one or more days after the day of the injury (i.e. the employee or contractor is unable to perform any of his/her duties). An MTI is a work-related injury sustained by an employee or contractor which does not incapacitate that employee and who, after having received medical treatment, is deemed fit to immediately resume his/her normal duties on the next calendar day, immediately following the treatment or re-treatment. An RWI is a work-related injury sustained by an employee or contractor which results in the employee or contractor being unable to perform one or more of their routine functions for a full working day from the day after the injury occurred, but the employee or contractor can still perform some of his/her duties.

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In this annual report, R and Rand refer to the South African Rand and SA cents refers to subunits of the South African Rand, \$ , U.S.\$ and U.S. dollars refer to United States dollars, U.S. cents refers to

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subunits of the U.S. dollar, A\$ and Australian dollars refer to Australian dollars, GH refers to Ghana Cedi, S/. refers to the Peruvian Nuevo Sol and CAD refers to Canadian dollars.

In this annual report, except where otherwise noted, all production and operating statistics are based on attribution of 100 per cent. of Gold Fields' total operations, which include production from the Tarkwa and Damang mines in Ghana and from the Cerro Corona mine in Peru, a portion of which is attributable to the non-controlling shareholders in those mines. In addition, production and operating statistics for Asanko are included on an attributable basis. This annual report contains references to gold equivalent ounces, which are quantities of metals (such as copper) expressed as amounts of gold using the prevailing prices of gold and the other metals. To calculate this, the accepted total value of the metal based on its weight and value is divided by the accepted value of one troy ounce of gold.

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**FORWARD-LOOKING STATEMENTS**

This annual report contains forward-looking statements within the meaning of Section 27A of the U.S. Securities Act of 1933, as amended (the Securities Act) and Section 21E of the U.S. Securities Exchange Act of 1934, as amended (the Exchange Act) with respect to Gold Fields' financial condition, results of operations, business strategies, operating efficiencies, competitive position, growth opportunities for existing services, plans and objectives of management, markets for stock and other matters.

These forward-looking statements, including, among others, those relating to the future business prospects, revenues, income and 2019 production and operational guidance of Gold Fields, wherever they may occur in this annual report and the exhibits to the annual report, are necessarily estimates reflecting the best judgement of the senior management of Gold Fields and involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. As a consequence, these forward-looking statements should be considered in light of various important factors, including those set forth in this annual report. Important factors that could cause actual results to differ materially from estimates or projections contained in the forward-looking statements include, without limitation:

the difficulties, delays and costs in relation to the restructuring plan at the South Deep operation;

decreases in the market price of gold or copper;

fluctuations in exchange rates, currency devaluations and other macroeconomic monetary policies;

changes in relevant government regulations, particularly labour, environmental, tax, royalty, health and safety, water, regulations and potential new legislation affecting mining and mineral rights;

court decisions affecting the South African mining industry, including, without limitation, regarding the interpretation of mineral rights legislation and the treatment of health and safety claims;

the success of the Group's business strategy, development activities and other initiatives, particularly at Damang and Gruyere;

the ability to achieve anticipated efficiencies and other cost savings in connection with past and future acquisitions or joint ventures;

changes in assumptions underlying Gold Fields' mineral reserve estimates;

the ability to achieve anticipated cost savings at existing operations;

the occurrence of hazards associated with underground and surface gold mining or contagious diseases (and associated legal claims) at Gold Fields operations;

loss of senior management or inability to hire or retain sufficiently skilled employees;

power cost increases as well as power stoppages, fluctuations and usage constraints;

the ability of the Group to protect its information technology and communication systems and the personal data it retains;

the ability of the Group to comply with requirements that it operate in a sustainable manner and provide benefits to affected communities;

regulation of greenhouse gas emissions and climate change;

geotechnical challenges due to the older age of certain mines and a trend toward mining deeper pits and more complex deposits;

the occurrence of work stoppages related to health and safety incidents;

the ability to manage and maintain access to current and future sources of liquidity, capital and credit, including the terms and conditions of Gold Fields facilities and Gold Fields overall cost of funding;

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downgrades in the credit rating of Gold Fields or South Africa;

political instability in South Africa, Ghana, Peru or regionally in Africa or South America;

overall economic and business conditions in South Africa, Ghana, Australia, Peru and elsewhere;

fraud, bribery or corruption at Gold Fields operations that leads to censure, penalties or negative reputational impacts;

the inability to modernise operations and remain competitive within the mining industry;

the effects of a failure of a dam at a tailings facility and the closure of adjacent mines;

the occurrence of labour disruptions and industrial actions;

the adequacy of the Group's insurance coverage;

supply chain shortages and increases in the prices of production imports;

the manner, amount and timing of capital expenditures made by Gold Fields on both existing and new mines, mining projects, exploration projects or other initiatives; and

the appointment of a new registered independent accounting firm which may interpret accounting rules differently than its former firm.

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

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### About this report

Gold Fields Limited is a globally diversified gold producer with eight operating mines (including our Asanko Joint Venture) and projects in Australia, Chile, Ghana, Peru and South Africa, and total attributable annual gold-equivalent production of approximately 2Moz.

It has attributable gold Mineral Reserves of around 48.1Moz. Attributable copper Mineral Reserves total 691 million pounds, while silver Reserves total 39.3Moz.

Gold Fields has a primary listing on the Johannesburg Stock Exchange (JSE) Limited, with a secondary listing on the New York Stock Exchange (NYSE).

Our integrated reporting approach aims to enable our stakeholders to make a more informed assessment of the value of Gold Fields and its prospects. This Integrated Annual Report (IAR) is structured around the Gold Fields Group balanced scorecard, which is how we measure our performance against our strategy and the matters we consider to be most material to the sustainability of our Group (p14). Gold Fields embraces integrated thinking and takes an integrated approach to value creation, which is aligned with the International Integrated Reporting Council's (IIRC) six capitals model.

The IAR also forms part of our adherence to the Global Reporting Initiative (GRI) Standards and the 10 Principles of the International Council on Mining & Metals (ICMM), whose mandatory requirements of its position statements are presented online. We also align with the 10 Principles of the United Nations Global Compact.

### ***Report scope and boundary***

This report covers the reporting period from 1 January 2018 to 31 December 2018 and provides an overview of our eight operations (including our Asanko JV) in Australia, Ghana, Peru and South Africa, as well as our exploration and business development activities. Details on the exact location of each operation and project can be found on p2 – 3.

Non-financial data for 2018 only covers our seven operating mines and excludes exploration activities and projects. Data from Darlot, which was sold, is included for the January to October 2017 period.

This report has been compiled in accordance with the GRI Standards: core option and the International Integrated Reporting Council Framework. Gold Fields also references a broad range of additional codes, frameworks and standards in compiling the report, including the King IV Code on Corporate Governance (King IV). The full list can be found in the Annual Financial Report (p15 – 16). We consider that this IAR, together with additional documents held online, complies with the requirements of the GRI Standards.

Non-IFRS measures are used throughout the IAR. These have been defined in the Management's discussion and analysis of the financial statement in the Annual Financial Report, p129 – 130.

Average exchange rates for 2018 of R13.20/US\$1 and US\$0.747/A\$1 have been used in this report. For 2019, forecast exchange rates of R13.61/US\$1 and US\$0.75/A\$1 have been used.

### ***ICMM subject matters***

Gold Fields has complied with the ICMM Sustainable Development Framework, Principles, Position Statements and Reporting Requirements (see p129 – 130, for the assurance hereof).

Our compliance with the ICMM is addressed throughout this report and on our website. This detail covers:

The alignment of our sustainable development policies against the 10 principles and mandatory position statements

The process for identifying specific sustainable development risks and opportunities

The existence and implementation of systems and approaches for managing sustainable development risks and opportunities

Gold Fields' performance across a selection of identified material sustainable development risks and opportunities.

### ***Assurance***

ERM has provided independent reasonable assurance over selected sustainability information in this report, which is prepared in accordance with the GRI Standards: core option. As a member of the ICMM, we are committed to obtaining assurance in line with the ICMM Sustainable Development Framework: Assurance Procedure. ERM has provided assurance over our statement on compliance with the ICMM Sustainable Development Framework, Principles and Reporting Requirements. The key sustainability performance data for assurance by ERM in 2018 can be found on p131 – 132.

### ***Board approval***

The Gold Fields Board of Directors acknowledges its responsibility to ensure the integrity of this IAR and has applied its collective mind throughout the preparation of this report. The Board believes that the integrated report is presented in compliance with the International Integrated Reporting Framework. Furthermore, the Board considers that this IAR complies in all material respects with the relevant statutory requirements of the various regulations governing disclosure and reporting by Gold Fields and that the annual financial statements comply in all material respects with the South African Companies Act No 71 of 2008, as amended, as well as with the International Financial Reporting Standards.

As such, the Board unanimously approves the content of the IAR 2018, including the Annual Financial Report 2018, and authorised its release on 29 March 2019.

### **Cheryl Carolus**

*Chairperson of the Board*

25 March 2019





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*Send us your feedback:*

To ensure that we report on issues that matter to our stakeholders please provide any feedback and questions to: **investors@goldfields.com**, **sustainability@goldfields.com** or visit **www.goldfields.com** to download the feedback form.

[linkedin.com/company/gold-fields](https://www.linkedin.com/company/gold-fields)

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Our global footprint

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Our business model

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## Value creation and distribution

The ultimate aim of our strategy and business model is to create value for our stakeholders

**Total and national value distribution**

National value distribution by region and type 2018 (US\$m)	Socio-economic spend						National value distribution
	Government	Business	Employees	Socio-economic spend	Capital providers	National value distribution	
Americas	55	156	37	6	4	258	
Australia	121	812	128	1	0	1,062	
South Africa	3 <sup>1</sup>	176	144	3 <sup>2</sup>	9	336	
West Africa	90	654	83	15	13	855	
Corporate	14	15	49	0	121	200	
<b>Total Gold Fields</b>	<b>283</b>	<b>1,813</b>	<b>442</b>	<b>26</b>	<b>147</b>	<b>2,711</b>	

<sup>1</sup> South Deep does not yet pay income tax as it is in a loss-making position

<sup>2</sup> This includes spending from the South Deep trusts and SLP commitments

**Governments**

Payments include

**Workforce**

Payments include Salaries and wages, benefits and bonus payments (including shares and payroll taxes).



Mining royalties and land-use payments, taxes, duties and levies.

#### Why these stakeholders matter

Governments provide us with access to ore bodies by granting mining and other licences. They also deliver the infrastructure necessary to build and maintain our mines, including roads, electricity and water supply.

#### 2018 Contributions:

We paid governments US\$283m (2017: US\$310m) in taxes and royalties, 10% of total value distribution (2017: 11%)

In addition, the Ghanaian government benefited from US\$15m in declared dividends relating to its 10% shareholding in Gold Fields Ghana

#### Business

#### Payments include

Operational and capital procurements.

#### Why these stakeholders matter

Supply chain businesses provide the equipment and services needed to develop and maintain our operations. They comprise business partners, contractors and suppliers.

#### 2018 Contributions:

We paid US\$1,813m to suppliers and contractors, representing 67% of total value creation (2017: US\$1,857m/65%)

Of the total 2018 procurement expenditure of US\$1,813m, US\$1,542m, or 85%, was spent on

#### Why these stakeholders matter

The technical skills, experience and activity of our people drive the day-to-day operations of our business.

#### 2018 Contributions:

We paid US\$442m (2017: US\$506m) to employees in terms of salaries, dividends and benefits, representing 16% of total value distribution (2017: 18%)

We also provide employees (where legislated) with additional benefits such as retirement savings, healthcare assistance, life and disability insurance, housing assistance and personal accident cover

We prioritise the employment of members from our host communities. At end 2018 host community employment comprised 56% of our workforce

#### Capital providers

#### Payments include

Interest and dividend payments to capital providers.

#### Why these stakeholders matter

Financial institutions, shareholders and bond holders invest with us, thus enabling us to fund the development, maintenance and growth of our operations and our overall business.

#### 2018 Contributions:

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businesses based in operating countries by our mines  
(2017: US\$1,620m/88%)

US\$441m, or 29%<sup>1</sup>, of total procurement by our mines  
was spent on suppliers and contractors from host  
communities (2017: US\$774m/45%)

<sup>1</sup> *The % decline is due to a change in the definition of  
host communities by our Australian operations to only  
include communities in their area of influence  
(previously Perth was included in the definition due to  
the FIFO nature of our mines)*

We paid US\$147m (2017: US\$160m) to the  
providers of debt and equity capital, mainly in  
the form of interest and dividends

Net debt increased by US\$309m to  
US\$1,612m

We paid a total dividend of R0.40/share for  
the 2018 financial year

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## **Communities**

How we create value for communities

Why the focus on communities

We believe that our host communities are one of our most critical stakeholders as they grant us our licence to operate. Over the past few years, we devoted considerable resources to sharing the value created through our mines with the communities surrounding them. This goes beyond the direct financial investment to creating sustainable surrounding economies through community employment and procurement.

During 2018, we enhanced our understanding of the value created through these programmes by quantifying the impact.

## **Trade-offs**

We continue to balance the legitimate, and at times conflicting, needs of our stakeholders in order to create value over the short, medium and long-term. These were some of the significant trade-offs we had to make during 2018.

**1. Balancing financial viability with employment**

To improve financial viability, we unfortunately had to retrench 1,082 employees and 420 contractors at South Deep to right-size the business (p46)

At Tarkwa mine, we retrenched 2,211 employees, of which 1,714 were re-engaged by contractors or on a contractor basis (p33)

**2. Improving long-term sustainability**

By channelling funds into growth capital we aim to secure future growth by temporarily cutting back on other stakeholder spending

**3. Managing our environmental impacts**

Mining is resource intensive, but we seek to minimise our environmental impacts. During 2018, we had two Level 3 water-related environmental incidents. We responded speedily to address the causes and communicated the incidents (p95)

**4. Balancing the immediate needs of communities with long-term value creation**

Our focus shifted from short-term projects to long-term value creation by creating sustainable value for host communities through employment and procurement programmes (p113)

**5. Providing long-term contributions to host governments**

At the Cerro Corona mine, we reduced our taxable income in the short term to fund future growth. The investment is set to provide longer-term tax and royalty revenues to the host government

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### **8 The Gold Fields Integrated Annual Report 2018**

#### Our operating context

Gold Fields is subject to external strategic dynamics that inform decision-making and influence our business performance. An analysis of the three key strategic themes - and how Gold Fields is responding to them - is set out below.

#### *Gold price*

##### **Issue**

The price of gold continued its relatively static course during 2018, ending the year at US\$1,280/oz, down just over US\$30/oz from the 2018 opening price of US\$1,313/oz. The average gold price received by Gold Fields, however, has barely changed from US\$1,255/oz in 2017 to US\$1,252/oz in 2018.

The traditional investment case for gold as a safe haven asset was called into question as many investors sold their physical gold holdings after the gold price collapsed in 2013. However, in late 2018 and early 2019 we have seen some shift to gold amid political and economic uncertainty in the US and the subsequent weakness in the US Dollar. While much of the gold price's short-term movement is driven by market sentiment and geopolitical developments, an analysis of gold's supply and demand fundamentals underpins our belief that the gold price could continue to improve over the next few years, though there will undoubtedly be periods of short-term volatility.

According to the CPM Group, total gold demand was steady at 127.4Moz in 2018 (2017:127Moz), with jewellery and industrial demand unchanged at 97Moz, and higher central bank purchases offsetting a decline in private investment in coins and bullion. Net purchases by central banks and other official institutions continued to grow steadily in 2018, improving by over 50% to 16.5Moz in 2018, after a similar rise in 2017 to 11Moz. Total stock demand by Exchange Traded Funds remained stable at 30.3Moz in 2018 (2017: 30Moz).

In the long term, gold supply issues will also support a recovery in the gold price, in our view. According to CPM data, mine production has plateaued between 90Moz – 92Moz since 2014. Mine supply in 2018 totalled 92.1Moz and secondary

supply 30.1Moz, both unchanged from 2017, leaving total supply marginally higher at 127.4Moz in 2018 (2017: 127Moz). Many gold market analysts are of the view that the industry has reached peak production levels given the limited number of new gold discoveries since the mid-1990s, together with the decreased levels of exploration spend in recent years.

##### **Response**

Gold Fields does not predict the gold price. We expect volatility and structure the business accordingly.

We seek to maximise value by:

- Prioritising cash-flow over production volumes

- Setting targets for each region at a 15% free cash-flow (FCF) margin around a planning price of US\$1,200/oz

- Eliminating marginal mining

- Selling non-strategic assets

- Hedging a portion of our gold production in times of high capital expenditure

The Group is therefore in a relatively strong state to weather a sustained lower gold price (at just over US\$1,000/oz) and well positioned to capture future upside when the gold price recovers.

During 2017 and 2018, we invested in the future of our portfolio with a number of new projects, while at the same time continuing to invest in the ongoing development of ore bodies through proactive near-mine exploration and development. Our mines avoid high-grading due to the obvious negative impact this would have on the sustainability of their ore bodies by mining at or below their reserve grade. We are implementing these strategies despite the current price environment.

#### **Global gold demand and supply versus the US\$ gold price (average annual)**

*Source: WGC*

#### **Total mine supply**

*Source: CPM*

**Table of Contents*****Social licence to operate*****Issue**

The nature of the extractive sector means the industry must pay particular attention to its social licence to operate. Unlike other companies, mines are dependent on their mineral deposits and cannot relocate to new locations when facing deteriorating local or national operating environments. Furthermore, despite many mines' lives being finite, they can still span decades. Mines must be able to navigate complex social, economic and political dynamics over time to avoid conflicts with their host communities. As it is, conflicts between communities and mines in the industry globally have risen sharply over the last decade.

To manage the potential risks, mining companies need to maximise their positive impacts, minimise their negative impacts and make sure that this is communicated to and recognised by host community stakeholders. For many decades this was not the case and, apart from a limited number of community jobs and procurement offered by mining companies, these communities saw few benefits. Similarly, taxes and royalties went into the coffers of central governments for national benefit and rarely found their way back through investment in host communities. It is therefore not surprising that demands from host communities have become more vocal and strident in recent years. Amid widespread use of social media and activism in these communities their demands have also found a global audience.

**Response**

At Gold Fields, a strong social licence to operate is embedded in our societal value proposition and is a prerequisite for long-term generation of value for stakeholders. This approach had to be underpinned by:

**Responsibility:** ongoing investment in responsible operational standards to avoid and mitigate negative social and environmental impacts. This includes effective water and environmental management, which has become an increasingly material issue for most mining companies (p95)

**Trust:** frank, two-way communication, realistic expectation management and visibly honouring commitments builds trust. This includes ongoing engagement on issues such as indigenous rights, employment opportunities and social transformation (p111)

**Understanding:** investment in communities relies on a thorough understanding of the risks, community needs and community perceptions. Since 2015, Gold Fields has undertaken relational proximity studies at a number of its mines and in 2017 also undertook socio-economic baseline and social return on investment (SROI) studies at its South Deep mine in South Africa

**Value creation in host communities:** we seek to create value in our communities through investment in socio-economic development (SED) projects, and, more critically, by recruiting employees and contractors from host communities and sourcing goods and services from companies in these communities (p113)

These initiatives are particularly important in the low gold price context, which has an impact on the Group's ability to invest in community development projects as well as raising the prospect of job cuts among employees, many of whom hail from host communities.

### **Conflicts between mines and communities on the rise**

*Source: ICMM*

### **Regulatory issues**

#### **Issue**

A sound and certain regulatory and fiscal environment should enable the global gold sector to ride out short-term fluctuations in gold prices

and achieve sustained returns over the 15- to 20-year average life of a mining project. In many jurisdictions, however, the legal and tax environment has become less conducive to the long-term viability of the mining sector. Many governments view the industry as an easy target for higher taxes and other fiscal imposts, particularly during tough economic times. As a result, the governments' share of mining revenue has grown at the expense of other stakeholders, but at the same time miners and investors are shying away from more risky jurisdictions.

#### **Response**

The question is how the trust gap between mining companies and governments can best be bridged. Gold Fields on its own and in conjunction with its peers in the wider global mining industry, has sought to address this trust gap in a number of ways:

The industry is continuing to spread value to a number of stakeholders. Over the past three years, Gold Fields has consistently created between US\$2bn and US\$3bn in total value annually for our wide range of stakeholders accounting for around 90% of revenue on average (p6)

Gold Fields is actively promoting host community employment and procurement from host community enterprises in an effort to strengthen its social licence to operate and mitigate any regulatory actions that limit its ability to share the benefits of mining. In 2018, about 25% of our total value creation benefited host communities through these initiatives (p7)

We are working with international mining bodies, such as the International Council on Mining and Metals (ICMM), to promote industry-wide best practice and showcase the benefits that a responsible and fairly regulated industry can bring

We actively engage with our host governments in Ghana, Australia, Peru and South Africa, either directly or through industry organisations, in addressing the resource nationalism that, we believe, prevents the sector from achieving sustainable growth.





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Risks and materiality

**Top 20 Group risks and opportunities in 2018**

**How Gold Fields manages risk**

The approach to assessing risk in Gold Fields is a collective effort by Group, regional and mine management of the risks facing the business. The assessments of the risks and their mitigating actions are a critical internal management tool, which reduce the identified risks significantly. Risk mitigations are included in the annual Group Performance Scorecard and cascaded down to the performance scorecard of management employees at regional and operational levels. The formal risk review process starts during management’s annual strategic planning sessions where strategic risks and macro-trends are analysed in developing the Company’s risk register and mitigating actions. These are updated quarterly, and presented to the Board’s Risk Committee twice a year for verification.

Risk tables and heat maps have been published in the IAR on this basis for the last nine years.

**OUR MATERIAL ISSUES**

**Gold Fields Group materiality score for GRI standards**

(where 1 = critical to Gold Fields and

10 = not material at all)

Direct and indirect economic impacts	1.85
Health and safety	2.62

Public policy / corporate governance	2.75
Environmental compliance	3.09
Employment	3.23
Water management	3.36
Energy / emissions	3.66
Indigenous people	3.85

## **RISK AND MITIGATING ACTIONS**

### **South Deep loss of investor confidence due to non- achievement of the restructuring plan**

Implementation of the organisational restructuring programme  
 Productivity initiatives to unlock the full potential of all our employees  
 Skills development programmes artisan upskilling and supervisor training programme progressed  
 Ensure compliance to mine design  
 Improve fleet performance by focusing on effective maintenance and operation of equipment  
 Continue to ensure safe working environments  
 Short-, medium- and long-term strategies to supplement grid power

### **A sustained and significantly lower gold price and currency exchange rate volatility**

Business plans implemented and monitored through regular cost, capital and production reviews  
 Ongoing portfolio optimisation to ensure cash generation  
 Gold and copper production hedging for various regions  
 Business restructuring and technology strategies to improve safety, efficiencies and costs

### **Resource nationalism**

Enhanced engagement and lobbying through industry bodies  
 Further refinement of stakeholder engagement policies and strategies

South Deep's new 2018 - 2022 Social and Labour Plan (SLP) submitted. Waiting for approval by the regulator  
Shared Value projects, particularly host community employment and procurement programmes

### **Non-delivery of Damang Reinvestment and Gruyere projects**

Damang Reinvestment project ahead of schedule  
Mitigating strategies in place to catch up on the slight backlog at Gruyere caused by severe weather  
Monthly reporting and monitoring of construction and engineering schedules  
Management of construction and commissioning contractor strengthened  
Night shift introduced at Gruyere to ensure project schedule is achieved

### **Replacing Resources and Reserves at international operations**

Comprehensive near-mine exploration programmes in place  
Mergers and acquisitions strategy to identify opportunities, such as the Asanko joint venture (JV) in 2018  
Damang Reinvestment progressing ahead of plan, and Gruyere commissioning planned for mid-2019  
Salares Norte project feasibility study completed

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**Safety and health of our employees**

Establishment of the Group Safety Leadership forum in 2018  
Courageous Safety Leadership programme to be rolled out throughout the Group during 2019  
Behaviour-based safety and visible-felt leadership programmes ongoing in all regions  
All operations certified to OHSAS 18001 standard, converting to ISO 45001  
Independent verification of critical controls identified in the ICMM critical control management programme during 2019

**Water pollution, supply and cost**

Strict and focused compliance with environmental management regulations  
All operations ISO 14001 certified  
Water management plans expanded to include post-closure water management  
Water recycle, reuse and conservation practices in place in all regions, and targets set for 2019

**Attraction and retention of skills**

Fit-for-purpose regional and mine human resource (HR) structures to meet operational requirements  
HR strategy focused on developing a high-performance culture  
Succession planning and talent review systems in place at mine, regional and Group level  
Building line leader capabilities to enable strategic and operational focus and key deliverables

**Cost of energy and security of power supply**

Implementation of the integrated energy and carbon management strategy  
Solar microgrid system advanced at Granny Smith, and signed agreement for a hybrid solution at Agnew  
Review of South Deep solar photovoltaic project  
Oil price hedges in place in Australia and Ghana, ending in 2022

**Cybercrime / Loss of ICT data**

South Deep, corporate and regional offices ISO 27001 certified, with certification of all outstanding operations planned for 2019  
Cyber security maturity assessment conducted and areas for continual improvement identified  
Ongoing attack and penetration testing

**Impact on social licence to operate**

Growth opportunities in stable mining destinations – Damang, Gruyere and Salares Norte  
Enhanced stakeholder engagement planned for 2019  
Strengthen stakeholder engagement strategy to deal with Native Title issues in Australia  
Ongoing community investment and Shared Value projects in Ghana, Peru and South Africa

**Failure to implement climate adaptation measures**

Comprehensive climate change risk assessment conducted at all mines with remedial action plans being implemented  
Alignment of financial and operational disclosures to the Task Force on Climate-related Financial Disclosures (TCFD)  
Evaluating 20% renewable energy options for new project in Chile

### Increased geotechnical underground risks

Implementation of the recommendations by the external Geotechnical Review Board (GRB) at South Deep is ongoing  
Enhanced ground and secondary support to mitigate against rock bursts  
GRB work extended in 2018 to all Australian operations to mitigate the effects of seismicity

### Increased surface open pit geotechnical risks

GRB work to be undertaken for all major project and pit cutbacks  
Real time continuous pit wall monitoring at Damang  
Upgrading hydro-geological monitoring at the Cerro Corona pit to enhance pit wall stability

### Tailings dam failure

Gold Fields tailings storage facilities (TSFs) aligned with and assured against the ICMM position statement  
Increased governance of TSFs at Company and Board level  
Accelerated dam break assessments, design code compliances and updated emergency response procedures implemented

### High debt levels

Ongoing sale of non-core investments  
Extensions for maturity dates on revolving credit facilities  
Regular engagements with credit rating agencies and financial institutions  
Cash generation from operations to be used to pay down debt  
New bond offering under review

### Political uncertainty in jurisdictions where we operate

Continued geographic de-risking towards mining jurisdictions in which we operate  
Enhanced stakeholder engagement planned in 2019 with key stakeholders, particularly governments and communities  
Engaging governments directly and indirectly through industry associations

### **Fraud and breach of the Code of Conduct**

Rigorous oversight through Board and the Social, Ethics and Transformation Committee  
Compliance with corporate governance codes and regular reviews  
Global training programme conducted on relevant legislation  
Screening of suppliers and contractors for pre-defined risks

### **Failure to modernise operations**

Real-time monitoring solutions that track movement of equipment, people and production  
CEO Young Persons Team established to align with latest digital and social media trends  
Programme in place for cooperation between original equipment manufacturers, suppliers and ourselves  
Innovation and technology (I&T) strategy implementation to work towards Gold Fields Mine of the Future

### **Ezulwini (neighbouring mine) re-watering impact on South Deep**

Planned maintenance and monitoring programme of reinforced concrete water plugs between the two mines  
Participation in Ezulwini closure regulatory processes backed by legal strategy  
Development of alternative solutions to utilise mine water



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Risks and materiality continued

**Top five risks and opportunities per region in 2018**

Americas

**region**

**RISK/OPPORTUNITY AND MITIGATING ACTIONS**

**Life-of-mine extension at Cerro Corona**

Accelerate mining and stockpiling to facilitate early in-pit tailings  
Pre-feasibility study for 2030 life-of-mine extension finalised, and feasibility study to be completed in 2019

**Salares Norte project, Chile Potential delay in Environmental Impact Assessment (EIA) approval**

Close interaction with the authorities and building sound relations in terms of baseline studies  
Assurance of project information, engineering design, scope and timetable  
Proactive and timely community engagement programme

**Lower copper and gold grades**

Continuous monitoring of grade reconciliation  
Drilling programme to target deeper ore resources  
Additional stockpile build-up to reduce risk of ore shortages due to higher cut-off grade

**Increasing hardness of ore impacting processing throughput**

Ongoing blasting engineering project to optimise ore fragmentation  
Implementation of optimisation projects in the process facility to deal with increased hardness

**Local social pressures, conflicts and community expectations**

Proactive community and stakeholder relationships and engagement  
Crisis management plans to deal with potential conflict  
Stringent follow-up and feedback on all community commitments  
Involvement of government authorities in our social projects

Australia  
**region**

**RISKS/OPPORTUNITY AND MITIGATING ACTIONS**

**Reserve life**

Commissioning of the Gruyere project planned for mid-2019  
Significant near-mine exploration to delineate further reserves  
Accelerating exploration intervention at Agnew  
Acquisition of JV ground near St Ives and assessing toll-treatment options

**Gruyere project delivery**

Stronger management team appointed at the construction contractor  
Increased room capacity at onsite camp facility to facilitate larger labour component  
Night shift implementation  
Stricter expenditure approval process

### Turnover of key personnel

Review and enhancement of employee development programmes  
Flexible working arrangement to facilitate greater work-life balance  
Market-related salary increases  
Quarterly talent discussions held at leadership level

### Volatility of Australian gold price

Ongoing portfolio of business improvement projects  
Continued focus on cost controls  
Hedges in place for gold, currency and oil

### Native title legislation

Stakeholder engagement strategies and programmes in place  
Extend business opportunities and job placement to Indigenous groupings, where feasible  
Finalisation of a holistic strategy for Indigenous Engagement  
Development of a Reconciliation Action Plan  
Ongoing legal and specialist support

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West Africa

**region**

**RISKS/OPPORTUNITY AND MITIGATING ACTIONS**

**Fiscal and government policy changes**

Frequent engagement with relevant government departments  
Intensive engagement via the Chamber of Mines  
Ensure adherence to principles and conditions in the Development Agreement (DA)  
Back-up legal strategies

**Under-performance of contractor mining at Tarkwa**

Updating and monitoring key contract milestones  
Implementation of continuous improvement initiatives  
Dedicated team to address and mitigate shortfalls in contractor performance

**Execution of Damang mine Reinvestment project**

Implementation and delivery of milestones under the reinvestment plan  
 Fit-for-purpose organisational structure and continuous improvement initiatives  
 Ongoing monitoring of contract mining milestones  
 Pit-wall control implementation

**Reserve depletion at Tarkwa inadequate organic growth and life-of-mine extension**

Bringing the Asanko JV ounces to account and aligning processes and systems  
 Continued brownfields exploration to test for further potential at Tarkwa  
 I&T programme to improve operational and processing efficiencies  
 Ensure utilisation of DA benefits for long-term exploration potential

**Optimisation of Independent Power Producer (IPP) arrangements**

Continuous monitoring of IPP performance  
 Full commissioning and expansion of power plants at both Damang and Tarkwa  
 Completion of the gas pipeline to supply plants with natural gas replacing the road trucked liquid gas

South Africa

**region**

**RISKS/OPPORTUNITY AND MITIGATING ACTIONS**

**Loss of investor confidence due to non-achievement of the business plan**

South Deep workforce has been restructured through the Section 189 process ensure the right people in the right roles  
 Frontline leadership, productivity and ways of working intervention  
 Effective and sustainable management operating system  
 Identify business improvement initiatives and drive implementation  
 Improvement of fleet reliability and utilisation  
 Adaptation to Eskom supply constraints and developing longer-term strategies for power self-sufficiency

### Poorly defined execution strategy

- Develop and roll out key visual control standards
- Organisational restructuring frontline coaching
- Implementation of a business improvement process
- Improved fleet utilisation
- Ore pass/tip/discharge chute rehabilitation
- Roadway and footwall (water) management

### Inappropriate organisational structure

- Embed new HR structure
- Fit-for-purpose organisational structures with the right people in the right roles
- Robust talent management system
- Identity, develop and recruit successor for critical roles

### Ageing infrastructure

- Replacing ageing infrastructure based on an inventory of our assets
- Utilise South Shaft for mining services only to enable extended maintenance
- Implementing infrastructure and maintenance improvement projects
- Independent risk engineering audit conducted on infrastructure and fire risks with a five-year remedial action plan developed

### Health and safety of our employees

- Roll out and effective monitoring of the safety management systems
- Implementing behaviour-based safety programmes and the Courageous Leadership programme
- Effective baseline risk management process identifying major unwanted events and verification of effective critical controls

Strengthen systems for effective reduction of dust and noise exposure levels  
Implementation of South African mining industry's occupational safety and health initiatives

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Performance against strategic targets

Group 2018 performance against BSC objectives

Our strategy is embodied through our Board-approved balanced scorecard (BSC), which is cascaded throughout our organisation. Below we reflect on our performance against these targets in 2018. On the pages that follow, we show our CEO's performance against his 2018 targets, as well as the Group's 2019 BSC.

<sup>1</sup> At 2019 levels

<sup>2</sup> FCF does not take project capital into account

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**Table of Contents****PERFORMANCE AGAINST 2018 BALANCED SCORECARD TARGETS**

Production and AIC/oz better than yearly guidance with spatial compliance to plan	pg 56
No fatalities and a reduction in TRIFR by 10% in the long term (due to a regression in 2017, the stretch target was 12% for 2018)	pg 63
Reduce energy usage by 5% to 10% against a future baseline through energy saving initiatives and implement renewable energy initiative at South Deep	pg 70
Implement ICMM critical control guidelines on safety, health and environmental stewardship and stakeholder management	pg 64
Project delivery: deliver in accordance with key metrics for 2018	
Damang	pg 48
South Deep	pg 46
Gruyere	pg 44
Manage talent pipeline and succession cover for critical roles	pg 76
Reinvigorate vision and values to a winning culture that rewards teamwork and delivery of Group strategy	
Pay dividends in line with policy	pg 87
Debt:	
Maintain net debt: adjusted EBITDA ratio of under 1.25x-	pg 87

Extend debt maturity

pg 87

All new capital spend to have appropriate returns taking into account risks and cost of capital ranked and prioritised in accordance with an agreed matrix and in line with internal capital control standards and study guidelines. Accordingly all growth capital expenditure on existing mines, new projects or acquisitions to have hurdle rates of 15% at a US\$1,300/oz gold price

Deliver life extension, cost reduction, revenue enhancement and improved health and safety through innovation and technology (I&T) and business improvement initiatives

pg 74

Reduce Group life-of-mine AIC/oz and increase reserve life per region through brownfields exploration, M&A and optimisation of existing mines

pg 50

Deliver positive Salares Norte feasibility project that exceeds metrics set for the project

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Mine closure costs, along with concurrent rehabilitation plans, incorporated into strategic plans

pg 105

Improve total shareholder return by positioning share price between median and upper quartile of peer group

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Increase the proportion of sustainable host community procurement and employment to drive Shared Value

pg 111

No Level 3 or above environmental incidents and a 10% reduction in Level 2 incidents

pg 95

Align management practices with ICMM tailings and water position statements

pg 100

Deliver and manage a robust and transparent group governance and compliance programme

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Maintain position in top five of the Dow Jones Sustainability Index (DJSI)

**Performance key:**    Achieved    Ongoing    Not achieved

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Performance against strategic targets continued

### CEO's 2018 performance against BSC objectives

Gold Fields recognises that remuneration is a critical part of value creation. We are committed to aligning our employees' remuneration to our strategic objectives, as embodied in our Group BSC. The Group BSC is then cascaded into individual scorecards, to ensure individual effort drives Group performance. Below is a summary of our CEO, Nick Holland's, BSC for 2018 and his performance against it. His average score for 2018 was 2.9 out of 5, as evaluated by the Remuneration Committee. The Board believes that by reflecting on the CEO's scorecard and how it drives value creation, we demonstrate to our stakeholders our commitment to fair and transparent reporting. For the detailed breakdown of the CEO's BSC, refer to our comprehensive Remuneration Report in the AFR p44 - 46.

**PERFORMANCE RATING SCALE:**

<b>1</b> / Target not achieved <i>(less than 60% of goals achieved)</i>	<b>3.5</b> / Great performance <i>(106% - 110% of goals achieved)</i>
<b>2</b> / Underperformance <i>(60% - 90% of goals achieved)</i>	<b>4</b> / High performance <i>(111% - 120% of goals achieved)</i>
<b>2.5</b> / Development required <i>(91% - 99% of goals achieved)</i>	<b>4.5</b> / Top performance <i>(121% - 125% of goals achieved)</i>
<b>3</b> / Good performance <i>(100% - 105% of goals achieved)</i>	<b>5</b> / Exceptional performance <i>(126% or more of goals achieved)</i>

**CATEGORY KEY:**

Safe Operational Delivery
Portfolio Management
Licence and Reputation
Capital Discipline

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**Group 2019 performance targets**

Each year, management and the Board assess the Group's key objectives for the year ahead to ensure the Group achieves its medium-term target. The 2019 goals are captured in the BSC below.

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Vision of the Chairperson  
Summarised governance and  
compliance report  
Our Board of Directors  
CEO Report  
Introduction and overview  
Group performance scorecard  
Strategy overview  
Note of thanks

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## Vision of the Chairperson

Many of our stakeholders, particularly investors, still see Gold Fields as a South African mining company, with much of its fortunes inextricably linked to the country's current and future mining landscape, as well as the short-term performance and outlook for South Deep, our sole remaining mine in the country. We are a proudly South African company with a history going back to 1887 and remain deeply committed to the country despite the political and economic uncertainties currently besetting it. While South Deep is a key component of our portfolio, I continue to stress that Gold Fields is a global gold mining company with a portfolio of assets spread across three continents.

Not only are our production and cash-flow already heavily weighted towards our mines in Australia, Peru and Ghana, we have increased our investment in these countries to enhance sustainability of our business:

We have successfully completed a feasibility study for the Salares Norte project in Chile and declared a maiden Mineral Reserve. While we await the outcome of the Environmental Impact Assessment (EIA), expected in early 2020, we have also asked management to develop a funding plan for the project

We have extended the life of our Cerro Corona mine in Peru to 2030 and are working on a scoping study with the aim of extending it further to 2040

Our substantial investments in near-mine exploration at our Australian mines continued to yield good results, with the mines not only making up annual depletion but adding net Mineral Reserves over the past four years

Until two years ago, just over 70% of our Reserves were held by South Deep. That profile has changed: at end 2018, 59% of the Group's attributable Mineral Reserves were at the mine

to a 45-day strike. We could not yield to the demands of the unions to reverse the retrenchments, as this would have put the sustainability of South Deep, and the remaining 3,500 jobs, at risk.

I believe that the restructuring, the most comprehensive in South Deep's history, will achieve a significant reduction in the cash losses this year and set the mine up for long-term and sustainable growth. However, the Board has also mandated management to investigate alternative options should it fail to deliver its key targets over the next year.

Gold Fields' mines performed well against a background of a volatile gold price and heavy investment in growth projects during 2018. All mines, except South Deep, met, or improved on, their production and cost guidance and generated sufficient cash to fund the bulk of the investment spend and pay a modest dividend to shareholders.

Our combined US\$502m investment over the past two years in the Damang mine in Ghana and the Gruyere project in Australia is set to bear fruit in 2019, with the potential to further boost our production and profitability in these regions

During 2018, we acquired a 45% stake in the highly prospective Asanko gold mine (AGM) in Ghana, further raising our profile in a jurisdiction in which we have operated for 25 years

We expect the production of our portfolio in Australia, Ghana and Peru to approach 2Moz during 2019. Based upon our attributable gold-equivalent Mineral Reserves of over 20Moz in these regions, our track record of resource conversion and exploration activity, we believe that our global portfolio outside of South Africa will be able to maintain a similar production level over the medium to longer term (at the current gold price)

I believe that these developments clearly underscore Gold Fields strong and sustainable global profile.

Turning to South Deep, I fully appreciate the frustration experienced by our shareholders over the past few years. We failed to deliver the rebase plan in 2018, as it became evident that South Deep would not achieve the targets set out in the plan and continued to experience cash losses that averaged R100m (US\$8m) a month.

With the full backing of the Board, the mine embarked on a fundamental restructuring in Q3 2018, which saw management close loss-making areas, reduce the cost base and embark on a section 189 retrenchment process. Unfortunately, this meant that we had to retrench just over 1,500 employees and contractors, despite the strong opposition by the unions, which led

We had to increase our debt to pay for the acquisition of Asanko Gold but, notwithstanding this, our balance sheet remained in good health.

Not only has the cash generated by our mines enabled us to invest in future growth, but also to create significant value for our key stakeholders. During 2018, Gold Fields total value distribution to our stakeholders was US\$2.7bn in the form of payments to governments, capital providers, business suppliers and our workforce.

A particular focus in 2018 was strengthening our relations with host communities, whose partnership is critical in sustaining our mines. We have asked management to focus on host community employment and procurement, to improve the economic wellbeing of these communities. During 2018, almost a quarter of our total value creation,

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Vision of the Chairperson continued

almost US\$700m, remained in our host communities through focused job creation and procurement.

Stakeholder engagement and relations remain a critical issue for the Board. As a foundation, we want to develop honest, mutually beneficial partnerships with these stakeholders and, by and large, have found ways to achieve this. In return though, we would expect governments and trade unions, in particular, to work with us to ensure that our mines can continue to operate sustainably.

During 2018, the major trade unions at our Ghanaian and South African operations resisted the restructurings we believed were essential to ensure the longevity and profitability of our Tarkwa and South Deep mines. While we eventually implemented contractor mining at Tarkwa and retrenchments at South Deep, we need to re-establish common ground with our union partners.

Resource nationalism is growing in many major mining jurisdictions. This presents a significant challenge for Gold Fields as we seek to expand our operations in some of these jurisdictions. In South Africa, a new Mining Charter was finally agreed in mid-2018. It is a significant improvement on previous iterations. There are, however, critical areas with which Gold Fields and the industry has deep concerns, namely that the Charter does not fully recognise the black economic empowerment (BEE) ownership credentials of previous BEE transactions. This is the case in respect of mining right renewals and transfers of these rights. To be frank, this is a non-negotiable for the mining sector and will require more engagement between the Minerals Council of South Africa and the Department of Mineral Resources (DMR). The 2018 Charter will also

require significant investment in employment equity, procurement and enterprise development, and human resource development.

The mining regimes in Peru, Ghana and Australia remain largely stable. Overall though, we would welcome a more proactive approach by governments, such as the one adopted by the Ghanaian government which has entered into development agreements (DAs) with large mining companies that actively encourage investments.

Most importantly, the Board shares management's commitment to eliminate all fatalities and serious injuries. It is therefore a major disappointment that we experienced a fatality during 2018. I want to express my sincerest condolences to the family, friends and colleagues of Ananias Mosololi, a load haul dump truck operator at South Deep.

Gold Fields continues to show significant progress in improving our safety performance and management practices. During 2018, the fatality rate, the benchmark total recordable injury frequency rate (TRIFR) and the total number of recordable injuries continued their overall improvements of the past few years. At 1.83 incidents per million hours worked, the Gold Fields 2018 TRIFR has improved by 55% since 2014.

On the health front, the Occupational Lung Disease Working Group, representing the majority of gold mining companies in South Africa, including Gold Fields, reached a historic settlement with attorneys representing ex-mineworkers suffering from silicosis and tuberculosis (TB). The settlement, once approved by the courts, is set to see R5bn (US\$380m) dedicated to compensating ex-mine workers.

### ***Appreciation***

As directors of this Company, one of our key responsibilities is to ensure that the global corporate governance programmes at Gold Fields are in line with the ever-changing and more stringent standards expected from multinational companies. I take enormous comfort in the fact that our Board of Directors comprises a team of dedicated and able men and women whose experience, knowledge and commitment makes my task as Chairperson so much easier.

The composition of this team was strengthened during 2018 with the addition of Phuti Mahanyele-Dabengwa to the Board. Phuti took over from Don Ncube, who was on Gold Fields Board for over 11 years. Don left a considerable mark at Gold Fields in terms of the transformation of the Company, improved relationships with our host communities and, most recently, as Chairperson of the Social, Ethics and Transformation (SET) Committee. His experience, counsel, humour and friendship will be missed.

Gold Fields had to contend with difficult economic and operational circumstances during 2018. The continued operational, financial and sustainability progress made by the Company in these conditions is a credit to the hard work and dedication of its employees, led by CEO Nick Holland and his executive management team. On behalf of the Board, I would like to express my gratitude to Nick and his team around the globe and wish them strength for their endeavours in the year ahead.

### **Cheryl Carolus**

*Chairperson*

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Summarised corporate governance

***Corporate governance overview***

Strong leadership and good governance support the achievement of our vision to be the global leader in sustainable gold mining. By protecting and enhancing our reputation and licence to operate, and ensuring compliance with legislation and industry standards, good governance ensures we continue to enjoy the support of stakeholders and allows us to deliver sustained value. The long-term, capital-intensive nature of our mining operations, as well as the often challenging social and political contexts in which we operate, make it even more important that we leverage good governance to ensure the long-term sustainability of our business.

In addition to the international standards and guidelines to which we voluntarily subscribe (outlined on p3 of the Annual Financial Report (AFR)), we are committed to entrenching the principles of the King IV Report on Corporate Governance (King IV) in our operations. The application of King IV within the Company can be found in the full corporate governance report on p15 – 16 of the AFR.

**KEY DELIBERATIONS AND DECISIONS TAKEN BY THE BOARD**

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Our Board of Directors

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**1. Cheryl Carolus (60)**

***Chairperson***

BA Law; Bachelor of Education, University of the Western Cape; Honorary Doctorate in Law, University of Cape Town

**Appointed to the Board:**

Director 2009, Chairperson 2013

**2. Richard Menell (63)**

***Deputy Chairperson***

MA (Natural Sciences Geology), Cambridge; MSc (Mineral Exploration and Management), Stanford University, California

**Appointed to the Board:**

2008, Deputy Chairperson 2015, Lead Independent Director 2017

**3. Terence Goodlace (59)**

**6. Carmen Letton (53)**

***Independent non-executive director***

PhD (Mineral Economics, University of Queensland; Bachelor Mining Engineering, WASM

**Appointed to the Board:**

2017

**7. Steven Reid (63)**

***Independent non-executive director***

BSc (Mineral Engineering), South Australian Institute of Technology; MBA, Trium Global Executive, ICD.D, Institute of Corporate Directors

**Appointed to the Board:**

2016

**8. Alhassan Andani (57)**

***Independent non-executive director***



***Independent non-executive director***

MBA (Business Administration), University of Wales; BCom, University of South Africa; NHDip (Metalliferous Mining), Witwatersrand Technikon; MDP, University of Cape Town

BSc (Agriculture), University of Ghana; MA (Banking and Finance), Finafrica Institute in Italy

**Appointed to the Board:**

2016

**Appointed to the Board:**

2016

**4. Phuti Mahanyele-Dabengwa (48)**

***Independent non-executive director***

Executive Development Programme, Kennedy School of Government, Harvard University, US; MA Business Administration, De Montford University, Leicester, UK; BA Economics, The State University of New Jersey, US

MA (Economics), Cambridge University

**Appointed to the Board:**

2016

**Appointed to the Board:**

2018

**5. Paul Schmidt (51)**

***Chief Finance Officer***

BCom; University of the Witwatersrand; BCompt (Hons), University of South Africa; CA(SA)

Executive director, 1998

CEO, 2008

**Appointed to the Board:**

2009

**11. Yunus Suleman (61)**

***Independent non-executive director***

BCom, University of KwaZulu-Natal; BCompt (Hons), University of South Africa; CA(SA)

**Appointed to the Board:**

2016

Board diversity

Board independence

Board tenure

Experience

Nationalities:

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Governance

**THE BOARD AND ITS SUB-COMMITTEES (as at March 2019)**

**The Board of Directors**

*Meets four times per year*

As the highest governing authority of the Group, the Board offers guidance and oversight that allows the Company to achieve its strategic objectives and deliver maximum value for stakeholders. It comprises a diverse group of competent and appropriately skilled and experienced individuals who seek to govern with integrity, responsibility, accountability, fairness and transparency. This informs the manner in which it leads to set the ethical tone of the Company. It delegates to management the responsibility of the implementation of and adherence to the Gold Fields Code of Conduct and the Company's values, and monitors how a culture of ethics is being managed.

**Audit Committee**

*Meets six times per year*

**Members:** Rick Menell, Alhassan Andani, Peter Bacchus

The Audit Committee oversees the integrity and transparency of Gold Fields' corporate reporting, and considers risks that may affect the integrity of external reports.

**Remuneration Committee**

*Meets four times per year*

**Members:** Cheryl Carolus, Alhassan Andani, Rick Menell, Peter Bacchus

The Remuneration Committee assists the Board in confirming that remuneration throughout the Group is fair and equitable and that the remuneration of executive management, in particular, is directly linked to Gold Fields performance against strategic objectives. This protects the interests of stakeholders by incentivising management to deliver value.

## **Social, Ethics and Transformation**

### **Committee**

*Meets four times per year*

**Members:** Cheryl Carolus, Rick Menell, Alhassan Andani, Nick Holland, Phuti Mahanyele-Dabengwa

This committee guides corporate behaviour and holds the Company accountable for conducting business ethically in line with the principles of good corporate citizenship. With a central focus on how the business interacts with communities and employees, it helps the business to retain its social licence to operate – a critical component of long-term sustainability.

## **Capital Projects, Control and**

### **Review Committee**

*Meets four times per year*

**Members:** Peter Bacchus, Terence Goodlace, Yunus Suleman, Steven Reid, Cheryl Carolus, Phuti Mahanyele-Dabengwa, Carmen Letton

This committee considers new capital projects and satisfies the Board that the Group has used correct, efficient methodologies in evaluating and implementing such projects.

## **Safety, Health and Sustainable**

### **Development Committee**

*Meets four times per year*

**Members:** Cheryl Carolus, Rick Menell, Steven Reid, Carmen Letton, Phuti Mahanyele-Dabengwa

The SHSD Committee seeks to ensure that Gold Fields complies with relevant laws, regulations and external standards to ensure optimal safety, health and environmental practices, contributing to the Group's reputation as a responsible corporate citizen.

### **Risk Committee**

Meets twice per year

**Members:** Terence Goodlace, Carmen Letton, Yunus Suleman

The Risk Committee assists the Board in developing improved risk management approaches, ensuring consistent value creation for our stakeholders in an ever-changing risk environment.

### **Nominating and Governance Committee**

*Meets four times per year*

**Members:** Steven Reid, Rick Menell, Yunus Suleman

This committee plays a leadership role in the structure and operation of Gold Fields' Board, and guides the Company's corporate governance ensuring an ethical and value-driven culture.

### **Ad-hoc Investment Committee**

**Members:** Alhassan Andani, Yunus Suleman, Steven Reid, Cheryl Carolus, Rick Menell

This committee makes recommendations to the Board on strategic restructuring options for the Group, as and when required.

### **Our Group Executive Committee (Exco)**

The Group Exco is primarily responsible for the implementation of Gold Fields' strategy, as well as carrying out the Board's mandate and directives.

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Exco meets on a regular basis to review Company performance against set objectives and develops strategy and policy proposals for consideration by the Board. It also assists the Board in the execution of the Company's disclosure obligations.

Exco consists of the principal officers and executive directors of Gold Fields 12 members in total.

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**BOARD OVERSIGHT OF KEY ISSUES PERTAINING TO OUR BUSINESS**

**Building an ethical culture**

As the highest governing authority of the Group, the Board is responsible for upholding an ethos of good governance and sustainability. It sets the tone for a culture of ethics that permeates throughout the Company. This underpins Gold Fields' commitment to going beyond compliance requirements, and voluntarily embracing best practice standards and principles.

The Board also seeks to ensure that business decisions are made with reasonable care, skill and diligence. This protects and enhances the Company's reputation and helps to maintain its licence to operate – a fundamental foundation of sustainability.

**Creating a safe working environment**

**Setting fair remuneration**

In determining remuneration principles, the Board is guided by the principles of King IV. The remuneration policy (outlined on p79) includes detailed and specific disclosures on implementation. Gold Fields provides stakeholders with transparent reporting of the remuneration of the CEO and CFO. The Board seeks to ensure that remuneration of executives is fair, equitable and responsible, and informed by the value added by the Exco through the achievement of strategic objectives.

Through the Remuneration Committee, the Board ensures that remuneration practices align with shareholder interests and support the achievement of a sustainable business by:

Helping to attract, motivate, retain and reward employees

Driving the achievement of strategic objectives through appropriate incentives and rewards

Our Board’s commitment to safety and health as our key 4 priority reflects the imperative of minimising any potential negative impact on our employees and contractors, maintaining operational continuity and protecting our reputation. The Board, together with management, drives a stringent safety culture. In upholding our primary value, ‘If we cannot mine safely, we will not mine’, the Board also backs management in stopping mining in areas or situations that are deemed unsafe.

In discharging its oversight responsibilities with regard to safety, the Board is assisted by the SHSD Committee, which receives detailed quarterly reporting on all safety issues and incidents. The Board also oversees Gold Fields’ adherence to safety, health and environmental standards and compliance requirements, and has approved the Company’s adoption of various voluntary best practice safety principles.

**Environmental and stewardship impact on communities**

The Board seeks to ensure that Gold Fields conducts business in a way that aligns with good corporate citizenship, and that we continually assess and respond to any negative impacts our operations may have on communities and the environment. The importance of these issues informed the Board’s establishment of a dedicated SET Committee in 2015. The committee focuses on, among others, our impact on communities, while the SHSD Committee deals with, *inter alia*, issues of environmental stewardship.

Promoting a culture of ethics and responsible corporate citizenship

**Stakeholder relationships and engagement**

Gold Fields understands that stakeholders are an integral part of our business, representing a wide range of interests that both influence and are impacted by our operations. The Board, through the adoption of the Stakeholder Relationship and Engagement Policy, seeks to ensure that the Company follows a stakeholder engagement approach that allows for participative and informed decision making. By overseeing transparent reporting, it allows stakeholder groups to make an informed assessment of Gold Fields’ ability to deliver sustainable value.

As stakeholder concerns have become increasingly important to Gold Fields’ sustainability, the Board has driven an evolution from simple stakeholder management to inclusive stakeholder engagement and relationship building. This approach balances the interests, needs and expectations of our stakeholder with the best interests of Gold Fields.

**Strategy to deliver long-term value and sustainability**

The Board is independent and delegates responsibility for the development and implementation of the strategy to the Group Exco. However, the Board nevertheless has a deep understanding of and approves the strategic goals and direction of the Company. When reviewing the strategy, it considers the business’ risks and opportunities and how these might impact the achievement of objectives. In so doing it aims to ensure that the strategy drives a sustainable business agenda and considers the interests of stakeholders.



For more information on our environmental stewardship and how we interact with communities, refer to p95 124.

### **Regulatory environment**

We seek to comply with all relevant laws and regulations, as well as the highest levels of corporate governance, and often our governance practices exceed the legal minimum. As such, corporate governance systems and frameworks at Gold Fields are reviewed constantly to align with the ever-changing and increasingly stringent standards that are being rolled out by regulators.

Exco presents the Company strategy, business plans and risk register to the Board on an annual basis for input and approval. The Board also agrees performance targets with management. The CEO provides the Board with monthly reports on, among others, performance against strategic and operational targets. This input allows the Board to effectively monitor the implementation of strategy.

Board members perform onsite visits to our operations and projects, and on occasion interact with individual executives on strategic and operational performance.

### **Innovation and Technology (I&T)**

Gold Fields recognises the importance of implementing I&T to secure the sustainability of our operations. Doing so is expected to deliver higher production, greater efficiencies, improved safety and a decrease in the potential negative impact on the environment and communities. In line with the requirements of King IV, the Board has approved an I&T strategy that is set to further the achievement of Gold Fields Group strategy.

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Summarised corporate governance

**Ensuring we do business ethically**

**THE STRUCTURES AND MECHANISMS USED TO DRIVE ETHICAL BUSINESS PRACTICE**

Our business is built on the foundation of ethics, which informs a culture of integrity and transparent reporting to our stakeholders. This foundation assists us in ensuring that we build trust, strengthen our reputation and create value for all our stakeholders. The Board and its committees set the ethical tone for the business. We use various mechanisms to confirm ethical behaviour, compliance and good governance in the business:

*Assesses the legal risks facing the Company and mitigates these by enacting effective policies, procedures and controls.*

***During 2018, we:***

Enhanced the regulatory risk profile process to incorporate the review and assessment of all applicable and adopted, non-binding rules, codes and standards (RCS) per country

Developed an online regulatory and RCS risk dashboard for the Group

*The Risk Committee reports our key business risks to the Board on a biannual basis. The Board aims for effective controls and corrective measures are in place to manage and mitigate these risks. Furthermore, the Audit Committee seeks to ensure the integrity, accuracy, and adequacy of accounting records.*

***Internal Audit*** assesses that the internal controls in place are working to mitigate potential risks. This takes place in all regions on a quarterly basis and operations are given an audit ranking. Corrective measures are put in place where

*We support the development of an ethical and impactful industry, one that goes beyond a compliance-based approach. Gold Fields is aligned to both international and local best practices, which underpin our commitment to responsible corporate citizenship. We are committed to and guided by:*

The legislation and regulations of the countries in which we operate

The requirements of the stock exchanges on which we are listed

The United Nations (UN) Guiding Principles on Business and Human Rights

<p>Recorded an Annual Compliance Index per region and for the Group</p> <p>Confirmed alignment with the Internal Audit Plan</p> <p>Screened 100% of all new and existing suppliers and contractors for a range of pre-defined risk categories, including human rights and related violations</p>	<p>necessary.</p> <p><b>External Audit</b> provides the integrity, accuracy and adequacy of accounting records and corporate reporting. During 2018 we contracted PricewaterhouseCoopers as our new auditors from 2019 onwards, following our standard tender process. KPMG had been our auditors since 2010.</p> <p>For more information on our Risk and Audit committees, refer to the full Governance Report in the Annual Financial Report.</p>	<p>The ICMM 10 Principles on Sustainable Development</p> <p>The 10 Principles of the UN Global Compact</p> <p>King IV</p> <p>UN Convention Against Corruption</p> <p>OECD Convention on Combating Bribery</p> <p>Extractive Industry Transparency Initiative</p> <p>World Gold Council Conflict Free Gold Standard</p> <p>Voluntary Principles on Security and Human Rights</p> <p><i>During 2018, we also committed to the Task Force on Climate-related Financial Disclosures (TCFD).</i></p>
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### Code of Conduct

*Our Code of Conduct is informed by the Gold Fields values and underpins the way we conduct ourselves, from our operations to our Board. It also extends to our supply chain business partners. The Code of Conduct was updated in 2017 and distributed to all existing employees, while all new employees receive it during their onboarding. As at end 2018, 66% of our people had undergone training on the Code of Conduct. An anonymous Tip-Offs hotline is permanently in operation, and the Company takes a zero tolerance approach to intimidation and victimisation of those who report incidents.*

#### **Key principles of our Code of Conduct:**

Emphasis on ethical leadership within the organisation in addition to ethical management

Protection of employee and third-party whistle-blowers, promoting an environment for reporting of Code of Conduct transgressions

Safeguarding the business against potential reputational harm and litigation

Transparent and ethical dealings with government and suppliers

Protection of company information

Accurate and transparent reporting

Safeguarding against insider trading

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CEO Report

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CEO Report continued

**Introduction and overview*****Dear stakeholders***

2018 marked the second year of the reinvestment programme embarked on by Gold Fields at the end of 2016. The key motivation behind the investment focus is to ensure that our portfolio of mines continues to generate cash sustainably into the foreseeable future, while at the same time lowering our costs and extending mine life.

Having spent total project capital of US\$502m over the past two years, primarily on Damang and Gruyere, Gold Fields is now well placed to maintain a production profile of near to 2Moz a year at our international operations in Australia, Ghana and the Americas over the medium to long term. This is based on current gold price levels, our attributable gold Mineral Reserves of 20Moz in these regions as well as our track record of Resource conversion and exploration activities.

margin of 15% at a gold price of US\$1,200/oz (previously US\$1,300/oz).

Not only did our international portfolio of mines exceed its production targets in 2018, but it also outperformed cost guidance. However, as South Deep, our only remaining South African operation, was well below target, Group attributable production of 2.04Moz for the year was below our original guidance of 2.08 – 2.10Moz, as well as 2017 production of 2.16Moz. Group AIC of US\$1,173/oz were below the guided US\$1,190/oz US\$1,210/oz, but slightly higher than the US\$1,088/oz reported in 2017, due to the continued investment in our growth projects.

The strong operational performances of our operations in Ghana, Peru and Australia resulted in net cash flows of US\$332m, and enabled us to fund our US\$290m total project capital expenditure in 2018 (excluding Asanko), without putting undue

fatalities and serious injuries to realise our goal of zero harm. We did however see a continued improvement in our health and safety performance amid renewed efforts to entrench a committed safety culture and standards. Gold Fields' total recordable injury frequency rate (TRIFR) fell below two recordable injuries per million hours worked for the first time, a continuation of our long-term downward trend and our best safety performance ever.

Mining is an industry that has significant impacts on the countries and communities in which it operates. This requires continued proactive stakeholder engagement strategies and sustainable development policies.

Host communities, in particular, are critical stakeholders for our mines. During 2018, we continued investing significant resources in community programmes, including increasing the share of jobs and

The 2Moz milestone is expected to be reached for the first time in 2019 as Damang and Gruyere are set to come into production and our Asanko joint venture (JV) in Ghana contributes for the full year. The longer-term future of this portfolio also looks positive as we continue to invest in near-mine exploration at our Australian mines, while the Board has approved a maiden Mineral Reserve and the technical components of the feasibility study for the Salares Norte project in Chile.

The globalisation of our portfolio has also been evident in a gradual shift in our Mineral Reserve exposure. Until two years ago, just over 70% of our Reserves were held by South Deep. That profile has changed: of our total gold-equivalent Mineral Reserves of 50.9Moz in December 2018 (December 2017: 53.1Moz), 41% are now outside South Africa.

One of the key benefits of the reinvestment programme over the past two years is the expected reduction in Group All-in Costs (AIC) to approximately US\$900/oz, a level which we feel is required to be competitive on a global scale. As the quality of the portfolio improves and our cost profile starts to decline, we expect an improved free cash-flow (FCF) margin. For 2019, therefore, we have adjusted our target to a FCF

pressure on our balance sheet. Despite the increased spending, as anticipated, we declared a total dividend for 2018 of R0.40/share. Planned project and sustaining capital for 2019 is scheduled to decline to US\$633m, of which US\$143m is growth capital.

At South Deep, annual production in 2018 at 157,100oz was half the originally guided 321,000oz. Production in the second half of the year was impacted by the tragic fatal accident as well as a wide ranging restructuring, including the retrenchment of over 1,500 employees and contractors, and a subsequent six-week strike by the majority National Union of Mineworkers (NUM). However, I believe that in the wake of the restructuring, which has seen our employee workforce at the mine fall by about 30% to just under 2,500 and the number of contractors decrease from 2,294 to 1,725, we are in a position to significantly reduce South Deep pre-restructuring (H1 2018) cash-burn of about R100m (US\$8m) a month.

During 2018, we recorded one fatality (three in 2017), which served as a tragic reminder that we have lots more work to do to eliminate all

procurement spend allocated to host communities. We are showing good results with around 25% of our total value creation of US\$2.7bn during 2018 channelled into host communities.

The judicious use of water and energy resources by our mines and proactive mine closure programmes are other critical elements of our sustainable development programmes, not only as part of our commitment to operational efficiencies and environmental stewardship, but also as part of strengthening our social licence to operate.

We are also committed, in collaboration with our peers in the ICMM, to a renewed focus on the governance and technical management of our tailings storage facilities (TSFs) following the collapse of a TSF at Vale's Feijão iron ore mine in Brumadinho, Brazil, in January 2019, during which there were over 300 deaths.

The Gold Fields share price took a hit when we announced the restructuring of South Deep in August 2018. While it has gradually recovered since then, overall in 2018 our share price decreased by 18% on the New York Stock Exchange and 9% on the JSE.

**Table of Contents****Group performance scorecard****Performance highlights (Group)**

		2018	2017 <sup>4</sup>
Fatalities	Number	<b>1</b>	3
TRIFR	/million hours worked	<b>1.83</b>	2.42
Attributable production	Moz	<b>2.04</b>	2.16
All-in Sustaining Costs (AISC) <sup>3</sup>	US\$/oz	<b>981</b>	955
AIC <sup>3</sup>	US\$/oz	<b>1,173</b>	1,088
Net cash-flow <sup>1,3</sup>	US\$m	<b>(132)</b>	(2)
Free cash-flow (FCF) margin <sup>3</sup>	%	<b>16</b>	16
Net debt <sup>3</sup>	US\$bn	<b>1,612</b>	1,303
Dividend declared	R/share	<b>0.40</b>	0.90
Total value distribution	US\$bn	<b>2,711</b>	2,849
Energy usage <sup>2</sup>	TJ	<b>11,628</b>	12,178
Water withdrawal <sup>5</sup>	M	<b>21,179</b>	32,985
CO <sub>2</sub> emissions	million tonnes	<b>1.85</b>	1.96
Host community procurement (% of total) <sup>6</sup>	%	<b>27</b>	45
Host community employment (% of total) <sup>7</sup>	%	<b>56</b>	40
Gross mine closure liabilities	US\$m	<b>400</b>	381

<sup>1</sup> Net cash-flow = cash-flow from operating activities less net capital expenditure, environmental payments and finance lease payments

<sup>2</sup> The sum of direct and indirect energy consumption reflects a conversion factor used by Granny Smith, Tarkwa and Damang power stations to account for generation losses

<sup>3</sup> These non-IFRS measures have been defined in management's discussion and analysis in the Annual Financial Report and have been reconciled to IFRS

<sup>4</sup> 2017 numbers include continued and discontinued operations

<sup>5</sup> Large difference in numbers due to change of definition of water withdrawal to exclude diverted water

<sup>6</sup> The % decline is due to a change in the definition of host communities by our Australian operations to only include communities in their area of influence (previously Perth was included in the definition due to the FIFO nature of our mines)

<sup>7</sup> South Deep's host community definition was changed in 2018 to align with the 2016 municipal boundary change which amalgamated the Westonaria and Randfontein municipalities. It now includes all individuals who reside in the Rand West City Local Municipality. This number also excludes the Perth office and Gruyere project



Each year, Gold Fields adopts a Group performance scorecard that incorporates the Company's strategic priorities and seeks to instil the right culture and behaviours among our workforce, driven by the imperatives of safety, cash generation and sustainably growing the business.

By integrating all of the key value drivers into the business, the scorecard also aims to enhance the Group's sustainability and reflects the integrated nature of our business. The scorecard consists of four key performance areas and elements against which we measure our performance, which are discussed in detail in the IAR:

- 1. Safe operational delivery – how we make money (p56)**
- 2. Portfolio management – what we choose to invest in (p40)**
- 3. Capital discipline – how we spend money (p84)**
- 4. Licence and reputation – how we conduct ourselves (p92)**

My performance as CEO against my scorecard objectives is shown on p16. This Integrated Annual Report (IAR) is structured along the lines of our 2018 scorecard and an overview of each performance area follows.

### ***Safe operational delivery***

#### **Safety and health**

Safety is management's first priority and it is critical that we continuously emphasise our commitment to zero harm. Therefore, the fact that we still had one fatality at our mines during 2018, compared with three in 2017, is a setback. Our heartfelt condolences go out to the family, friends and colleagues of Ananias Mosololi, a load haul dump operator at South Deep, who died after an underground accident on 12 October 2018. In a non-mining-related accident, a member of the Community Security Task Force, Francis Yeboah, drowned in a settling pond at our Tarkwa mine in Ghana. We are deeply saddened by his loss and extend our condolences to his family.

Our overall safety performance improved during 2018, with the TRIFR declining to 1.83 incidents per million hours worked from

2.42 in 2017, as the total number of recordable injuries reduced to 99 from 138 in 2017. This is a continuation of a longer-term trend. As recently as 2014, our TRIFR was 4.04 and we reported 200 recordable injuries.

Working towards eliminating all fatalities and serious injuries remains a priority for our management teams at the operations, which have ultimate responsibility for health and safety issues. The Group Safety Leadership Forum, formed in 2017, is overseeing the development of a Group-wide safety strategy that will further improve our safety performance. It has identified three pillars to underpin our safety efforts - systems and processes, safety leadership, and safe behaviour - to complement the many good safety initiatives already in place. To further

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CEO Report continued

### **Group performance scorecard continued**

entrench safe behaviour, we have also implemented greater recognition for safety in performance scorecards of all employees by adding a number of leading indicators to the current lagging indicators.

On the health front, the Occupational Lung Disease Working Group, representing most gold mining companies in South Africa, including Gold Fields, reached an historic settlement with attorneys representing ex-mine workers suffering from silicosis and TB. The settlement still needs to be approved by South Africa's courts. Once it is approved a trust will be set up, funded by R5bn (US\$390m) from the gold mining companies, and the process of compensating ex-mine workers can finally begin. Gold Fields has provided R368m (US\$25m) for its share of the settlement.

### **Business and financial performance**

2018 was the second year of our reinvestment programme that seeks to improve the quality of our portfolio and sustain the current production base for the next decade. The significant capital expenditure requirements that accompany this programme inevitably resulted in higher Group AIC and reduced net cash-flow during both 2017 and 2018. As such, we guided the market at the beginning of 2018 on higher costs and marginally lower production.

Group attributable production of 2.04Moz for the year was 2% below our originally guided 2.08 – 2.10Moz. All the international mines exceeded their production guidance. South Deep's production at 157,100oz was well below guidance.

Despite the significant capital expenditure programme during 2018, stringent cost management across the Group resulted in a good cost performance with AIC of US\$1,173/oz and AISC of US\$981/oz in 2018, below guidance

for the year of US\$1,190/oz – US\$1,210/oz and US\$990/oz – US\$1,010/oz respectively.

Total capital expenditure during 2018 was US\$814m, just lower than the US\$834m spent in 2017. The Group reported net cash-outflow of US\$132m (2017: US\$2m cash-outflow) and a FCF margin (which excludes capital spend on growth projects) of 16% (2017: 16%). The gold price received by Gold Fields during 2018 averaged US\$1,252/oz (2017: US\$1,255/oz).

The Group and mine operating and financial performances are detailed on p56 – 62.

### **South Deep restructuring**

2018 proved to be an extremely difficult year for South Deep. After falling behind plan in H1 2018, management announced a material restructuring on 14 August 2018. The aim of the restructuring was to consolidate mining activity to increase focus, and to match the cost structure with the level of production.

As part of the restructuring, South Deep closed mining activities in loss-making areas of the mine and reduced operational and support staff commensurately. Development activities in the new mine areas were also suspended. Both registered trade unions were served with section 189 notices in terms of South Africa's Labour Relations Act and, after the legislated consultation period ended, the retrenchment of 1,092 employees and 420 contractors were implemented. This leaves the staff complement approximately 30% lower than it was before the retrenchments.

The NUM commenced strike action on 2 November 2018 to protest the retrenchments, which continued until 18 December 2018. Amid violence and intimidation, non-striking employees were prevented from accessing the mine and, subsequently, no production was possible for November and December 2018.

Attributable gold production

All-in Costs (AIC)

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Production at South Deep during 2018 decreased by 44% to 4,885kg (157,100oz) from 8,748kg (281,300oz) in 2017 driven by decreased volumes and grade. AIC for 2018 increased 42% to R854,049/kg (US\$2,012/oz) from R600,109/kg (US\$1,400/oz) in 2017, mainly due to lower gold sold. Net cash-outflow for the year was R1,891m (US\$141m). South Deep also reported an asset and goodwill impairment of R6.47bn (US\$482m) in 2018 following a goodwill impairment of R3.5bn (US\$278m) in 2017.

Subsequent to the 2018 year-end, South Deep commenced the process of building up production with a reduced, but more focused, workforce and having removed over R800m from the mine's cost base. The immediate target is to get the mine to break even at the current level of production. Once this has been achieved, the focus will be on improving productivity off the restructured cost base and overhead structure, to bring the mine to profitability. Gold Fields is unable to continue sustaining the cash losses of the last few years and, should our efforts subsequent to the restructuring at South Deep not show positive results, other options for the asset cannot be ruled out.

Guidance of 6,000kg (193,000oz) has been provided for 2019 at an AIC of R610,000/kg (US\$1,394/oz). The mine's Mineral Reserves were reduced by 12% to 32.8Moz in December 2018 compared with a year earlier.

**Energy**

During 2018, Gold Fields shifted further away from the use of carbon-intensive energy sources. Our mines in Ghana, Australia and Peru are now largely powered by low-carbon gas, though diesel is still being used for the majority of our mining fleet. During 2018, 54% of our total electricity capacity was generated by gas, with coal accounting for 35%, hydro-electric for 9% and diesel for 2%.

Currently Gold Fields has 134MW in installed gas capacity and an additional 16MW of gas capacity is being evaluated by the Australian and Ghanaian mines. Renewable energy is also becoming a viable option, not only due to its positive impact on carbon emissions but also because the cost of renewables is rapidly coming down. At present, Gold Fields has 55MW of solar capacity and 18MW of wind capacity under study at our South African, Australian and Ghanaian mines.

The Granny Smith mine in Australia looks set to be the first mine in our portfolio to be partly solar powered, having contracted an independent power producer to design, build and operate a 8MW solar plant backed by 2MW of battery systems, to be commissioned in Q4 2019. The Agnew mine is also expected to develop a hybrid gas and renewable power plant during 2019.

By 2020 we are confident that around 2% of installed Group energy capacity will be from solar and wind. Gold Fields also remains committed to its goal of 20% renewable energy generation over the life-of-mine at all new projects.

Energy accounted for 22% of Group operating costs in 2018, the second largest cost component at our mines. While energy consumption decreased by 4% in 2018, the Group increased energy spending by 17% to US\$302m in 2018, amid higher diesel unit costs and regulated tariff increases. Operational energy efficiencies yielded savings of US\$29m.

Greater use of renewables has the added benefit of reducing the carbon footprint, which is one of Gold Fields' key environmental priorities. During 2018, total CO<sub>2</sub> emissions declined to 1.85m tonnes (2017: 1.96m tonnes), and we expect longer-term benefits arising from the energy efficiency and fuel-switching projects we have put in place at our mines.

### **Fit-for-purpose workforce**

A key area of focus in 2018 was to ensure that our mines have appropriately sized and qualified workforces to drive safe operational delivery. As part of the restructuring of South Deep, which commenced in August 2018, 1,092 employees and 420 contractors were retrenched as part of our efforts to align the cost base with the reduced operational footprint of South Deep. Earlier in the year a further 260 employees and about 25% of the mine's management team had accepted voluntary severance packages.

The Tarkwa mine switched to contractor mining during 2018, with about 90% of the affected workforce of the mine moving over to the two contractors. At our Damang mine, too, we converted just over 300 full-time employees into fixed-term contractors. As a result, the number of full-time employees in the West Africa region reduced from 2,910 at end 2017 to 1,079 at end 2018, while the number of contractors rose from 4,761 to 6,291 over the same period. Damang has been using contractor mining since the start of the reinvestment project early in 2017.

As a result of these initiatives, the Group now employs 5,601 full-time employees (2017: 8,856) and 12,010 contractors (2017: 9,738).

Another important human resource initiative implemented in 2018 is the continued drive to have appropriately skilled people in the right roles. With the increasing shift towards mechanisation and automation at our mines, we have found that, in addition to the continued development and training of our workforce, it is important to recruit appropriately skilled and experienced people. During 2018, we spent over US\$14m globally on training and development on top of recruiting the best mining skills to supplement our existing talent pool.

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***Capital discipline***

The core focus of Gold Fields' financial strategy is to grow our FCF margin and to sustain this margin in the long-term. The Group has set a FCF margin target per region (after capital expenditure, royalties and taxes) of at least 15% at a notional long-term planning gold price of US\$1,200/oz, thus providing a cushion in case of lower prices.

Despite the significant capital investment programme of US\$814m, Gold Fields produced a sound cost and cash-flow performance during 2018. AIC of US\$1,173/oz and AISC of US\$981/oz for 2018 were slightly ahead of 2017 numbers but below guidance for the year of US\$1,190 – US\$1,210/oz and US\$990 – US\$1,010/oz, respectively.

Cash-flow generated by the operations remained strong. Excluding project capital and off-mine exploration expenditure, operational cash-flow was US\$334m (US\$194m in Australia, US\$114m in Peru, US\$149m in Ghana and a negative US\$141m in South Africa) versus US\$441m in 2017. On a net basis, which includes growth capital, the Group reported net cash-outflow of US\$132m (2017: US\$2m cash-outflow) and an FCF margin (which excludes capital spend on growth projects) of 16% (2017: 16%) at an average gold price received of US\$1,252/oz (2017: US\$1,255/oz).

Revenue was down by 7% to US\$2.58bn (2017: US\$2.76bn) due to the production decline at South Deep. Cost of sales were down proportionally at US\$2.04bn (2017: US\$2.11bn). The overall financial performance was impacted largely by non-recurring items, including impairment of South Deep and retrenchment costs in Ghana related to the conversion to contract mining at Tarkwa.

Given the volatility in commodity prices and exchange rates and, more pertinently, the high levels of project capital expenditure incurred during 2018, management undertook short-term, tactical hedging of the oil price, the copper price and the

US Dollar, Australian Dollar and South African Rand gold prices to protect cash-flow. We are continuing with our gold hedging programme in Australia during 2019 as we finalise the construction of Gruyere. We have also extended hedging to the Rand gold price to protect South Deep's cash-flow during the build-up to more sustainable production levels. Altogether, around 1Moz of gold production for 2019 has been hedged.

**Dividends and debt reduction**

Two of Gold Fields' key strategic objectives are to pay its shareholders a dividend and reduce the amount of debt on our balance sheet. Despite recording a net cash-outflow, the Group declared a total dividend for the year of R0.40/share (2017: R0.90/share).

Having moved into a capital-intensive phase during 2017 and 2018, management guided the market for a pick-up in debt. Net debt increased by US\$309m during 2018 to US\$1,612m, mainly due to project capital spend and the funding of the Asanko Gold deal.

Gold Fields ended 2018 on a net debt:adjusted EBITDA ratio of 1.45x compared with 1.03x at the end of 2017, but still well below the debt covenant level of 2.50x.

During 2018, we continued to successfully manage our balance sheet by extending the maturity of the US\$380m term loan by 12 months to June 2020. We are considering additional refinancing of our debt in 2019 to further improve liquidity.

### ***Portfolio management***

Gold Fields manages its assets to improve the overall quality of its portfolio and enhance the sustainability of the cash-flow generated by this portfolio. In this regard, the focus is on reducing Group AIC, increasing the FCF/oz and extending the life of the assets.

All assets in our portfolio are subject to the Group's annual strategic planning process. A scenario analysis is conducted for each operation,

assessing how to maximise cash-flow, life-of-mine and margin. The results of this analysis are then used in conjunction with the Group's capital profile and the current economic environment as inputs into our annual business planning.

### **Mine developments**

The strength of our international portfolio is evident in the continued net cash-flow generation of our mines in Australia, Ghana and Peru, which collectively generated US\$457m in 2018 (2017: US\$501m), before taking into account project capital.

During 2018, we announced an extension of Cerro Corona's life-of-mine to 2030 through work on the tailings facility and the future use of in-pit tailings.

Our Australian mines continue to benefit from our consistent and sizeable near-mine (brownfields) exploration programmes. During 2018, we spent A\$83m (US\$62m) at Agnew, Granny Smith and St Ives and, as a result, added 1.18Moz in Mineral Reserves (before depletion) at our Australian mines. Notable projects arising from this investment drive are:

- Greater Invincible Complex continued to grow in 2018 and now represents one of the largest mineralised systems at St Ives

- Significant incremental ounces added to the Wallaby mine at Granny Smith

- Near-mining resources and reserves replaced at Agnew's New Holland and Waroonga mines and new discoveries at Waroonga North and Redeemer

A further A\$76m (US\$57m) has been budgeted for brownfield exploration at our Australian mines in 2019.

Near-mine exploration is also being stepped up at our Ghanaian mines, notably at Tarkwa, where the focus is on paleoplacer extension opportunities at the mine's existing pits. US\$9m was spent in 2018 with some early promising

results evident.

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The only operating asset in the Group that still needs to be brought to full account is the South Deep mine. Management believes that following the significant restructuring in the second half of 2018 the cost base has been adjusted to the reduced operating footprint. We expect to significantly reduce the monthly cash losses at the mine and are confident that South Deep is set up for a sustainable recovery over the next few years.

Gold Fields holds investment positions in Gold Road Resources and Asanko Gold, which are the joint venture partners in the Gruyere project and the Asanko gold mine (AGM) respectively. We also have minority holdings in a number of junior mining companies, including Cardinal Resources, Red 5 and Hummingbird, and evaluate these interests on a regular basis. The company also diluted its shareholding in Toronto-listed Maverix Metals to 20%.

**Project advancements**

2018 was the second year in our drive to secure the longevity and sustainability of our portfolio of assets, and all our key projects in this respect are tracking their delivery deadlines and financial budgets:

At Gruyere, the JV partners, Gold Fields and Gold Road Resources, have to date invested A\$492m (US\$374m) of the total expected project cost of A\$621m (US\$480m). During 2017 and 2018, Gold Fields' portion of the spend was A\$246m (US\$185m), including capital investment and management costs. First gold is expected to be poured during Q2 2019, with production for 2019 guided at 118koz (100% basis)

At the end of 2016 we commenced the US\$341m investment at our Damang mine in Ghana to extend the life-of-mine to 2025. Capital spending during 2018 was US\$125m (2017: US\$115m). The project is ahead of plan and the mine is set to reach full production in early 2020

At the Salares Norte project in Chile, the feasibility study was completed in 2018, and a maiden Mineral Reserve of 4.0Moz (gold equivalent) was declared. Any decision to build a mine at Salares Norte will be made based on the outcome of the Environmental Impact Assessment (EIA), which was accepted for evaluation by the regulator in July 2018 and is expected to take 18 - 24 months. Spending on further drilling and other work totalled US\$64m during 2018.

Potential operational parameters established by the feasibility study for a possible future mine include:

Initial 11.5-year life-of-mine

Annual throughput of 2Mt

Life-of-mine production of 3.2Moz of gold and 26.7Moz of silver

Average annual production of 450koz gold equivalent for the first seven years of the project at an AISC of US\$465/Au-eq oz

Project construction capital of US\$834m

A JV with Asanko Gold in Ghana was completed in July 2018, with Gold Fields acquiring 45% in the Asanko Gold Mine (AGM) for approximately US\$185m, of which US\$20m was deferred. The mine achieved total production of 223koz (100% basis) at an AIC of US\$1,183/oz and is guiding for production of 225koz - 245koz at AIC of US\$1,130/oz - US\$1,150/ oz for 2019. Gold Fields has also acquired a 9.9% stake in the holding company, Toronto listed Asanko Gold

The sale of the Arctic Platinum Project to CD Capital Management was concluded in early 2018 for a cash consideration of US\$40m and future royalties of 2%

### Mineral Reserves

During 2018, Gold Fields managed gold-equivalent Mineral Reserves (net of depletion) decreased by 1% to 54.1Moz at 31 December 2018. The declines were largely due to reductions in Mineral Resource and Reserves at South Deep, due to a higher cut-off grade.

Other notable developments during 2018 were:

Salares Norte declared a maiden gold-equivalent Mineral Reserve of 4.0Moz at 31 December 2018, following the completion of its feasibility study

In Australia, managed Mineral Reserves (net of depletion) increased by 0.2Moz to 6.4Moz at 31 December 2018, testament to the continued success of brownfields exploration at the mines

At South Deep, Mineral Reserves totalled 32.8Moz (2017: 37.4Moz) at 31 December 2018.

As recently as 2017 South Deep held just over 70% of our Group Mineral Reserves. The profile has changed: of our total managed gold-equivalent Mineral Reserves as at 31 December 2018, 59% are held by South Deep, and our Mineral Resource profile indicates that this percentage could continue to fall.

A straight comparison between South Africa's and our international operations Mineral Reserves is in any case misleading, given the different style of mineralisation. The paleoplacer type orebody at South Deep is large and consistent, while most of the rest of the Group's reserves are dominated by orogenic/ greenstone type orebodies, which are more variable and usually do not have particularly long Reserve lives. But these orebodies are characterised by consistent replacement of Reserve depletion. Importantly, our commitment to brownfields exploration has allowed us to continually replace Reserves, particularly at our Australian mines, over a number of years.

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### **Group performance scorecard continued**

#### ***Licence and reputation***

The success of our business is dependent on our relationships with key external stakeholders which determine both our regulatory and social licences to operate.

#### **Environmental stewardship**

Responsible environmental management remains a vital component of Gold Fields' approach to operate at all our operations and projects. In 2018, we reported two Level 3 environmental incidents (2017: two), one in Peru and one in Ghana (p95). Gold Fields has had no Level 4 or 5 environmental incident for well over ten years, but the two Level 3 incidents had the potential to impact water supply to the nearby communities. Our teams acted quickly to remediate the events and communicated transparently with regulators and communities on this issue. The number of Level 2 incidents fell by 18% to 68 in 2018 from 83 in 2017.

Water is a particular focus of our environmental strategy, as it is becoming an increasingly scarce and expensive resource globally. Managing the risks around current and anticipated water security, which includes the quantity and quality of supply as well as associated costs, is essential to ensure sustainable production for existing operations and the future viability of projects.

During 2018, our operations invested in improving water practices, including pollution prevention, recycling and conservation initiatives. A key target is to reuse or recycle much of the water we use in our processes and we set ourselves a target of 65%, in line with ICMM guidance. We achieved the target in 2018, when 66% of our total water use was recycled or reused water.

Work carried out by the ICMM on water and tailings management has provided best-practice guidelines for the Company, and during 2017 and 2018 we worked closely to align our practices to these ICMM position statements. During 2018, external reviews of our compliance with these position statements concluded that

we are aligned with the ICMM position statements both in terms of water and tailings management.

After the catastrophic tailings failure at the Feijão iron ore mine in Brumadinho, Brazil, in January 2019, during which there were over 300 deaths, all Gold Fields' operations carried out additional safety inspections at our 33 tailings

facilities, particularly on the 18 decommissioned TSFs, and concluded that Gold Fields-managed TSFs were not at risk. During 2019 we will further strengthen technical and governance oversight over all of our TSFs. Longer term, our teams are working with our peers at the ICMM to evaluate independent assessment and accreditation of all ICMM member TSFs as well as on solutions such as filtered and dry-stack tailings.

The total gross mine closure liability for Gold Fields was raised by 5% to US\$400m in 2018 from US\$381m in 2017. During 2018, we further enhanced our integrated approach to mine closure management with a focus on progressive environmental rehabilitation and full life-of-mine closure obligations.

### Stakeholder relations

Employees, business partners, shareholders, investors, governments and communities have been identified as Gold Fields' key stakeholders. Their support is critical in ensuring that we receive and retain our regulatory approvals and social licence to operate. This can only be achieved if we develop stakeholder relationships that are based on transparent and open engagement and if we create shared value with them. The ability to generate cash is critical in distributing the benefits from mining to our stakeholders. In 2018, Gold Fields' value distribution totalled US\$2.7bn, compared with the US\$2.9bn we distributed in 2017. For details on how this amount was dispensed to stakeholders during 2018 see p6.

### Government relations

As the issuers of mining licences, developers of policy and implementers of regulations, host

governments at all levels (national, regional and local) are one of Gold Fields' most critical stakeholders. While we seek to engage with these stakeholders regularly to build trusts, these relationships are not always easy. Over the past few years we have seen a resurgence of resource nationalism, particularly in Africa. As part of this many governments accuse the mining industry of not paying fair taxes by using profit-shifting and under-invoicing their physical gold exports. Gold Fields has appropriate controls and procedures in place to ensure that we comply with relevant tax legislation, including compliance with transfer pricing regulations, and account fully for our gold exports.

In South Africa the industry and government have been at an impasse for a number of years over the implementation of a new Mining Charter to govern the sector. A new Charter was published by the Department of Mineral Resources (DMR) in mid-2018. The 2018 Mining Charter is an improvement on previous draft versions, but there are still critical matters, including renewals of licences, that are not dealt with. As it stands now the licence renewal clause is unacceptable to the industry, as it would invalidate all previous empowerment deals if the empowerment partner has since sold its interests. Should this impasse continue, the Minerals Council of South Africa (MCSA), reserves its rights to proceed with a legal review of the Charter relating to, among others, the renewal of licences.

The Minerals Council of South Africa won a court case recognising the 'once empowered, always empowered' principle, which would guarantee the legislated black economic empowerment ownership levels for South Deep until its licence renewal in 2040 and a further term of 30 years after that. However, the ruling has been appealed by the DMR and the MCSA will follow due process in this regard.

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A more proactive approach is required, such as the one adopted by the Ghanaian government, which has entered into development agreements with large mining companies, including Gold Fields, and incentivises new mining projects. Our agreement with the Ghana government was fundamental in our US\$341m reinvestment programme in Damang, which created or secured around 1,850 jobs. The favourable investment environment also encouraged us to take a 45% holding in AGM.

The mining regimes in Peru and Australia remained relatively stable, though we opposed a proposed rise in the gold royalty rate in Western Australia.

**Labour relations**

Gold Fields fundamentally respects and protects the rights of its employees to organise themselves through trade unions. Over the years we have developed good working relations with organised labour at our operations and constructive engagement usually precedes any restructuring and corporate actions needed to keep our operations sustainable. However, during 2018, our relationship with unions at our Ghanaian mines and at South Deep turned adversarial.

At Tarkwa, the Ghanaian Mineworkers Union brought a court injunction against the decision to convert from owner to contractor mining, which is essential to ensure life extension at the mine. This was overturned by the courts and the mine implemented the transition to contractor mining successfully, with a large part of affected employees joining the two mining contractors. As a result the employee workforce at our Ghanaian mines is now non-unionised.

At South Deep, the NUM embarked on a 45-day strike in November and December 2018 following the mine's decision to retrench around 1,500 employees and contractors as

part of its wide-ranging restructuring. The strike was marred by violence and intimidation carried out by a small group of NUM branch members against the majority of employees who wanted to return to work, but were prevented from doing so. The strike was resolved after many NUM employees sought the assistance of the national and regional offices of the NUM to end the industrial action.

The strike highlighted the need to rebase our labour relations at South Deep, and a new collective agreement was signed between the NUM and the mine in March 2019 to take cognisance of South Deep's new operating model.

**Community relations and Shared Value**

One of the biggest challenges facing mining companies is building relationships and trust with their host communities, without which there is potential for operational disruption, project delays and cancellations – the loss of our social licence to operate.

Gold Fields has traditionally invested in communities through a range of educational, skills development, health and infrastructure projects and, more recently, through Shared Value-based projects. This approach to structuring our investments in communities ensures that the value created is shared by communities and the business. Socio-Economic Development (SED) is still an important part of our community investment strategy, but host community procurement and employment have proven to be more impactful as they create economic value directly in the communities most impacted by our mines and projects.

During 2018, host community members accounted for 56% of our total workforce (employees and contractors) throughout the Group – 9,259 employees – with the numbers varying from around 5% at our Fly-in, Fly-out mines in Australia to over 70% at our two Ghanaian operations.

Host community procurement can be even more impactful as our spending with suppliers and contractors is generally our biggest cost component. In 2018 we spent about US\$1.81bn with these businesses, of which 94% was spent in-country and 27%, or US\$441m, with businesses from our host communities. The economic benefits in terms of skills development, job creation and reducing dependency from the mine are self-evident.

Altogether, we have calculated that during 2018 almost a quarter of our total value creation of US\$2.71bn – US\$686m remained with our host communities. It is a number we are seeking to grow and our regions have developed ambitious targets in this respect.

### **Governance and compliance**

Supporting our integrated management approach is a robust corporate governance programme throughout the Company. During 2018, building on the implementation of the recommendations of the King IV Report on Corporate Governance during 2017, the Board approved a diversity policy and revised human rights, stakeholder engagement, environmental as well as occupational health and safety policy statements. These policies are expected to improve sound governance, transparency and regulatory compliance at Gold Fields.

Adherence to legislation, controls and standards is a non-negotiable aspect of doing business, while ethical leadership and sound business governance serve to strengthen our reputation and relationships with shareholders, governments, communities and employees.

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CEO Report continued

**Strategy overview**

***Industry developments***

The past few months has seen a pick-up in mergers and acquisitions in the global gold mining sector. Most notably, there have been announced tie-ups between Newmont Gold and Goldcorp and between Barrick Gold and Randgold Resources, as well as Newmont and Barrick merging their Nevada assets. These deals, if and when finalised, will reshape the industry. Amid speculation about further sector consolidation, Gold Fields has been linked with a number of similar-sized industry peers.

We believe, though, that we are in the final stages of successfully implementing our own growth strategy, one we embarked upon two years ago. By kick-starting the investments in our growth projects then, we are confident that we are ahead of the curve in terms of project development.

Historically, mergers between gold mining companies have faced significant challenges to achieving success. We believe that too often a proposed merger was based on an increased production profile without necessarily achieving greater cost synergies, while cultural differences between companies are another impediment to delivering value to shareholders and other stakeholders.

It is early days for the recently announced mega-mergers but extracting value-creating synergies could prove challenging. Instead, they suggest that the companies are seeking to build growth and boost their Reserve lives. At Gold Fields, we don't believe we need a merger to achieve profitable growth. We are executing what we believe to be strong, sustainable and deliverable growth strategy, which will create shareholder value in the short, medium and long-term.

***Our growth strategy***

Gold Fields seeks to be a low-cost gold producer that secures sustainable cash-flow through the inevitable price cycles in the gold mining industry. Through this, we are confident we can deliver superior returns when the gold price is high, and offer a degree of protection when the price falls. At the same time, sound cash-flow has enabled us to manage our debt, invest in the right

assets and distribute the benefits of mining to our stakeholders.

To continue expanding margins and distributing cash, the long-term sustainability of the business must be kept intact. This requires investing to extend the life of our assets, ensuring we maintain our social licence to operate and retaining

our people who are key to the Company's success.

2018 was the second year of our reinvestment programme in which we have invested a total of almost US\$550m. The key projects under this programme are set to come to fruition in 2019 and have the potential to produce strong cash-flows for Gold Fields in the future.

At present gold prices, I am confident that our Ghanaian, Australian and South American regions are well placed to maintain a production profile of nearly 2Moz per year over the medium to longer-term, based upon our Mineral Reserve profile in these regions, our track record of resource conversion, finalisation of our growth projects, and expected exploration activity.

In Ghana, the reinvestment at Damang is essentially the equivalent of developing a new mine, while our investment in Asanko Gold also has the potential for longer-term growth through life-of-mine extension. The Gruyere JV is close to completing a new mine in Western Australia, with first production scheduled in Q2 2019. Finally, in the Americas region, we have successfully completed a feasibility study for the Salares Norte project in northern Chile.

These projects are important in terms of their contribution to the strategic objectives of Gold Fields, namely to maintain and grow cash-flow on a sustainable basis. Based on current projections, they are expected to operate at an AIC that is lower than the current AIC of the Group, once steady-state levels of production are realised. As such, management believes that the Group's overall cost of production has the potential to reduce over time.

We continue to invest in brownfields exploration in Australia with the objective of not only replacing what we mine, but also increasing our

Mineral Resources and Mineral Reserves at a higher quality than what has been mined previously. Finally, we need to optimally manage the ore bodies of our operating mines in terms of grade management and ongoing sustainable capital expenditure by planning for outcomes that optimise the lives of these ore bodies.

We should not forget the potential growth and profitability that we believe South Deep and its 33Moz in gold Reserves can offer Gold Fields in the longer-term. We have thus far failed to bring that potential to the fore, but I believe that the wide-ranging restructuring measures we implemented during 2018 – reducing the mine's footprint and cutting the accompanying cost structures – have laid the foundation for future growth. For 2019, the focus will be on improving productivity and reducing the mine's significant cash-outflows. But beyond that I believe we could see sustainable growth from South Deep that has the potential to add further to Group production.

A key element of the Group's underlying strategy, which has contributed towards improving the quality of the portfolio over the years, are value-accretive acquisitions. During 2018, this resulted in our acquisition of a 45% stake in AGM.

Given the amount of capital that has been committed to Gruyere, Damang, Asanko and South Deep, and the potential call on funding resources to build Salares Norte, should we decide to do so, management has adopted a cautious approach on future acquisitions.

I am confident that Gold Fields has put in place the strategies that will lead to sustained value creation in the medium to long-term, and will see the Company build on its current production profile.

Executive management has sought to align itself with investors through its long-term incentive scheme, a large portion of which relates to the performance of the share price over time. If we stay the course on which we have embarked, I am confident that the Company will achieve strong operational performances, cash-flow generation and profitable growth.



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**Table of Contents*****Gold price outlook***

During 2018 the average US Dollar gold price declined marginally to US\$1,252/oz from US\$1,255/oz in 2017. It recovered strongly from lows in late November and Q1 2019 was trading in between US\$1,290/oz – US\$1,330/oz. In their assessments the World Gold Council (WGC) and the CPM Group credit gold's recent stronger performance to three main factors:

Increased market uncertainty, political turmoil in the US and the expansion of protectionist economic policies, which have historically made gold attractive as a hedge

While gold has faced headwinds from higher interest rates and US Dollar strength, these effects have been limited as the US Federal Reserve has signalled a more neutral stance following a series of rate hikes in 2018

Continued purchases of gold by central banks, a trend set to continue into 2019

While management anticipates that these trends may have a positive impact on the gold price, Gold Fields has adopted a cautious approach and is planning its business for 2019 on the assumption of a US\$1,200/oz gold price, the same as in 2018.

The fundamentals may support a firmer gold price in future. On the supply side the steady increase in primary gold supplies until 2015 has since stabilised to around 105Moz per annum. This is predominantly due to the cut in exploration spending as well as the dearth of new mines being built, but also exacerbated by the decline in grades and the increasing depth and complexity of the ore bodies being mined and processed.

Consumer demand in India and China, while significantly down on its highs over the last five years, should remain strong according to CPM and WGC, given economic growth, rising urbanisation and traditional affinity towards gold in these countries. Central banks continue to buy gold and it appears that most of the central banks that were looking to sell gold have already done so.

Management believes these factors bode well for the long-term future of gold, although the price will undoubtedly move through cycles with the attendant volatility.

***Guidance for 2019***

Gold Fields' business plan for 2019 has been built around an average gold price of US\$1,200/oz (A\$1,600/oz, R525,000/kg) and assuming exchange rates of R13.8 per US\$ and A\$0.75 per US\$.

As stated, 2019 is set to be an important growth year for Gold Fields, with the Damang project approaching completion and Gruyere commencing production. In addition, Asanko will contribute for a full year for the first time since acquisition. As a result the Company is guiding for an increase of 4% – 7% in attributable equivalent gold production in 2019 to 2.13Moz – 2.18Moz. AISC is expected to be between US\$980/oz and US\$995/oz and AIC between US\$1,075/oz – US\$1,095/oz. The year will however, be one of two halves, with both production and cash-flow being weighted to H2 2019.

The main drivers behind production and cost guidance for 2019 are:

Our 50% share of production at Gruyere, which is guiding 118koz (100% basis) for the year with production set to start in Q2 2019

An expected increase in Damang's production from 181koz to 218koz, with AIC of US\$1,100/oz (2018: US\$1,506/oz)

Asanko is set to contribute for the full year. Its guidance for 2019 is 225koz – 245koz (100% basis) at AIC of US\$1,130/oz -US\$1,150/oz

Production for South Deep is expected to be 6,000kg (193koz), with AIC of R610,000/kg (US\$1,394/oz)

An expected 5% decline in the production of our three Australian mines to 843koz (2018: 886koz)

A drop in gold-equivalent production at Cerro Corona from 314koz in 2018 to 291koz at a higher AIC of US\$802/Au-eq oz (2018: US\$699/oz)

With our two key projects set to reach fruition it means that our capital expenditure is expected to decline through 2019. Capex for 2019 is split into planned sustaining capital expenditure of US\$490m (including near-mine exploration) and growth capital expenditure of US\$143m. Growth capex comprises US\$69m

for Damang and A\$99m (US\$74m) for Gruyere. Expenditure on Salares Norte (which is not capitalised) is expected to be US\$57m in 2019, comprising US\$37m on fixed costs and engineering work and US\$20m on district exploration. The capital expenditure above excludes Gold Fields' 50% share of Asanko's capital expenditure of US\$25m for 2019, as this interest is equity accounted.

For 2019, Gold Fields has continued to undertake certain gold price hedging to secure short-term cash flow and protect the balance sheet from the volatility of the gold price as we complete our investment phase and ramp up the projects.

### ***Note of thanks***

I would like to express my gratitude to my fellow directors, led by our Chairperson, Cheryl Carolus, for their support and guidance during 2018. I want to pay a special tribute to Don Ncube, who retired as Chairperson of the Social, Ethics and Transformation Committee and the Board in May 2018. He was a director of Gold Fields for 11 years and the input he provided in transforming the Company and building closer relations with our host communities, particularly at South Deep, will stand us in good stead for years to come.

The composition of our Executive Committee remained stable during 2018, with Rosh Bardien joining as Executive Vice President: People and Organisational Effectiveness in early 2018. I rely heavily on the members of this team in guiding and advising me in managing a complex, multinational company like Gold Fields. Each member of the team did a fantastic job in 2018.

Most importantly, I would like to express my sincere appreciation and gratitude to all the employees of Gold Fields. They have gone through some difficult times over the past year, with wide-ranging restructuring initiatives impacting their work lives, particularly for our colleagues at Tarkwa and South Deep. Their resilience, hard work and dedication never fails to astonish me and it gives me great comfort to know that I have this team behind me.

### **Nick Holland**

*CEO*

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## Managing our portfolio

**Introduction**

Gold Fields manages its business with the aim of continually improving the quality of its portfolio and, ultimately, its cash-flow generation. From a strategic standpoint, the overriding goal is to generate a free cash-flow (FCF) margin of at least 15% at a US\$1,200/oz gold price, which is an adjustment from the previous 15% FCF margin at US\$1,300/oz. To achieve this, there is strict focus on reducing AIC and, as a result, increasing the FCF/oz. However, it is also imperative that the generation of cash-flow is sustainable. Therefore, in addition to lowering Group AIC, strategic decisions aim to extend the life of the Group's asset base and the overall portfolio.

To improve the quality of our portfolio, management employs the following elements in the portfolio management process:

Acquiring or developing lower-cost (than Group average), longer-life assets

**Quality portfolio of growth projects**

By employing an active portfolio management approach, Gold Fields has built an attractive global portfolio of assets in Australia, Ghana and Peru, which have met or exceeded production and cost guidance over the past few years. At a mine level, this international portfolio of assets, excluding South Deep, generated net cash flow of US\$457m (excluding project capital) during 2018 (2017: US\$485m), enabling the Group to report a FCF margin, which takes into account the outflow from South Deep, of 16% (2017: 16%). This is in line with our targeted 15% margin at a US\$1,200/oz planning gold price.

South Deep is the only asset within the Company that has failed to meet expectations, with 2018 proving to be an extremely difficult year for the mine. After falling behind plan in the first half of 2018, management announced a material restructuring on 14 August 2018, with the aim of consolidating mining activity to

All assets in our portfolio are subject to the Group's annual strategic planning process, which assesses how to best maximise cash-flow, life-of-mine, and margin. The results of this analysis are combined with the Group's capital profile and the current economic environment as inputs into our annual business planning. This process supported the continued investment in the Group's three key growth and exploration projects (Damang, Gruyere and Salares Norte) during 2018:

US\$125m in project capital was incurred on the Damang Reinvestment project in 2018, after having spent US\$115m in 2017 (p48)

Gold Fields spent A\$218m (US\$163m) on the Gruyere project in 2018, compared with A\$182m (US\$140m) in 2017. Included in this number is A\$153m (US\$115m) in project capital, A\$39m (US\$29m) in capitalised interest, A\$18m (US\$14m) in operational support costs and A\$8m (US\$6m) in exploration expenditure. During 2018, the joint venture (JV) partners announced that there had been a



Disposing of higher-cost, shorter-life assets that management believes can be better served by a company that has more time and resources to commit to them

Extending the life of current assets through near-mine brownfields exploration

Focusing on in-country opportunities to leverage off our existing footprint, infrastructure and skill set and capitalise on the experience we have gained from operating in these jurisdictions

increase focus and to match the cost structure with the level of production. The immediate target is to get the mine to break even at the current level of production (around 190koz per annum) and minimise the cash burn. Once this has been achieved, the focus will be on improving productivity off the restructured cost base and overhead structure, to bring the mine to profitability. For more details on the South Deep restructuring and outlook, refer to p46.

delay to the project timeline (first gold now expected in Q2 2019), together with a 17% increase in the final forecast capital cost estimate to A\$621m (US\$480m) (p44)

US\$64m on further feasibility study work was spent on the Salares Norte exploration venture in Chile during 2018. The feasibility study was completed and approved by the Board in February 2019 (p47).

Recent developments that improved the quality of our portfolio include the sale of Darlot in 2017, the acquisition of a 45% stake in the Asanko gold mine (AGM), and the continued investment into the Damang and Gruyere projects. Once Damang and Gruyere are operating at steady state, expected in 2020, Group AIC is expected to approach US\$900/oz.

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**Table of Contents*****Expanding our global footprint***

2018 was the second year of Gold Fields' reinvestment phase, in which we incurred US\$290m (excluding Asanko) in project capital (2017: US\$217m). All project capital spent was in countries that Gold Fields currently operates in, allowing us to leverage our knowledge of the business environment. Importantly, management only invested in projects that it believes have relatively short pay-back periods and attractive returns.

Gold Fields also increased its footprint in Ghana during 2018 by acquiring a 50% stake of Asanko Gold's 90% interest in AGM for an upfront payment of US\$165m (the government of Ghana holds the remaining 10%). A deferred payment of US\$20m will be paid to Asanko Gold, should it achieve key milestones in the development of the Esaase project at AGM before 31 December 2019. In addition, Gold Fields purchased a 9.9% equity stake in Toronto Stock Exchange-listed Asanko Gold for US\$17.6m.

While the Group spent more than it generated in 2017 and 2018, the cash-outflow over the period (US\$2m in 2017 and US\$132m in 2018) was lower than anticipated, underpinned by favourable hedge positions and a gold price received that was higher than planning prices. Despite the cash-outflows over the past two years, Gold Fields remains committed to its strategy of generating cash to reduce our debt, pay dividends to shareholders and share the value we create with employees, governments and host communities.

Gold Fields also has a portfolio of minority investments through a range of transactions conducted over the previous few years. During 2018, the Arctic Platinum Project in Finland was sold for US\$40m, while we also bought a 9.9% stake in Toronto-listed Asanko Gold for US\$17.6m. Asanko is our JV partner in AGM in Ghana. In 2016 Gold Fields injected its royalty portfolio into Toronto-listed Maverix Metals in exchange for a 32% interest. As other gold mining companies, including Newmont Gold, have followed our move this interest has been diluted to approximately 20%. A summary of our investments is in the table below.

**Gold Fields' material investments**

<b>Investment</b>	<b>Market Value (Dec 2018)</b>	
	<b>Shareholding</b>	<b>US\$m)</b>
Gold Road Resources	<b>10%</b>	<b>37</b>
Asanko Gold	<b>9.9%</b>	<b>14</b>
Cardinal Resources	<b>11.3%<sup>1</sup></b>	<b>11</b>
Red 5	<b>19.9%</b>	<b>16</b>
Maverix Metals	<b>19.9%<sup>2</sup></b>	<b>75</b>
Hummingbird Resources	<b>6%</b>	<b>6</b>
Rusoro Mining	<b>25.7%</b>	<b>13</b>
Lefroy Exploration	<b>18.2%</b>	<b>2</b>
Magmatic Resources	<b>15%</b>	<b>1</b>
Orsu Metals	<b>7.2%</b>	<b>1</b>
Other		<b>15</b>
<b>Total value (including warrants)</b>		<b>191</b>

<sup>1</sup> Gold Fields owns an additional 38.2m options valued at US\$6.0m

<sup>2</sup> Gold Fields owns an additional 10m warrant options valued at US\$9.3m. Adding these warrants results in a holding of 20.5% in Maverix on a diluted basis

There were no further material developments regarding the Far Southeast (FSE) project in the Philippines during 2018. The project is held by Far Southeast Gold Resources (FSGRI) in which Gold Fields has a 40% interest, with an option to increase its stake to 60%, and is adjacent to an existing mining operation with established infrastructure. Lepanto Consolidated Mining of the Philippines holds the remaining 60% interest and manages the existing mining operation. Gold Fields impaired its investment in Far Southeast to US\$92m in 2018, as determined by an evaluation of Lepanto's market value on the Philippine Stock Exchange.

Gold Fields' holding costs in FSE have been reduced to approximately US\$120,000/month, related mainly to staff and administrative costs, managing existing drill core, environmental monitoring, community engagement work, as well as activities to support the permitting process.

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## Managing our portfolio continued

**Gruyere**

In November 2016, Gold Fields entered into a 50/50 JV with Australian exploration company, Gold Road Resources, for the development and operation of the Gruyere gold project in the Yamarna belt of Western Australia, one of the country's largest undeveloped gold regions. The JV comprises the Gruyere gold deposit and 144km<sup>2</sup> of exploration tenements.

Gruyere is a large shear hosted porphyry gold deposit, with Mineral Reserves of 3.8Moz, 50% of which is attributable to Gold Fields. It is located 200km east of Laverton in Western Australia, where our Granny Smith mine is located.

Early work at Gruyere began in December 2016, with Gold Fields taking over management of the project on 1 February 2017. After remaining largely on track and within budget in 2017, the JV partners announced a slight delay to project completion and an increase in the final forecast capital (FFC) cost estimate during 2018. First gold is now expected to be poured during the June 2019 quarter (previously the March 2019 quarter) whilst the FFC estimate is A\$621m (US\$480m), a 17% increase from the previous FCC estimate of A\$532m (US\$411m). Included in the new FFC estimate are scope changes and *force majeure* costs (due to extreme rainfall events during 2018) of A\$30m (US\$22m) and a contingency of A\$30m (US\$22m).

During 2018, Gold Fields spent project capital of A\$153m (US\$115m) on Gruyere, bringing our cumulative capital expenditure as at end-December 2018 to A\$246m (US\$187m). In addition, capitalised interest of A\$39m (US\$29m), operational support costs of A\$18m (US\$14m) and exploration expenditure of A\$8m (US\$6m) was incurred during the year, bringing Gold Fields' total spending on Gruyere for 2018 to A\$218m (US\$163m). The remaining project capital of A\$129m (US\$97m) (100%

basis) has been budgeted for 2019, the majority of which is expected to be spent during the first half of the year.

In a project update released on 6 December 2018, the JV partners announced an increase in average annual production to 300koz from 270koz, driven by the purchase of larger semi-autogenous grinding (SAG) and ball mills which increased processing throughput to 8.2Mtpa from 7.5Mtpa. In addition, there was an increase in average All-in Sustaining Costs (AISC) over life-of-mine to A\$1,025/oz (US\$738/oz) from A\$945/oz (US\$709/oz) to reflect industry cost inflation since the 2016 feasibility study.

As at end December 2018, engineering was largely complete, while construction progress was 86.7% with all major equipment and materials for effective construction already delivered to site. During 2018, civil works on the TSF and installation of the tailings decant recovery pipelines were completed and the power station was fully commissioned. All civil and concrete works for the process plant were completed by year-end, with structural steel, plate steel and tanks nearing completion. Post year-end, the remaining work focused on piping, electrical and instrumentation and

delivery of plant systems for commissioning of the plant during Q1 2019.

Downer EDI, which was awarded a five-year mining services contract in Q4 2017, began mobilising its workforce during Q1 2018 to begin construction of the mining infrastructure. Mining activities commenced in November 2018, focusing on completing the pre-strip and second stage run-of-mine (ROM) pad development. First ore was in Q1 2019, with mining rates expected to peak at 60Mtpa (100% basis) in 2023 and average 32Mtpa over life-of-mine.

The tenements comprising the Gruyere project fall within the area of the Yilka and Sullivan Edwards native title determination. The Yilka People and the Sullivan Edwards families are the traditional owners of the land, with many of their members residing in the nearby Cosmo Newberry community. The JV partners have a Native Title Agreement in place with the Yilka People and the Cosmo Newberry Aboriginal Corporation, which provides consent to mine. The partners also offer financial, contracting and employment benefits to the community, and have facilitated comprehensive processes for the management of Aboriginal heritage within the project area. A number of projects have been implemented with the Yilka People, including the provision of cultural awareness training for Gruyere employees and contractors. Key contractors at Gruyere have also been required to identify and pursue employment and contracting opportunities with the Yilka People to expand the scope of local participation.

First gold is forecast for Q2 2019 with production guidance of 118koz (100% basis) for the year at an AIC of A\$3,178/oz (US\$2,384/oz) (Gold Fields share only). A relatively quick ramp up is anticipated, with steady state run-rate expected by year-end.

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Managing our portfolio continued

**South Deep**

The key challenge for Gold Fields since taking ownership of South Deep in 2006 has been transitioning the mine from a conventional mining mindset to mining with a safe, modern, bulk, mechanised approach. Despite numerous interventions over the years to address the mine's underperformance – including optimising the mining method, extensive training and skills development, changing shift and work configurations, and outsourcing functions – the mine has continued to underperform and make losses.

South Deep got off to a difficult start in 2018, with production in Q1 2018 impacted by a slow build-up after the seasonal holidays, two labour restructuring processes that took place at the end of 2017 and Q1 2018 respectively, and a change in the underground working shift arrangements implemented to increase face time and productivity. In addition, low mobile equipment reliability, the intersection of active geological features (faults and dykes) in the high-grade corridor 3 and poor ground conditions in the western sections of the mine (composites) slowed production rates. South Deep only produced 1,485kg (48koz) in Q1 2018.

Production was further impacted by a Department of Mineral Resources (DMR) related safety stoppage during April. As a result of these factors, guidance for the mine was downgraded to 7,600kg (244koz) with the release of our Q1 2018 production update on 25 April, down from the original guidance of 10,000kg (321koz).

Despite the two restructuring processes, South Deep continued to face a number of organisational and structural challenges that directly impacted performance during Q2 2018, with production during the quarter only marginally higher than Q1 2018 at 1,518kg (49koz). As a result, on 14 August 2018, Gold Fields announced a further material restructuring of the mine. The aim of the restructuring was to consolidate mining activity to increase focus, and to match the cost structure with the level of production. This included:

- Temporarily suspending mining activities at one of the mining areas (87 Level) and redeploying these mining crews into a different corridor (4W)

- Servicing the eastern part of the mine from the Twin Shafts and restaffing the South Shaft operations to a single shift per day. South Shaft now only facilitates the provision of water and backfill reticulation, water pumping and ventilation services to the full mining operation

- Reducing growth capital expenditure for an 18-month period up until end 2019 to reduce the cash burn. New mine development has outperformed the plan with 918m achieved during 2018 against 749m planned, which allowed us some flexibility to reduce this spending in the near term

As part of the restructuring, Gold Fields served a section 189 notice on its trade unions, the National Union of Mineworkers (NUM) and UASA (formerly named the United Association of South Africa), on 14 August 2018, which is when the legislated minimum 60-day consultation period commenced. It was envisaged that an estimated 1,100 permanent employees and 460 contractors could be impacted through the retrenchment process. The

consultation period ended on 31 October and Gold Fields formally served the NUM and UASA with a list of employees that were to be given notice of termination as per the section 189 process. Severance letters were issued to 1,082 affected employees, which prompted the majority union (NUM) to serve Gold Fields a 48-hour notice of its intention to commence a strike.

The strike started on 2 November and Gold Fields was granted an urgent court interdict on 3 November which prevented striking employees from intimidating other employees and blocking access to the mine. Despite this, the strike, which was orchestrated by a core group of about 200 NUM members and supporters of the South Deep branch leadership, was immediately characterised by intimidation and violence, prompting management to instruct all employees to remain clear of the mine property for the duration of the industrial action. The no work,

no pay policy applied to all NUM members given that this union had declared the strike.

On 20 November, Gold Fields tabled an improved retrenchment offer in an attempt to break the deadlock and end the strike. The union rejected the offer twice before the regional office of the NUM suspended the strike on 13 December and signed a settlement agreement five days later. Through the restructuring, a total of 1,092 permanent employees exited the business, of which 904 were retrenched, 183 opted for voluntary separation packages and five resigned.

In the wake of the restructuring, which has seen us remove R800m (US\$56m) from the mine's cost base and our employee workforce fall by 38% to just under 2,500 and the number of contractors from 2,294 to around 1,500, we are in a position to significantly reduce South Deep pre-restructuring cash-burn during 2019. We expect to build-up gradually to a sustainable production profile from this restructured position. Guidance of 6,000kg (193,000oz) has been provided for 2019 at an AIC of R610,000/kg (US\$1,394/oz).

The key enablers for sustainable improvements at South Deep are expected to be:

- Improved organisational design with the right people in the right roles and a flat management structure
- Rigorous performance management linked to line of sight performance
- Improved stakeholder management, including government, trade unions and surrounding communities
- Reliable fixed infrastructure
- Accelerated backfill placement
- Improved fleet availability and utilisation

Once this has been achieved, the focus will be on improving productivity off the restructured cost base and overhead structure, to bring the mine to profitability.

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**Salares Norte**

The Salares Norte project is 100% Gold Fields-owned and is focused on a gold-silver deposit in the Atacama region of northern Chile. Mineralisation is contained within a high-sulphidation epithermal system, offering high-grade oxides. The project is at an elevation of 4,200m – 4,900m above sea level.

The Salares Norte feasibility study was completed in late 2018 and peer reviewed in January 2019. Gold Fields spent US\$51m on feasibility study work and drilling in 2018 (2017: US\$53m) with a further US\$13m spent on district exploration. The findings of the feasibility study were presented to the Gold Fields Board in February 2019.

Key findings of the feasibility study include the following potential operational parameters for Salares Norte:

- Initial 11.5-year life-of-mine

- Annual throughput of 2Mt

- Life-of-mine production of 3.2Moz of gold and 26.7Moz of silver

- Average Annual production of 450koz gold equivalent for the first seven years of the project at AISC of US\$465/Au-eq oz

- Average annual production of 355koz gold equivalent for the first 10 years of the project at AISC of US\$545/Au-eq oz

- Project construction capital of US\$834m (in current terms)

- Internal rate of return of 25% at a US\$1,300/oz gold price with a 2.2-year payback period from commencement of production

The project envisages open pit operations with a processing plant that includes both Carbon-in-Pulp (CIP) and Merrill Crowe processes due to the high silver content of the ore. The processing plant could

deliver recovery rates of around 92% for gold. In addition, filtered and dry stack tailings will be used for safety, water scarcity and environmental reasons. Contractor mining is likely to be used for Salares Norte.

In December 2018, a maiden Mineral Reserve has been declared with 3.5Moz of gold and 39Moz of silver. The gold-equivalent Mineral Reserve is 4.0Moz.

A final go-ahead decision on the project hinges on the outcome of the Environmental Impact Assessment (EIA) for the project, which was accepted by the regulator for review on 11 July 2018. The EIA entails baseline research comprising hydrogeological, flora, fauna and biodiversity studies, including research and recommendations on the

protection of the endangered short-tailed Chinchilla in the area. Gold Fields anticipates the EIA review to take 18 24 months to complete.

This time period will give Gold Fields sufficient time to consider funding options for the anticipated US\$834m in project capital. Depending on the timing of the EIA decision, construction could commence in late 2020 with first gold production in 2023.

A pre-development budget of US\$81m has been estimated to advance detailed engineering, permits and early works during 2019 and the first half of 2020, while we await the outcomes of the EIA and the permit to proceed. As at December 2018, Salares Norte controlled about 84,000ha of mineral rights concession in the Salares Norte district and has carried out extensive district-wide exploration within a 20km radius of Salares

Norte. It will continue investing in exploration in the area, with the objective to discover and deliver ore from these targets to the production pipeline from 2025 onwards.

Land easement for 30 years was granted on 30 May 2016 and water rights for the project were obtained on 29 December 2016, with the regulator granting Gold Fields access to 114.27l/second (more than double what the project is planning to use). Energy demand for the project is estimated at 12MW, with an independent power producer (IPP) operating an onsite 14MW diesel power station to meet this requirement. A staged approach to incorporating renewable energy sources is also being considered.

While there are no indigenous claims or community presence on the concession or the dedicated access routes, Salares Norte has embarked on an extensive engagement programme with three indigenous communities in the wider vicinity of the project. The principal area of social influence of the project and, potentially, for recruiting labour is the Diego de Almagro municipality, approximately 125km away. A long-term framework agreement has been signed with the municipality and its communities to govern the relationship. Furthermore, work protocols have been signed for the gathering of information and citizen participation process with two of the three communities, with the process ongoing for the third community.

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Managing our portfolio continued

**Damang Reinvestment**

The Damang Reinvestment project is set to extend its life-of-mine to 2025. It entails a major cutback to both the eastern and western walls of the Damang Pit Cutback (DPCB). When complete, the cutback is expected to have a total depth of 341m, comprising a 265m pre-strip to access the base of the existing pit. This will be followed by a deepening of the pit by a further 76m which will ultimately provide access to the full Damang ore body, including the high-grade Tarkwa Phyllite lithology.

The project is on track to begin sourcing higher-grade ore from the Saddle area of the DPCB towards the middle of 2019, and then reach the bottom of the main pit in early 2020. The Amoanda pit has been the main ore source during the cutback of the Damang pit, with positive grade reconciliation from Amoanda being

the main reason for the out performance of the project during 2017 and 2018.

The reinvestment project, which commenced on 23 December 2016, got off to a strong start in 2017 and continued to track well against plan during 2018. Total tonnes mined were 45.9Mt in 2018 (2017: 39.7Mt) versus the project schedule of 41.5Mt, driven by a good performance by both contractors (BCM and E&P). Gold produced of 180.8koz (2017: 143.6koz) was 13% higher than guidance of 160koz, underpinned by the high-grade material from the Amoanda pit, while AIC of US\$1,506/oz (2017: US\$1,827/oz) was below guidance of US\$1,520/oz. Project capital of US\$125m was spent during 2018, on top of the US\$115m spent during 2017.

To ensure sufficient tailings capacity for Damang's extended life-of-mine, a new tailings storage facility, the Far East Tailings Storage Facility (FETSF), with a tailings capacity of 44Mt, was commissioned in Q4 2017, on time and within budget. Decommissioning of the older East Tailings Storage Facility (ETSF) commenced during Q1 2018, and was completed during 2018, with all tailings now being deposited on the FETSF.

A sharp increase in Damang's production from 181koz to 218koz has been guided for 2019, with AIC sharply reduced to US\$100/oz (2018: US\$1,506/oz). Project capital for 2019 is expected to be US\$69m.

**Table of Contents****Asanko**

In March 2018, Gold Fields announced that it had entered into an agreement to form a 50:50 incorporated JV with Asanko Gold. In the deal, which went unconditional on 31 July 2018, Gold Fields acquired a 50% stake in Asanko Gold Ghana's 90% interest in AGM, associated properties and exploration rights in Ghana (the Ghana government holds the remaining 10% through the legislated free carry arrangements). Our 45% stake in AGM is equity accounted as Asanko Gold remains the operator of the mine.

The acquisition was in line with the Group's growth strategy of focusing on jurisdictions in which it already has an established footprint and can leverage off its infrastructure and skills set. A JV committee has been established which oversees the running of the JV.

AGM is a multi-deposit complex, with two main deposits, Nkran and Esaase, and nine known satellite deposits. The mine is situated 100km north of Gold Fields' Tarkwa and Damang operations along the prospective and under-explored Asankrangwa greenstone belt in Ghana.

Gold Fields' purchase consideration included an upfront payment of US\$165m and a deferred payment of US\$20m by 31 December 2019, or earlier if agreed development milestones at the Esaase project are reached. In addition, Gold Fields purchased 9.9% of Asanko Gold's issued equity on the Toronto Stock Exchange through a private placement, for a total consideration of US\$17.6m.

During 2018, AGM produced 223koz (100% basis) at an AISC of US\$1,072/oz and an AIC of US\$1,183/oz. Gold Fields' share of the production for the period August – December 2018 was 44,500oz.

Guidance for 2019 is production of 225koz – 245koz (100% basis) at an AISC of US\$1,090/oz – US\$1,110/oz and AIC of US\$1,130/oz – US\$1,150/oz. The guidance includes oxide material from the Esaase deposit, which will be trucked about 30km to the processing plant. A feasibility study has been completed and the JV partners are currently deciding on the long-term development and associated ore transportation plans for the Esaase project in H2 2019.

An updated Mineral Reserve will also be released on completion of the feasibility study. Development capital of US\$18m is planned for AGM during 2019, mainly on the development of Esaase.

AGM's sizeable resource base, with a life-of-mine of at least 15 years at 2018 production rates, is accretive to the Gold Fields portfolio, with the potential for further discoveries on the large, relatively unexplored, tenement package of

about 540km<sup>2</sup>, held by Asanko Gold.

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Life extension through near-mine exploration

Near-mine exploration plays a key role in Gold Fields' strategy as we believe it offers one of the lowest-cost opportunities for growing cash-flow, particularly on a per share basis. The value in near-mine exploration lies in:

- Knowledge of the ore bodies, which enables the exploration teams to identify extensions or additional ore sources housed within the mining tenement

- Operational capabilities, including Gold Fields' proven ability to develop and mine orogenic ore bodies, which are prevalent at our Australian mines

- Regional and operational infrastructure, including existing processing plants and regional management teams

In addition to adding to Gold Fields' Mineral Resource and Mineral Reserve base, near-mine exploration:

- Extends the life of the Group's existing mines

- Ensures each region can continue to leverage its infrastructure

- Provides a robust platform for regional growth

In 2018, Gold Fields spent US\$80m on near-mine exploration (2017: US\$87m), which supported a total of 507,497 metres of near-mine drilling (2017: 754,669 metres). The majority of this spending – US\$63m (A\$85m) (2017: US\$75m (A\$99m)) – was incurred at our Australian mines. US\$14m was spent in Ghana, which is slightly higher than the US\$11m spent in the region in 2017, amid a renewed focus on extending the life of the Tarkwa mine.

For 2019, Gold Fields has budgeted US\$63m for near-mine exploration of which US\$57m (A\$76m) will be at our Australian operations.

**Following is a breakdown of brownfields exploration at our operations during 2018:**

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A fit-for-purpose workforce

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## Operational performance

**Introduction**

During 2018, Gold Fields continued to expand its international footprint with the acquisition of a 45% stake in the Asanko gold mine (AGM) in Ghana. The portfolio is geographically diversified, boasting eight mines in four regions, only one of which is in South Africa. In addition, investment into the Gruyere project in Australia continued as planned during 2018. The project remains on track to start contributing to the production profile during Q2 2019, and is set to reach steady state production towards the end of 2019 or early 2020. At name plate, Gold Fields share of Gruyere's production is expected to be 150koz, bringing production in the Australian region to approximately 1Moz.

In another positive development, the feasibility study on Salares Norte in

Chile was completed during the year, showing an internal rate of return of 25% at a US\$1,300/oz gold price (for more details refer to p47). While there is more work to be done on the project, Salares Norte offers longer-term optionality to the production base.

The Group's broader strategy is focused on reducing Group All-in costs (AIC) and improving cash generation. Our international operations (excluding South Africa) lived up to this mandate during 2018, with each mine meeting or exceeding production and cost guidance for the year. The solid operational and cost performances of our Australian, Ghanaian and Peruvian assets contributed to strong overall Group results and enabled Gold Fields to contain the net debt increase during

a year in which US\$295m in project capital was incurred.

Some of the key investments made during 2018 in order to bolster the longevity of our portfolio include:

A\$153m (US\$115m) (2017: A\$182m (US\$139m)) spent on the Gruyere project in Western Australia (p44)

US\$125m (2017: US\$115m) in project capital spent at our Damang mine in Ghana (p48)

Near-mine exploration spending of A\$85m (US\$63m) (2017: A\$95m (US\$72m)) in Australia (including Gruyere) and US\$14m (2017: US\$11m) in Ghana (p50)

US\$51m (2017: US\$53m) spent on feasibility study work and further exploration drilling at Salares Norte in Chile (p47)

**Group operational performance**

	2019 Guidance		2018 Actual		2018 Guidance		2017 Actual	
	Prod	AIC	Prod	AIC	Prod	AIC	Prod	AIC
	(Moz)	(US\$/oz)	(Moz)	(US\$/oz)	(Moz)	(US\$/oz)	(Moz)	(US\$/oz)
Group	2.13	1,075	2.04	1,173	2.08	1,190	2.16	1,088
	-2.18	-1,095			-2.10	-1,210		

In 2018, Gold Fields' attributable gold-equivalent production decreased by 6% to 2.036Moz, driven predominantly by the underperformance at South Deep, which was compounded by a six-week strike on the mine during Q4 2018. The Group performance takes into account attributable production from AGM from 1 August 2018, with the acquisition having gone unconditional on 31 July 2018.

The Group achieved AIC of US\$1,173/oz in 2018, which was lower than guidance (US\$1,190/oz – US\$1,210/oz), but higher than the US\$1,088/oz recorded in 2017. The year-on-year increase in AIC was driven by an increase in non-sustaining capital and Salares Norte expenditure, coupled with the lower

level of gold sold. Group All-in Sustaining Costs (AISC) increased to US\$981/oz from US\$955/oz in 2017, and were lower than the guidance of US\$990/oz – US\$1,010/oz.

During 2018, Gold Fields maintained the capital expenditure (capex) levels deemed critical to sustain the portfolio. With the focus on extending the life of our ore bodies at all of our international mines, Group capex remained elevated at US\$814m (excluding Asanko) (2017: US\$834m). This comprised sustaining capital of US\$524m and project capital of US\$290m.

Regional capex highlights included:

**Australia:** Our Australian mines decreased capex to A\$373m (US\$279m) in 2018 from A\$423m (US\$324m) in 2017, with near-mine exploration spending amounting to A\$85m (US\$63m) in 2018 (2017: A\$95m (US\$72m))

**South America:** At Cerro Corona, capex decreased slightly to US\$33m in 2018 from US\$34m in 2017

**West Africa:** Capex declined to US\$290m (excluding Asanko) (2017: US\$313m), mainly as a result of lower expenditure on the mining fleet at Tarkwa. Project capital at Damang increased to US\$125m in 2018 from US\$115m in 2017

**South Africa:** Capex at South Deep decreased to US\$58m in 2018 from US\$82m in 2017, with project capital remaining stable at US\$18m (2017: US\$17m)

**Table of Contents***South Africa region*

	2019 Guidance		2018 Actual		2018 Guidance		2017 Actual	
	Prod	AIC	Prod	AIC	Prod	AIC	Prod	AIC
South Deep	6,000kg (193koz)	R610,000/kg (US\$1,394/oz)	4,885kg (157koz)	R854,049/kg (US\$2,012/oz)	10,000kg (321koz)	R540,000/kg (US\$1,400/oz)	8,748kg (281koz)	R600,109/kg (US\$1,400/oz)

**South Deep** got off to a tough start in 2018, with production in Q1 2018 impacted by a slow build up after the seasonal holidays, two labour restructuring processes that took place at the end of 2017 and during Q1 2018, and a change in the underground working shift arrangements implemented to increase productivity. In addition, low mobile equipment reliability, the intersection of active geological features (faults and dykes) in the high-grade corridor 3 and poor ground conditions in the composites slowed production rates. The mine only produced 1,485kg (48koz) in Q1 2018.

Production was further impacted by a Department of Mineral Resources enforced safety stoppage during April. As a result of these factors, guidance for the mine was downgraded to 7,600kg (244koz) with the release of our Q1 2018 production update on 25 April, from the original guidance of 10,000kg (321koz).

Despite the two restructuring processes, South Deep continued to face a number of organisational and structural challenges that directly impacted performance during Q2 2018, with production during the quarter only marginally higher than Q1 2018 at 1,518kg (49koz). As a result, on 14 August 2018, Gold Fields announced a material restructuring of the mine, which entailed reducing the workforce by 30%. This announcement impacted the productivity of the mine (Q3 production: 1,539kg (50koz)), and ultimately resulted in the majority union (the National Union of Mineworkers (NUM)) embarking on industrial action on 2 November 2018. The strike lasted 45 days and ended on 13 December. Five days later the NUM signed a settlement agreement.

*For details of the South Deep restructuring, see p46.*

As a result of the above factors, production for the full year decreased by 44% to 4,885kg (157koz) in 2018 from 8,748kg (281koz) in 2017. Cost of sales before amortisation and depreciation reduced by 12% to R3.586m (US\$272m) in 2018 from R4.062m (US\$305m) in 2017, mainly due to lower production exacerbated by the industrial action in 2018's last quarter.

Capital expenditure decreased by 30% to R770m (US\$58m) in 2018 from R1,099m (US\$82m) in 2017. Sustaining capital expenditure decreased by 40% to R528m (US\$40m) in 2018 from R874m (US\$66m) in 2017, underpinned by lower spend on fleet and surface

infrastructure. Non-sustaining capital expenditure increased by 8% to R242m (US\$18m) in 2018 (2017: R225m (US\$17m)) due to higher expenditure on new mine development infrastructure and an increase in development metres.

AISC increased by 41% to R807,688/kg (US\$1,903/oz) from R574,406/kg (US\$1,340/oz) in 2017, while AIC increased by 42% to R854,049/kg (US\$2,012/oz) compared with R600,109/kg (US\$1,400/oz) in 2017. The increase in AISC and AIC was driven mainly by the lower amount of gold sold.

South Deep recorded a net cash-outflow of US\$141m in 2018.

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Operational performance continued

*Americas region*

		2019 Guidance	2018 Actual	2018 Guidance	2017 Actual
<b>Production overview</b>					
Gold-only production	koz	<b>153</b>	150	145	159
Copper production	kt	<b>28</b>	32	30	30
Gold-equivalent production	koz	<b>291</b>	314	280	307
AIC/AISC	US\$ /oz	<b>566</b>	282	585	203
AIC/AISC eq-oz	US\$ /oz	<b>802</b>	699	810	673

**Cerro Corona** in Peru had another solid year in 2018, with total managed gold-equivalent production of 314koz (2017: 307koz). This was 12% higher than the 280koz gold-equivalent production guidance for the year, underpinned by the higher copper price ratio and increased copper production due to a increased copper head grade.

Cost of sales before amortisation and depreciation increased marginally to US\$155m in 2018 from US\$154m in 2017. The higher cost was due to

higher mining expenditure resulting from increased tonnes mined in 2018, partially offset by a US\$6m credit to costs of concentrate inventory in 2018 (2017: charge to costs of US\$3m). Capital expenditure decreased by 3% to US\$33m in 2018 from US\$34m in 2017, due to lower expenditure on the tailings dam and waste storage facilities.

AISC and AIC were US\$282/oz in 2018 compared with US\$203/oz in 2017 and, on a gold equivalent basis,

US\$699/oz in 2018 (2017: US\$673/oz). The increase in AISC and AIC was primarily due to lower by-product credits, lower gold sold and higher cost of sales before amortisation and depreciation. Both AISC and AIC comfortably beat guidance for the year of US\$585/oz and, on a gold equivalent basis, US\$810/oz.

The region reported net cash-inflow of US\$114m during 2018 (2017: US\$117m).

*Australia region*

	2019 Guidance		2018 Actual		2018 Guidance		2017 Actual	
	Prod	AIC	Prod	AIC	Prod	AIC	Prod	AIC
	(koz)		(koz)		(koz)		(koz)	
St Ives	362	A\$1,342/oz (US\$1,007/oz)	367	A\$1,207/oz (US\$902/oz)	360	A\$1,250/oz (US\$1,000/oz)	364	A\$1,198/oz (US\$916/oz)
Agnew	221	A\$1,538/oz (US\$1,154/oz)	239	A\$1,374/oz (US\$1,026/oz)	230	A\$1,310/oz (US\$1,050/oz)	241	A\$1,276/oz (US\$977/oz)
Granny Smith	260	A\$1,370/oz (US\$1,028/oz)	280	A\$1,239/oz (US\$925/oz)	275	A\$1,240/oz (US\$990/oz)	290	A\$1,171/oz (US\$896/oz)
Darlot	Sold	Sold	Sold	Sold	Sold	Sold	39	A\$1,874/oz (US\$1,432/oz)
Gruyere (50%)	59	A\$3,178/oz (US\$2,384/oz)						
<b>Region</b>	<b>902</b>	<b>A\$1,518/oz (US\$1,139/oz)</b>	<b>886</b>	<b>A\$1,262/oz (US\$943/oz)</b>	<b>865</b>	<b>A\$1,263/oz (US\$1,010/oz)</b>	<b>935</b>	<b>A\$1,239/oz (US\$948/oz)</b>

Gold Fields Australian operations delivered another strong operational performance in 2018. Gold production of 886koz at an AIC of A\$1,262/oz (US\$943/oz) was better than full year guidance of 865koz at an AIC of A\$1,263/oz (US\$1,010/oz), with Granny Smith, St Ives and Agnew all outperforming both production and cost guidance. Production was 5% lower than

in 2017 (935koz), which included production from Darlot during three quarters in 2018. Stripping out Darlot's production from 2017 (895koz excluding Darlot), production would have decreased by only 1% in 2018.

Cost of sales before amortisation and depreciation increased by 13% to A\$690m (US\$516m) in 2018, from A\$613m (US\$469m) in 2017. Capital

expenditure decreased to A\$373m (US\$279m) from A\$423m (US\$324m), including near-mine exploration expenditure which was slightly lower at A\$85m (US\$63m) in 2018 compared to A\$95m (US\$72m) in 2017.

The Australia region reported a net cash-inflow of US\$194m in 2018 (2017: US\$188m).



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**Table of Contents****Mine performances**

**St Ives** continued its transition from being predominantly open pit to a predominantly underground operation during 2018. By end-December, 79koz had been mined from the Invincible underground mine. The Invincible open pit will be phased out during 2019, at which point Invincible Underground, Hamlet Underground and the Neptune open pit will be the main sources of ore.

Production increased marginally to 367koz in 2018 from 364koz in 2017, and came in slightly ahead of guidance of 360koz. Cost of sales before amortisation and depreciation increased by 20% to A\$249m (US\$186m) in 2018 from A\$207m (US\$159m) in 2017. The increase in costs was primarily due to increased underground mining cost of A\$18m (US\$14m) and a lower gold inventory credit to costs of A\$20m (US\$15m) in 2018, compared with A\$38m (US\$29m) in 2017.

Capital expenditure decreased by 17% to A\$170m (US\$127m) in 2018 from A\$204m (US\$156m) in 2017, due to lower expenditure at the open pits following completion of activities at Invincible open pit stage 5, partially offset by increased capital development at the new Invincible underground mine.

AISC and AIC increased by 1% to A\$1,207/oz (US\$902/oz) in 2018 from A\$1,198/oz (US\$916/oz) in 2017, and were 3% below full year guidance of A\$1,250/oz (US\$1,000/oz).

At **Agnew**, gold production decreased by 1% to 239koz in 2018 from 241koz in 2017, but was 4% higher than guidance of 230koz. Cost of sales before amortisation and depreciation increased by 10% to A\$216m (US\$162m) in 2018 from A\$197m (US\$150m) in 2017. The cost increase was driven by higher mining costs at Waroonga as a result of increased ground support and paste fill, as well as an increase in gold-in-process charge to costs of A\$2m (US\$2m) in 2018, compared with a credit to costs of A\$6m (US\$5m) in 2017.

In an important development for Agnew, Gold Fields made the decision to invest in a new camp (we previously rented rooms from BHP Billiton in Leinster) and a hybrid power station on site. The first buildings for the camp arrived on 15 December 2018 and construction commenced in January 2019. Commissioning of 450 rooms and the central facilities is targeted for May 2019. The new power station will entail a combination of gas, solar and wind power generation.

AISC and AIC increased by 8% to A\$1,374/oz (A\$1,026/oz) in 2018 from A\$1,276/oz (US\$977/oz) in 2017, and were 5% above full year guidance of A\$1,310/oz (US\$1,050/oz).

Commissioning of the gas and solar components is scheduled for June 2019, with wind generation to follow in Q1 2020. Capital expenditure rose by 2% to A\$98m (US\$73m) in 2018, up from A\$96m (US\$74m) in 2017.

In addition to the camp and power station, Agnew put out a tender for an aviation contract, which was awarded on 30 January 2019.

At **Granny Smith**, production decreased by 3% to 280koz in 2018 from 290koz in 2017, but was 2% ahead of guidance for the year of 275koz. Cost of sales before amortisation and depreciation increased by 7% to A\$225m (US\$168m) in 2018 from A\$210m (US\$160m) in 2017, mainly due to increased mining costs on the back of increased ore tonnes mined from the deeper zones, and an 18% increase in ore development in 2018.

Capital expenditure was 8% lower in 2018 at A\$105m (US\$79m) (2017: A\$114m (US\$87m)), due to completion of the VR8 ventilation shaft in 2017.

AISC and AIC increased by 6% to A\$1,239/oz (US\$925/oz) in 2018 from A\$1,171/oz (US\$896/oz) in 2017, mainly due to higher cost of sales before amortisation and depreciation and lower gold sold, partially offset by lower capital expenditure.

The mine generated net cash-flow of A\$131m (US\$98m) in 2018.

*A review of the three mines' brownfields exploration activities in 2018 is detailed on p50 51.*

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Operational performance continued

**West Africa region**

	2019 Guidance		2018 Actual		2018 Guidance		2017 Actual	
	Prod (koz)	AIC (US\$/oz)	Prod (koz)	AIC (US\$/oz)	Prod (koz)	AIC (US\$/oz)	Prod (koz)	AIC (US\$/oz)
Tarkwa	514	949	525	951	520	970	566	940
Damang	218	1,100	181	1,506	160	1,520	144	1,827
Asanko <sup>1</sup>	108 <sup>3</sup>	1,140 <sup>3</sup>	45	1,175				
<b>Region</b>	<b>838</b>	<b>1,102</b>	751	1,098 <sup>2</sup>	680	1,100	710	1,119

<sup>1</sup> 45% stake, equity-accounted<sup>2</sup> Excludes Asanko contribution<sup>3</sup> Gold Fields' 45% share of the mid-point of Asanko 2019 guidance

The Ghanaian region is the second biggest producer in the Gold Fields portfolio, contributing 34% to Group attributable production in 2018. Gold Fields has a shareholding of 90% in both Tarkwa and Damang, with the Ghanaian government holding the remaining 10%. During 2018, Gold Fields acquired 45% of AGM in August, with our joint venture (JV) partner Asanko Gold holding 45%, and the Ghanaian government the remaining 10%.

The Damang Reinvestment project, which commenced at the end of 2016, continued to track well against plan during 2018. Total tonnes mined were 45.9Mt against the project schedule of 41.5Mt, while gold produced was 181koz, compared with guidance of 160koz. There will be a material increase in Damang's production in 2019, with guidance of 218koz. Encouragingly, AISC of US\$813/oz and AIC of US\$1,506/oz both came in below guidance of US\$860/oz and US\$1,520/oz, respectively. For an update on the Damang Reinvestment plan, see p48.

Despite total managed gold production for the region falling 1% to 706koz (excluding Asanko) in 2018, it came in 4% ahead of guidance of 680koz, driven by the better-than-expected performance at Damang. Total managed production (including AGM's contribution from 1 August 2018) increased to 751koz from 710koz in 2017.

Cost of sales before amortisation and depreciation for the region increased by 1% to US\$433m in 2018 from US\$428m in 2017. Capital expenditure decreased to US\$295m in 2018 from US\$313m in 2017,

mainly due to lower expenditure on the mining fleet at Tarkwa. AIC for the region was US\$1,098/oz, in line with guidance of US\$1,100/oz and 2% lower than the US\$1,119/oz reported in 2017.

Despite the significant amount of project capital incurred at Damang, the region as a whole reported a net cash-inflow of US\$25m during 2018.

### Mine performances

During 2018, **Tarkwa** transitioned from owner mining to contractor mining in an attempt to address cost inflation in the region. The mining contract was demarcated into two zones and awarded to two local contractors: BCM for Zone 1 (Pepe, Mantraim, Atuabo and Teberebe pits) and E&P for Zone 2 (Akontansi and Kottraverchy pits). BCM started operations in Zone 1 in March, with E&P following in April. As part of the tender process, the contractors undertook to purchase the fleet, which largely covered the retrenchment costs incurred through the process.

Tarkwa's production decreased 7% to 525koz in 2018 (2017: 566koz). However, production beat guidance of 520koz, a notable achievement given the transition to contractor mining. The mine's Carbon-in-Leach plant throughput increased slightly to 13.8Mt (2017: 13.5Mt), while its yield decreased to 1.18g/t (2017: 1.30g/t) due to the lower head grade mined and processed.

Cost of sales before amortisation and depreciation increased by 1% to US\$309m in 2018 from US\$306m in 2017 due to a gold-in-process charge to cost, partially offset by

lower mining costs. Capital expenditure decreased 14% to US\$156m in 2018 from US\$181m in 2017. AISC and AIC increased by 1% to US\$951/oz in 2018 from US\$940/oz in 2017, and were comfortably below guidance of US\$970/oz.

Tarkwa generated a net cash-inflow of US\$92m during 2018.

**Damang** produced 181koz in 2018, which is 26% higher than the 144koz produced in 2017 and 13% higher than guidance of 160koz. While the reinvestment plan entailed an increase in both operating costs and capital expenditure, both AISC (US\$813/oz) and AIC (US\$1,506/oz) came in below guidance. This is a result of the strict cost controls and better than expected efficiencies from the contractors used.

Cost of sales before amortisation and depreciation increased by 2% to US\$124m in 2018 from US\$122m in 2017. This increase was mainly due to higher operating tonnes mined, partially offset by a gold-in-process credit to costs of US\$19m in 2018. Capital expenditure was US\$139m in 2018 from US\$132m in 2017.

Damang recorded a net cash-outflow of US\$67m in 2018, underpinned by the US\$125m in project capital spent during the year.

**Asanko** produced 223koz in 2018, of which 45koz was attributable to Gold Fields for the five months from August to December. AISC was US\$1,069/oz in 2018 and AIC US\$1,175/oz for the five-month period.

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## Safety

***Introduction***

Gold Fields' commitment to health and safety as our foremost priority reflects the importance of safeguarding and promoting the welfare of our employees and contractors, maintaining operational continuity and protecting our reputation. During 2018, we remained focused on improving our performance and entrenching the requirement to operate safely into all daily activities. Gold Fields' target is the elimination of all fatalities and serious injuries, and our ultimate goal is zero harm.

Safety forms a fundamental component of performance management, and our annual performance bonus for executives, managers and the wider workforce contains a substantial safety component. Furthermore, maintaining safe and healthy working conditions is a key compliance issue.

and good practices. The strategy comprises three pillars, namely systems and processes, safety leadership, and safe behaviour, that will direct our safety programmes.

The most important programmes focus on the elimination of material unwanted events (MUEs), fatalities and serious potential incidents. MUEs in health and safety, environment and community have been identified and prioritised in each region. Gold Fields' MUEs in the safety and health area are dropped objects, light vehicles, working at heights, hazardous materials, particularly cyanide, confined spaces, slope stability, explosives and fires, tailings facility incidents, community activism and protests, and surface water pollution.

During 2017 Gold Fields adopted the International Council on Mining & Metals (ICMM) critical control management of MUEs, which entails listing MUEs,

international health and safety management system standard. There are opportunities for us to improve these systems, including upgrading to the ISO 45001 standard over the next two years and increasing use of leading indicators.

Our safety leadership forum has initiated the development and roll out of a Courageous Leadership programme to align all employees to a common set of beliefs and attitudes to health and safety. This programme will be cascaded to every employee in the organisation. As a supporting and complementary initiative to the leadership programme, the Vital Behaviours programmes will be implemented in all regions, based on the success of this initiative at our Australian operations where we have seen fundamental shifts in the safety culture.

We are very conscious of major incidents in the mining industry

Our first and most important value, If we cannot mine safely, we will not mine, remains critical to the sustainability of our organisation. As specified in our Occupational Health and Safety Policy Statement, updated in 2018, we endeavour to continually improve our occupational health and safety performance by providing a workplace that is conducive to health and safety.

Our Group Safety Leadership Forum, formed in 2017, is overseeing the development of the Group-wide safety strategy to further improve our safety performance, continually embed safety as a line management responsibility, and share learnings

identifying controls that could prevent these incidents from occurring and reducing the impact should they occur, selecting those controls that are critical or essential and, finally, bedding down the controls and verifying their effectiveness. Our regions make quarterly presentations to the Board's Safety, Health and Sustainable Development (SHSD) Committee on safety-related MUEs and their critical controls. Health, environmental and community MUEs and their critical controls are presented every alternate quarter. Critical controls will be independently verified during 2019.

All of the Group's operations are certified to the OHSAS 18001

globally and consequently implement mitigating actions to prevent the risk of similar incidents at our operations. We have benefited from greater sharing of information about fatal incidents between ICMM members.

The work on safety is integral to our operational discipline and is accepted as the foundation for improved operational performance. As such, pursuing safety and productivity at the same time are mutually reinforcing.

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Safety continued

***Group safety performance***

Our generally improved safety performance during 2018 was overshadowed by a fatal incident in which our South Deep colleague, Ananias Mosololi, a load haul dump operator, was trapped between the door and the cabin of the dumper he was operating underground. Following the incident, and the subsequent joint investigations with the regulator, South Deep conducted a comprehensive analysis to understand what took place and prevent its recurrence.

In a non-mining-related incident, a member of the Community Security Task Force, Francis Yeboah, drowned in a settling pond at our Tarkwa mine in Ghana. The local police did not suspect foul play in the incident.

During 2018, Gold Fields' safety performance improved significantly from 2017. We recorded one fatal injury compared with three fatal injuries in 2017. Our TRIFR for the year improved by 18% to 1.83 injuries per million hours worked in 2018 from 2.24 in 2017, exceeding our target of a 12% reduction. The TRIFR among employees in 2018 was 1.94 (2017: 2.69) and among contractors 1.75 (2017: 2.16). The number of recordable injuries fell to 99 in 2018 (2017: 138). Of the 99 injuries, 43 were employee injuries (2017: 75) and 56 were contractor injuries (2017: 63).

The elimination of serious injuries, along with fatalities, is viewed as a safety priority. During 2018 we finalised the definition of a serious injury (see in table footnote below).

Gold Fields recorded 18 serious injuries in 2018 (2017: 28), which will serve as a baseline for future performance.

To further entrench safe behaviour in our workplace, the Board broadened the 2019 safety performance scorecards by adding a number of leading indicators to the current lagging indicators to measure safety performance. These leading indicators are the number of safety engagements (introduced to the LTIP in 2018), improved reporting of near-miss incidents, and timeous close-out of corrective actions on serious potential incidents. The elimination of serious injuries will be included in scorecards for the first time in 2019.

**Group safety performance**

2018	2017	2016	2015	2014
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TRIFR <sup>1</sup>	<b>1.83</b>	2.42	2.27	3.40	4.04
Fatalities <sup>2</sup>	<b>1</b>	3	1	4	3
Serious injuries <sup>3</sup>	<b>17</b>	26	19	27	
Lost time injuries (LTIs) <sup>4</sup>	<b>34</b>	52	39	68	75
Restricted work injuries (RWI) <sup>5</sup>	<b>45</b>	60	59	68	84
Medically treated injuries (MTI) <sup>6</sup>	<b>19</b>	23	25	35	38
<b>Total recordable injuries</b>	<b>99</b>	138	124	174	200

<sup>1</sup> *TRIFR = (fatalities + LTIs + RWIs + MTIs) x 1,000,000/number of hours worked.*

<sup>2</sup> *In both 2017 and 2018 we also recorded non-occupational fatalities at our mines. In 2017, a member of the protection services team at South Deep was shot and killed during a robbery at the mine, while in 2018 a member of Tarkwa mine's Community Security Task Force drowned in a settling pond on the mine*

<sup>3</sup> *A Serious injury is an injury that incurs 14 or more days lost and results in:*

*A fracture of any bone (excluding hairline fractures and fractures of fingers, toes or nose)*

*Internal haemorrhage*

*Head trauma (including concussion, loss of consciousness) requiring hospitalisation*

*Loss of all or part of a limb (excluding bone dressing to facilitate medical treatment of injured fingers and toes)*

*Permanent loss of function and/or permanent disability such as hearing loss or damage to lung function*

*Permanent disfigurement where the injury has resulted in the appearance of a person being deeply and persistently harmed medically and that is likely to lead to psychosocial problems* Numbers exclude our projects

<sup>4</sup> *An LTI is a work-related injury resulting in the employee or contractor being unable to attend work for a period of one or more days after the day of the injury. The employee or contractor is unable to perform any of his/her duties*

<sup>5</sup> *An RWI is a work-related injury sustained by an employee or contractor which results in the employee or contractor being unable to perform one or more of his/her routine functions for a full working day, from the day after the injury occurred. The employee or contractor can still perform some of his/her duties*

<sup>6</sup> *An MTI is a work-related injury sustained by an employee or contractor which does not incapacitate that employee or contractor and who, after having received medical treatment, is deemed fit to immediately resume his/her normal duties on the next calendar day, immediately following the treatment or re-treatment*

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**Table of Contents*****Regional safety performance***

## Americas region

	2018	2017
Fatalities	<b>0</b>	0
TRIFR	<b>0.54</b>	0.19
Recordable injuries	<b>3</b>	1
Safety Engagement Rate (SER)*	<b>1.14</b>	0.70

\* *The SER is an LTIP metric and equals the number of in field engagements divided by the number of man hours, multiplied by 1,000. The SER index for 2017 is used as our baseline.*

Gold Fields external auditors recommended Cerro Corona for recertification to OHSAS 18001 in 2018. There were no non-conformances.

Our visible leadership programme obtained an SER of 1.14 for 2018, above the target of 0.73. Our behaviour-based safety programme had a 165% compliance, which was 65% above target. We trained 148 new employees to act as observers of critical tasks, of which 36 are Gold Fields employees and 112 contractors.

We continued to invest in the training and development of our employees and contractors to reinforce their safety knowledge and to motivate good behaviour. We conducted two-hour workshops throughout the year, where all Gold Fields employees and contractors completed awareness programmes on critical control management. Our Cerro Corona mine has developed a mobile phone app which allows managers and employees to capture safety-related information and share this immediately with their colleagues.

Coca leaf usage has an adverse impact on alertness levels, and progressive efforts to eradicate the consumption thereof through awareness programmes for employees and contractors to improve their safety, health and wellness, continued in 2018. These programmes are also part of our induction programme for new employees. Furthermore, we completed an awareness programme with 130 families in our host communities.

Australia region

	2018	2017
Fatalities	<b>0</b>	0
TRIFR	<b>8.27</b>	10.44
Recordable injuries	<b>46</b>	61
SER	<b>6.50</b>	4.84

The region’s TRIFR reduced to an all-time low of 8.27. This represents a 67% improvement in the rate since the current safety strategy was introduced in 2013.

At the heart of Gold Fields Australia’s safety efforts are the ongoing Visible Felt Leadership and Vital Behaviours programmes, both of which were introduced in 2014. Our annual survey among employees indicated that the workforce believe that safety rules are carefully observed even if it means work is slowed down (82% agreement). These programmes have also been integrated into the construction activities at Gruyere.

Another important component of our strategy is the use of innovation and technology to reduce exposure to risk. A key project has been the deployment of the Newtrax system at our Granny Smith mine. This system allows for real time monitoring of personnel underground and also immediately notifies personnel of an emergency that requires them to move to a refuge chamber. In

addition, the deployment of proximity detection has been completed for heavy equipment in the St Ives pits and underground at Granny Smith – it integrates with the Newtrax system and operates on a frequency that provides for better signal penetration around corners.

Remote loading at Granny Smith and at the Invincible underground at St Ives has also been introduced, which allows an operator to move material underground from a dedicated operating room on surface. The remote loading system at Agnew is still operated from underground with plans to move this activity to the surface. By moving personnel to a surface environment we are reducing employees’ exposure to risk. The system also includes guidance and automation technologies which will remove risks associated with human error.

A biannual review of all safety and environmental-related incidents at our sites identified that field-level risk assessments were not being

undertaken to the extent and quality required. Based on the outcomes of our 2018 reviews, we will focus on the following in 2019:

- Refresher training to emphasise the importance of anticipating risk, and to ensure that field-level risk assessments are being conducted as required
- The majority of incidents, though relatively minor in nature, are dominated by employees placing themselves, particularly their hands (50% of the injuries in 2019), at risk
- Integration of safety performance into talent management protocols needs to be investigated
- A renewed focus on safety among contractor workers

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Aligning our operations to a common leading and lagging indicator scorecard  
The implementation of the SER continues to gain momentum at all sites, and a standard has been developed to ensure that appropriate governance protocols are in place.

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Safety continued

## West Africa region

	2018	2017
Fatalities	<b>0</b>	1
TRIFR	<b>0.49</b>	0.50
Recordable injuries	<b>12</b>	12
SER	<b>4.30</b>	2.23

Damang's TRIFR in 2018 was 0.80 and Tarkwa's 0.31, resulting in a combined rate of 0.49 for 2018 (2017: 0.50). Both mines accelerated their SERs, with Damang and Tarkwa recording 5.17 and 3.82, respectively. Both mines have observed improvements in safety behaviour since the introduction of this leading indicator.

37 near-miss incidents were investigated by the mines during 2018 to identify their main causes, which included:

- Maintenance culture and operation of defective equipment
- Supervision and risk assessments
- Limited fatigue management training for some contract drivers

All significant investigation findings were either rectified immediately or action plans were put in place to address them.

A focus of safety management in 2018 was our open pits at both mines. High-risk working areas were being cordoned off and access limited,

potential water seepages through the pit high walls were re-engineered, and warning signs were erected at designated areas in the pits to caution all personnel of possible dangers of rock falls.

Tarkwa and Damang launched a joint 'Take 5' safety campaign to reinforce the five steps required to ensure safety at the mine, being Stop and Think, Look for Hazards, Assess the Risk, Make the Changes, and Do the Job Safely.

## South Africa region

	2018	2017
Fatalities	<b>1</b>	2
TRIFR	<b>2.07</b>	2.91
Recordable injuries	<b>38</b>	64
SER	<b>0.49</b>	0.80

All lagging safety indicators showed an improvement at South Deep during 2018. However, these were overshadowed by the fatal incident recorded in October (2017: two fatalities). The mine's TRIFR improved by 29%, LTIFR by 41%, and serious injury frequency rate (SIFR) by 43%, due, in part, to the 45-day strike action at South Deep which halted operations.

The improvement in safety can be attributed to the Purposeful Visible Felt Leadership initiative launched during the year, which demonstrated safety leadership to all employees by focusing on engagement, key leading indicators and critical controls. The introduction of new shift arrangements resulted in improved supervision, which enabled employees and supervisors to focus more on safety-related issues.

Prior to the fatality in October, South Deep achieved over two million fatality-free shifts. After the fatal incident, an in-loco investigation

was conducted by the DMR, in conjunction with organised labour and management, which led to a section 54 instruction being issued to halt all trackless mobile machinery.

The DMR issued an additional eight section 54 instructions during the year (2017: 15) for, among others, ineffective secondary support, poor housekeeping, inadequate dust suppression, poor water controls, and unsafe working conditions. These resulted in partial production stoppages. The mine seeks to address the underlying reasons for section 54 instructions as soon as feasible, and has over the year implemented mitigation strategies, such as a change in shift configuration to improve supervision, changes to tramming shift arrangements and dedicated operational maintenance teams.

Seven gravity-related fall-of-ground accidents occurred in 2018 compared to nine in 2017, amid a strong focus on primary and secondary ground support. Seismic-related events at South Deep

occur frequently, but the mine is working with a number of academic institutions to achieve greater predictability of events. As a result, the number of seismic damage incidents in 2018 fell by 33% to 26. No injuries were reported during these events, but the resultant rock bursts did damage sidewalls and/or hanging walls. This required that the affected areas to be cleaned out and re-supported.

As part of South Deep's effort to engineer-out safety risks, a proximity detection system (PDS) was rolled out which warns both pedestrians and drivers of railed and trackless vehicles of each other's proximity. South Deep made steady progress on the implementation of the remedial action plan on the PDS for both rail-bound equipment and trackless mobile machinery. Our aim for this system is to stop and slow down vehicles, as well as warn of unauthorised positions and entries.



**Table of Contents****Health*****Introduction***

Occupational health is critical to Gold Fields' operations and we are committed to reducing our employees' exposure to occupational health risks, including those associated with silicosis, tuberculosis (TB), noise-induced hearing loss (NIHL), diesel particulate matter (DPM) and hearing loss.

Our Occupational Health and Safety Policy Statement, revised in 2018, sets out our approach and we endeavour to provide a workplace that is conducive to the health of our employees. The implementation of the ICMM's critical controls guidelines (p63) is key to ensuring healthy workplaces and assists with the identification and mitigation of adverse health impacts on our employees.

Longer term, we are working in a collaborative initiative with the

***Regional performance*****Silicosis and TB**

As per the South African mining industry regulations for silica dust exposure, 95% of all personal silica dust samples taken must be below 0.05mg/m<sup>3</sup> by 2024. By the end of 2018, 18% of the employee silica dust samples exceeded this level, compared with 24% in 2017. This was mainly attributed to the progress made in improving engineering controls, such as improved dust allaying and footwall treatment in high risk areas. Installation of automated footwall treatment and upgrading of internal tip dust suppression systems will further improve conditions in 2019.

During 2018, the number of silicosis cases submitted to the health authorities decreased to eight from

Since 2014, Gold Fields, along with five other companies in South Africa, has been involved in negotiations with the legal representatives of former mineworkers suffering from Silicosis in the so-called Silicosis class action case. In May 2018, the companies and legal representatives reached an historic settlement in this matter, whereby the gold companies will contribute over R5.2bn (US\$400m) towards a settlement trust fund, which will be used to pay compensation to all former mineworkers who are confirmed to have contracted Silicosis during their time working on the mines. In instances where these workers may have passed away, their dependants will receive a benefit. Gold Fields has provided an amount of US\$32m (R390m) for its share of the settlement cost.

The settlement also provides for compensation for workers who have been diagnosed with certain severe forms of TB. In December 2018, the Johannesburg High Court initiated

ICMM on Innovation for Cleaner, Safer Vehicles (p75). In addition, we are implementing new technologies that allow us to move material underground through remote loading via an operating room on surface, thus moving operations away from potential risks.

All of Gold Fields regions run dedicated health programmes, tailored to both the national and local context of each mining operation. These programmes aim to identify and manage chronic medical conditions within the workforce, while also maximising its productive capacity and reducing absenteeism.

Health programmes are a strong focus for our South Deep mine, due to the heightened health risks associated with deep-level underground mining, as well as the prevalence of many chronic diseases as a result of the relatively poor socioeconomic conditions in the country. While there were no occupational health related deaths at our mines during 2018, seven contractors and employees in our service died as a result of wider health related issues: five from HIV/Aids-related complications, one from cerebral malaria and one from drug-resistant TB. Our condolences go out to the families and friends of our colleagues.

11 in 2017, while the silicosis rate per 1,000 employees increased to 1.72 from 1.71 in 2017 because of the reduced workforce. All employees diagnosed with silicosis were initiated on a six-month course of TB prophylaxis. However, as per the 2014 Mine Health Safety Council milestones, no South Deep employee who joined the mine after 2008 and had previously not been exposed to silica dust has contracted silicosis. Continued focus is being placed on the dust mitigation strategy.

the process by which the settlement could eventually be made an order of court and subsequently implemented.

The mine recorded 15 CRTB cases in 2018, compared to 21 in 2017, and the CRTB rate improved to 3.23 per 1,000 employees in 2018 from 3.26 in 2017. Due to the mechanised nature of our operation, this rate is significantly better than the 5.45/1,000 recorded for the rest of the mining industry and 5.67/1000 for South Africa in 2017.

#### Occupational diseases at South Deep (rate per 1,000 employees and contractors at year-end)

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
Noise Induced Hearing Loss (NIHL) <sup>1</sup>	<b>0.86</b>	<b>0.78</b>	<b>0.80</b>	<b>0.68</b>	<b>1.52</b>
Cardio-Respiratory Tuberculosis (CRTB)	<b>3.23</b>	<b>3.26</b>	<b>5.26</b>	<b>6.16</b>	<b>9.15</b>
Silicosis	<b>1.72</b>	<b>1.71</b>	<b>1.12</b>	<b>1.54</b>	<b>2.67</b>
Chronic Obstructive Airways Disease (COAD) <sup>2</sup>	<b>0.65</b>	<b>0.47</b>	<b>0.64</b>	<b>0.17</b>	<b>0.76</b>
South Deep workforce	<b>4,643</b>	<b>6,432</b>	<b>6,277</b>	<b>5,837</b>	<b>5,246</b>

<sup>1</sup> Numbers are now presented per 1,000 employees and contractors. Comparatives have been restated

<sup>2</sup> Based on the number of cases submitted for compensation



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## Health continued

**HIV/Aids**

HIV/Aids management is integrated into Gold Fields' mainstream health services at South Deep. Voluntary counselling and testing (VCT) is offered to prospective and permanent employees, including contractors, by the occupational health practitioners during regular employee health assessments. This has the added benefit of directly addressing the interaction of HIV/Aids with related health issues such as TB.

Gold Fields is committed to lowering the HIV/Aids levels at South Deep, where the prevalence rate is 5.6% (percentage of the workforce living with HIV/Aids). There was an increase in the number of employees who tested positive for HIV/Aids in 2018, from 45 in 2017 to 79 in 2018. From 2014 to 2018, approximately 5,786 employees have been counselled and tested for HIV. A total of 326 employees are currently on the highly-active anti-retroviral treatment (HAART) programme.

South Deep's integrated HIV/Aids and TB strategy directly addresses interactions between these diseases. It has four key pillars:

**Promotion:** This includes regular publicity campaigns and condom distribution at all workplaces

**Prevention:** VCT is provided to all mine employees and contractors on a confidential basis. In 2018, the mine's VCT participation rate was around 17% (2017: 29%)

**Treatment:** Free HAART is provided to HIV-infected employees through onsite, medical doctor-staffed clinics. In 2018, 31 employees joined the HAART programme (2017: 36). This takes the total number of active participants to 326 (2017: 336), with 605 cumulatively enrolled since the HAART programme began in 2004. Employees' dependants can also receive HAART via the Company's medical aid schemes. We do not provide treatment to employees from contracting firms, which provide their own support

**Support:** This includes doctor-based primary healthcare, psychological counselling and social services for all employees and contractors. South Deep also supports a number of community-based HIV/Aids projects

**Malaria**

South Deep conducts quarterly wellness and wellbeing campaigns, during which employees and community members are informed about chronic medical diseases, including malaria, and are made aware of the risks associated with the discontinuation of medical treatment. During 2018, 19 employees were tested for malaria, of whom 10 tested positive.

**Noise**

There were four new cases of NIHL at South Deep mine (2017: five). Personal noise samples above the regulated occupational exposure limit of 85 dB(A) improved from 1.8% in 2017 to 0.9% in 2018 – by 2024 no noise samples

should be above that level. In line with the industry regulators' 2024 milestones, all noise emitting equipment should be below 107 dB(A) by then. Only 1.7% of South Deep's equipment was still above that level at year-end.

A survey indicated 87% compliance among employees in terms of

wearing hearing protection devices in the working places. In response, South Deep has rolled out ear-moulded protection devices to all underground employees exposed to high noise levels. The mine is also working through the Minerals Council of South Africa to encourage equipment manufacturers to produce low noise emission equipment. During 2018, the mine's auxiliary fans were sound attenuated or retrofitted with silencers to ensure fan noise levels do not exceed 107dB(A).

## **DPM**

Diesel Particulate Matter (DPM) is a critical health issue at underground mines in South Africa. Although the Occupational Exposure Limit (OEL) for DPM has not yet been promulgated by the regulator, an industry-best practice limit of 0.16mg/m<sup>3</sup> has been adopted in South Africa. South Deep has set a benchmark to have 95% of all personal samples measured below 0.16mg/m<sup>3</sup> by 2024. DPM results above the 0.16mg/m<sup>3</sup> limit improved slightly from 11.54% in 2017 to 10.96% in 2018. In an effort to reduce DPM exposure, South Deep continues to drive compliance to maintenance schedules and utilises only tier 3 and 4 machinery running on lower sulphur content diesel. Drill rigs only use diesel when travelling and switch to electrical when drilling.

## **Substance abuse**

During 2018, 6,206 cannabis (2017: 7,755) and 277,100 (2017: 273,500) alcohol tests were performed. Nine employees were tested positive for cannabis and 82 were tested positive for alcohol. All employees who tested positive for these substances were put through an employee assistance programme. Should an employee be tested positive for a second time, a formal hearing is conducted that could lead to dismissal.

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There were no new cases of NIHL reported during 2018. Furthermore, due to the nature of our Cerro Corona operation, the exposure levels and concentration of personal and area DPM samples are insignificant.

Chewing coca leaves is a cultural practice in the high altitude areas of Latin America, but which has deleterious impacts on those who practice it. Cerro Corona's ongoing programme to eradicate coca leaf consumption covers topics such as loss of insurance coverage, chronic fatigue and malnutrition. The entire workforce was taken through an awareness-raising refresher programme in 2018, which was incorporated into the new employee induction course. Six of the mine's host communities and 130 family members of employees were also taken through the course.

The Chilean Ministry of Health inspected Salares Norte's polyclinic, focusing on verifying compliance with hypobaric requirements and emergency response. The regulator verified the project's compliance with health and emergency requirements. We also implemented the regulator's occupational health protocols at the project.

No new cases of NIHL were reported during the year.

Our control strategies with regard to DPM are effective, with the majority of our samples yielding results substantially below the exposure limit recommended by the Australian Institute of Occupational Hygienists.

Mental health has been highlighted as a problem that is particularly acute among Fly-In, Fly-Out workers at mining camps. Historically, our operations have implemented a range of initiatives to promote mental health

amongst our employees. However, additional initiatives have been identified for implementation:

At St Ives, we have introduced 'Mates in Mining' as part of our 'Vital Behaviours' programme, through which 400 employees received training in mental health during 2018. This programme includes providing them with the necessary skills to identify and facilitate early interventions when mental health issues become evident

At Granny Smith, our 'Vital Behaviours' programme absorbed an initiative known as LIVINWell, which aims to enhance employee wellbeing by encouraging them to speak up when challenged with mental health issues and to seek help. The intent is to abolish the stigma associated with mental health

Gold Fields Australia also support the national 'RU OK day' initiative, which supports our mine-specific programmes. Our sites launched specific interventions on the day, and provided information sessions on mental health. For employees who are experiencing mental health problems, we are providing assistance in helping them address their problems

Contact with silica dust is limited at our Ghanaian operations. Mitigation measures have been implemented to ensure efficiency of existing controls, which have proven to be effective in reducing silica concentration levels.

Our workforce in Ghana faces a high risk of exposure to malaria and we have a comprehensive malaria control strategy in place, which incorporates education, prevention, prophylaxis and treatment. It also includes provision of mosquito repellent for workers, support for community health facilities and rapid diagnosis and treatment. In 2018, 227 employees (2017: 392) tested positive for malaria after 1,405 individuals (2017: 2,460) were tested at both Tarkwa and Damang. None of the treated cases proved fatal. The

lower treatment numbers were due to the move to contractor mining at Tarkwa. During the year, 279 company housing units were covered under the malaria vector control indoor spraying programme, and 700 insecticide-treated bed nets were distributed to community residents.

HIV/Aids management is integrated into Gold Fields' mainstream health services, and VCT takes place during regular employee health assessments. In Ghana, where the national HIV/Aids rate is around 2%, employees and contractors have access to a confidential VCT programme which they receive free of charge. During 2018, about 60% of the workforce underwent the VCT, of whom two tested positive. By year-end, Ghana had 10 employees on HAART (2017: 34).

Both Tarkwa and Damang identified a number of personal noise exposures exceeding the regulated limit of 85dB(A). Employees were educated and counselled to use existing control measures to prevent hearing damage. On average, 43% of tested vehicles and machines exceeded the noise limit, but the use of hearing protection reduced the noise exposure by employees to below regulated limits. Equipment that exceeds the limits is also being re-engineered to reduce noise levels.

During Tarkwa's contract mining transition, employees underwent compulsory exit medical assessments. Two cases of silicosis, nine cases of NIHL and 67 musculoskeletal disorders were identified. Employees retired on medical grounds were duly compensated as per regulations and the collective agreement.

Drug and alcohol testing continued at both our Ghanaian operations, and 87 contractors and three Gold Fields employees tested positive either for alcohol or drugs at Tarkwa. In line with the region's zero tolerance for drug and alcohol policy, all employees who tested positive have either been dismissed or banned from the site. Testing is compulsorily for all employees and contractors entering the mine.

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## Energy management

Amid rising energy costs, increasing depth of our underground mines and longer hauling distances for our open pits, our energy strategy focuses on ensuring security of supply, improving energy efficiencies and reducing the cost of energy while, at the same time, minimising our contributions to and building resilience against climate change.

**Group energy performance**

Gold Fields' energy spend, which combines our spending on electricity and fuels, accounts for a significant portion of our operating costs. During 2018, this percentage rose to 22% of operating costs from 17% in 2017, or 15% of our AISC (2017: 12%).

Given the importance of energy to the Group operations, we have set a number of aspirational goals for the year

gas-generated, increasing the use of renewables and rolling out training and awareness programmes. During 2018, Cerro Corona in Peru became the first Gold Fields mine and the first mine in Peru to be certified to the ISO 50001 standard, and we aim to have all our operations aligned with the standard by 2020.

Total energy consumption decreased by 4% to 11,628TJ in 2018, from 12,178TJ in 2017, with 69% comprising fuel usage and 31% electricity, compared to a 67%/33% split in 2017. Fuel spend amounted to 52% (2017: 44%) of the total energy spend, and electricity spend accounted for the rest.

Total Group energy spend increased by 17% to US\$302m (US\$146/oz) in 2018 from US\$258m (US\$115/oz) in 2017, largely due to an average 23% increase in diesel prices paid by our Ghanaian and Australian

capacity about 54% of total electricity capacity with an additional 16MW of capacity being evaluated. The independent power producers (IPPs) supplying the gas are finalising the construction of the gas pipeline to our Tarkwa and Damang mines in Ghana (77km) and have completed the pipeline to the Gruyere project in Australia (200km). This is a safer and more reliable option for supplying gas than trucking it to these operations.

Renewable energy is also becoming a viable option for our operations, not only due to their positive impact on our carbon emissions but also because the cost of renewables is rapidly decreasing. At present, Gold Fields has 55MW of solar capacity and 18MW of wind capacity under study at our South African, Australian and Ghanaian mines. Two of our Australian mines, Granny Smith and Agnew, are also finalising the construction of battery storage facilities (p72). Our investments in renewables will result in solar and wind being added to our supply mix, initially at our Australian mines, where it is set to reach at least 10% of total energy usage by 2020. Several additional opportunities are being assessed at the rest of our operations. We also remain

2020:

Maintain energy security outside and Australian operations, which are the top 10 Group risks

Achieve 5% to 10% energy savings off our annual energy plans each year

Achieve 17% carbon emission reductions each year up to 2020, equivalent to 800,000t CO<sub>2</sub>-e of cumulative carbon emission reductions over the two years

Gold Fields has developed integrated energy and carbon management strategies at both Group and operational level that are aligned with the global ISO 50001 energy management system standard. The key pillars of this strategy are to reduce our diesel usage, to switch from diesel-generated electricity to cleaner

**Gold Fields electricity consumption by source**

mines. This was slightly offset by oil price hedges at our Ghanaian and Australian operations, which realised net gains of US \$14m during 2018. In 2018, we invested US\$3m in energy initiatives, which delivered 411TJ of savings and resulted in long-term cost savings of US\$29m (US\$14/oz), compared with US\$22m (US\$10/oz) in 2017.

With the exception of our South Deep mine in South Africa, which is still heavily reliant on coal-fired electricity, all of our operations are using low-carbon gas, with grid and diesel generators as emergency supply. During 2018, our Group had 134MW in installed gas

committed to our target of using renewables for 20% of the energy requirements of new projects over their life-of-mine.

*More details on Gold Fields climate change management and carbon emission performance can be found on p97-99.*

**Group energy consumption**

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**Table of Contents*****Energy savings initiatives***

Since 2013, the implementation of our integrated energy and carbon management strategy has realised cumulative savings totalling 1,685TJ, or 2.2%, of total energy consumption over the period. These savings amounted to US\$92m and avoided 432kt CO<sub>2</sub>-e in carbon emissions (6% of our total Scope 1 and 2 emissions over the same period). During 2018, Scope 1 and 2 carbon emissions, totalling 149kt CO<sub>2</sub>-e, were abated. Our Scope 1, 2 and 3 emissions decreased to 1,852Mt CO<sub>2</sub>-e from 1,959Mt CO<sub>2</sub>-e in 2017.

***Eskom electricity supply to South Deep***

South Deep's electricity is supplied by Eskom, the state-owned utility which generates 95% of its electricity from coal-fired power stations. As a result, South Deep is Gold Fields' electricity most carbon intensive operation.

Eskom remains a critical risk to our South Deep operations, both from a supply reliability and a cost perspective. Eskom's financial and operational viability have significantly weakened over the past few years, given the utility's inability to service its debt obligations and keeping its power plants running consistently and efficiently. Since June 2018, Eskom has issued several emergency notices

While energy efficiency initiatives have a dual benefit of improving energy productivity and reducing our carbon footprint, a number of our energy initiatives have significant carbon footprint reduction impacts without necessarily reducing energy usage. These include fuel switching from diesel to gas-generated electricity or renewable energy technologies).

Gold Fields aims to deliver further energy savings through greater energy efficiencies and the use of new technologies. We implemented 16 new energy saving projects in 2018, which include:

and initiated rolling blackouts, calling on large power users to reduce demand. Eskom has been plagued with coal shortages at its coal power stations and frequent plant breakdowns, given the ageing fleet whose maintenance has been deferred over the years.

South Deep, like other large power users, has a curtailment agreement with Eskom under which the mine is expected to reduce power demand when called upon by Eskom, but preserving a minimum critical load to achieve hoisting of staff and water pumping. As a short-term response, we reschedule our operations by stopping our process plant, when possible, and reschedule hoisting of ore and equipment.

## Regional energy spend

Changing lighting systems to new, efficient, light-emitting diode (LED) systems which, are expected to save 5.53TJ at Tarkwa, with emission reductions of 830t CO<sub>2</sub>e and cost savings of US\$338,000 a year, and an annual saving of US\$60,000 at Cerro Corona

Rolling out more fuel efficient drill rigs and hauling trucks

Replacing diesel generators with gas and solar systems

Optimising compressed air systems

Replacing inefficient cooling fans

Comminution circuit optimisation.

Our medium-term responses include running our own emergency diesel generators to ensure safe operations, but also continue investing in energy efficiency initiatives, to improve our energy productivity, reduce our carbon footprint and save energy costs. Our long-term solution is to increase our own supply capacity, including bringing in renewables into the power mix, including the solar photovoltaic plant currently in the review phase (p73).

On the cost side, Eskom tariffs have escalated sharply well ahead of inflation over the past few years and the tariff trajectory going forward remains uncertain. In 2010 a unit of electricity cost R0.36/kWh (in nominal terms); in 2018 the equivalent unit cost was R0.85/kWh for large industrial customers. In March 2019, Eskom received the go-ahead to raise its average tariff by 14% for 2019 followed by increases of 8% and 5% for 2020 and 2021 respectively. These will add significant cost pressures on South Deep and strengthen the case for reduced dependence on the utility.

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Energy management continued

**Regional performance***Regional performance***KEY RISKS**

Stable electricity supply and pricing

Limited renewable energy opportunities

**STRATEGIC RESPONSES**

Long-term energy supply agreements

Energy reduction target set

*2018 vs 2017 performance*

	<b>2018</b>	<b>2017</b>
Total energy usage (TJ)	<b>1,082</b>	997
Energy split electricity/fuel (%)	<b>50/50</b>	55/45
Total energy spend (US\$m)	<b>26</b>	22
Energy spend per oz (US\$/oz)	<b>82</b>	72
Energy initiatives savings (TJ)	<b>34</b>	27
Energy cost savings (US\$m)	<b>0.8</b>	0.6
CO <sub>2</sub> -e emissions abated (kt)	<b>2.56</b>	2.00

## 2018 KEY DEVELOPMENTS

Electricity to Cerro Corona is supplied by an independent power producer, generated from hydro (30%) and gas (70%), and supplied via a transmission line. This makes it the least carbon intensive electricity in our portfolio.

Cerro Corona energy spend and consumption increased in 2018

compared to 2017, due to greater tonnages mined in 2018 and consequently higher diesel and electricity consumption.

Among efficiency initiatives, Cerro Corona recently upgraded the haulage fleet to higher capacity trucks to improve diesel usage intensity, has been applying a diesel additive in its mining fleet and rolled

out an LED lighting initiative for its pit lighting. Cerro Corona is also evaluating battery-operated vehicles for the transport of personnel within the mine. A pilot project was initiated in Q1 2019, and, depending on the results, we will investigate gradually replacing the diesel bus fleet with electric buses.

### *Regional performance*

#### KEY RISKS

Increase in oil and diesel prices

Remote location of our operations

Reliance on energy supplies from

third parties

#### STRATEGIC RESPONSES

Increased investment in energy

self-sufficiency

Investment in renewables commenced

### *2018 vs 2017 performance*

	2018	2017
Total energy usage (TJ)	3,142	3,631
Energy split electricity/fuel (%)	41/59	41/59
Total energy spend (US\$m)	78	81
Energy spend per oz (US\$/oz)	88	86
Energy initiatives savings (TJ)	207	21
Energy cost savings (US\$m)	10.5	3.4
CO <sub>2</sub> -e emissions abated (kt)	33.60	25.82

## 2018 KEY DEVELOPMENTS

Our Australian operations run on gas-generated electricity. Diesel is used primarily for our fleet vehicles and machinery. To further embed energy management into operational activities, we implemented an energy steering committee during the year.

Energy spend at our Australian operations was lower in 2018 than 2017 due to the divestment from Darlot and operational adjustments. These included a 20% decrease in diesel usage as St Ives moved to increased underground operations. Hedging 50% of our diesel

purchases during 2018, realised a net gain of US\$4.6m in 2018, cushioned the impact of higher diesel prices.

At Granny Smith, we increased the generation capacity of the gas power station's turbines and started development of a 8MW solar farm with 2MW battery storage facility, due for completion in Q4 2019. Both projects will address growing energy demand from the Wallaby underground mine, reduce gas consumption and cut carbon emissions.

Agnew is investing in a hybrid gas and renewable energy power supply with the capacity to expand to meet future mine growth. The gas supply and base load power plant is under construction and will start supplying energy to the mine in Q3 2019. Additional phases of the project are being investigated, with further development likely to occur during H2 2019.

At Gruyere, the 200km gas pipeline was completed, and gas introduced into the 45MW power plant. We are also piloting five solar power depressurisation pumps around the open pit.

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**Table of Contents***Regional performance***KEY RISKS**

- Costly, unreliable national grid
- Gas supply concerns
- Mandatory renewable energy targets

**STRATEGIC RESPONSES**

- Gas pipeline construction
- Energy reduction targets set
- Investigating renewable energy

*2018 vs 2017 performance*

	<b>2018</b>	<b>2017</b>
Total energy usage (TJ)	<b>5,709</b>	5,647
Energy split electricity/fuel (%)	<b>28/72</b>	28/72
Total energy spend (US\$m)	<b>164</b>	143
Energy spend per oz (US\$/oz)	<b>233</b>	201
Energy initiatives savings (TJ)	<b>145</b>	102
Energy cost savings (US\$m)	<b>17.0</b>	18.0

CO<sub>2</sub>-e emissions abated (kt)**106.61**

80.94

**2018 KEY DEVELOPMENTS**

Our Ghanaian mines completed their transition from the national grid to an independent power producer (IPP), Genser Energy, during 2018. The IPP commissioned the last of the gas units at the Tarkwa power plant in February 2018 and now supplies 40MW to Tarkwa and 18MW to Damang mine. We maintain nominal grid electricity consumption and our own emergency diesel generators ensure we have sufficient back-up infrastructure. Since the switch over, we have realised operational costs

savings and processing efficiency gains.

During 2018, energy spend at our Ghanaian operations was higher than in 2017 primarily due to higher diesel prices. We hedged 50% of our diesel purchases against Brent crude prices, realising a net gain of US\$7.9m in 2018. Heavy rainfalls and increased pit dewatering contributed to higher diesel consumption in 2018.

Genser Energy is advanced with construction of a 77km buried natural gas pipeline from the port of Takoradi

to our mines, which is expected to be commissioned during Q2 2019. This will enable the IPP to convert both plants from propane to natural gas and discontinue transportation of gas on public roads, minimising road transportation risks.

Assessment for renewable energy is at an advanced stage, in support of the government efforts to increase the use of renewable energy by 2020, especially for mining.

***Regional performance*****KEY RISKS**

Eskom's future electricity tariff increases  
Increased risk of load-shedding  
Uncertainty around renewable

energy rules

**STRATEGIC RESPONSES**

Industry pressure against hefty

Eskom tariff hikes  
Implementing energy efficiency

initiatives  
 Finalisation of the solar photovoltaic  
 power usage

***2018 vs 2017 performance***

	<b>2018</b>	<b>2017</b>
Total energy usage (TJ)	<b>169</b>	190
Energy split electricity/fuel (%)	<b>96/4</b>	94/6
Total energy spend (US\$m)	<b>33</b>	34
Energy spend per oz (US\$/oz)	<b>211</b>	122
Energy initiatives savings (TJ)	<b>24</b>	26
Energy cost savings (US\$m)	<b>0.8</b>	0.4
CO <sub>2</sub> -e emissions abated (kt)	<b>6.43</b>	7.10

**2018 KEY DEVELOPMENTS**

South Deep’s electricity is supplied by Eskom, the state-owned utility which generates 95% of its electricity from coal-fired power stations. As a result, South Deep is Gold Fields’ most carbon intensive operation.

Total energy usage was down by 21TJ in 2018 due to lower production, primarily due to a halt in production as a result of the labour strike during the fourth Q4. Energy

spend, however, did not decline at the same rate due to a high baseload demand profile and an average 5.2% electricity tariff increase during the year. (See p71)

Due to regulatory uncertainty around the use of private power purchase agreements, South Deep has delayed the signing of a 25-year power purchase agreement with an IPP for a 40MW solar photovoltaic facility at the mine. We are exploring ways to

develop the facility incrementally in line with government’s recent Integrated Resource Plan, which for plants with a generation capacity above 10MW, requires both ministerial exemption and a power generation licence for IPPs.

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#### Innovation and Technology

We need to operate as a low-cost gold producer in order to achieve our free cash-flow margin target. To this end we have set ourselves a medium-term aspiration of AIC of approximately US\$900/oz by 2020. We need to do this within the context of a number of industry-wide challenges that include longer discovery to development times, a fall in average gold grades and a gold price that has declined around 30% since September 2011.

Advances in innovation and technology provide an opportunity for gold miners to digitise and automate their operations, which will help increase levels of efficiency, reduce costs, improve safety and further mitigate environmental impacts.

Gold Fields I&T strategy has five key objectives:

1. Grow reserve life: reduce discovery cost and cycle time from discovery to development handover
2. Sustain and grow cash margin: improve operational efficiencies to

4. Improve health and safety: distance people from active mining areas

5. Maintain social licence to operate: reduce mining waste/tailings and emissions

To guide the delivery of these objectives, clear execution principles have been defined, and the strategy will be selectively applied at each mine based on relevance and robust business cases. Other principles include that only proven technology will be deployed, a fast follower approach will be used and each region will have its Innovation and technology champion.

We are following a staged approach that will progressively move our operations through the phases of modernisation, integration and ultimately automation, when appropriate and within strict cost parameters. These stages have been broken into three horizons .

Pulling data from all areas onto an integrated platform to enable more effective operational decisions

**Horizon 2** Transformation phase: completing the integration and optimisation of our data and systems and developing an innovative culture. This will allow us to develop a single, real-time view of all operating aspects of a mine, which in turn enables more flexible and responsive production planning and scheduling, all of which can be managed from remote operating centres. To be successful and sustainable, the mine of the future needs to be supported by new ways of working and a culture of innovation building this culture is an additional area of focus during Horizon 2

**Horizon 3** The Gold Fields mine of the future is delivered during this horizon, when and where appropriate. A new level of productivity and safety is achieved through automation, robotics and autonomous operations that are connected through remote sensors

sustain cash margin by the use of automation, information, integration and innovation

3. Implement a future operating platform: develop a fully connected mine with a manufacturing culture of collaboration and innovation

**Horizon 1** Modernisation phase: foundations are put in place to support the use of future technologies. This involves:

Increasing the use of sensors to improve the data we receive from our machines

Upgrading our data backbone to allow our IT systems to efficiently manage higher volumes of data

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**GOLD FIELDS INNOVATION & TECHNOLOGY STRATEGY*****Progress to date***

During 2018 we advanced a number of important Horizon 1 projects:

- Fibre networks were installed underground and in some mining pits – these lay the foundation for connecting people and machinery at the face to employees and systems on-surface
- At Granny Smith we trialled new technology to improve the precision alignment of drills, and increased the number of tele-remote systems that control machinery at both this operation and St Ives
- Drones were deployed at Tarkwa and Damang to conduct surveying by remote
- Cerro Corona rolled out new fleet management software
- Granny Smith, South Deep and St Ives improved their people and equipment tracking systems which are designed to improve man-machine interface safety.

***Looking ahead***

In the year ahead, each Region will define the operating platform, systems and technology required to achieve the strategic goals of Horizon 2, thereby laying the platform required for digital mining. These plans will also outline the technical design, resources, skills, funding and training required to support the successful roll-out of I&T projects at each site. Furthermore, the regions have been asked to bolster their I&T resources, appoint an I&T lead and roll-out workforce communication on their I&T programmes. Around US\$9m has been set aside for I&T projects during 2019.

In the longer term, Gold Fields is working with the ICMM on a plan to make mining vehicles cleaner and safer. Under the Innovation for Cleaner Safer Vehicles (ICSV) programme, the ICMM is working with leading truck and mining equipment suppliers to accelerate innovation and develop a new generation of mine vehicles. The programme aims to:

- Introduce greenhouse gas emission-free surface mining vehicles by 2040
- Minimise the operational impact of diesel exhaust by 2025
- Make collision avoidance technology available to mining companies by 2025

Gold Fields CEO Nick Holland is one of three ICMM member CEOs on the ICSV advisory council.

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## A fit-for-purpose workforce

**Workforce profile**

Our workforce is structured to support the delivery of immediate and long-term strategic objectives. During 2018, the two most significant people-related developments were the restructuring exercise and related strike action at South Deep, as well

as the transition from owner to contractor mining at Tarkwa. The key people-related balanced scorecard objectives were driving diversity and inclusion, managing the talent pipeline and ensuring succession planning for critical roles, and strengthening a values-based culture that drives delivery.

Due to the workforce restructuring at South Deep, Tarkwa and Damang, overall workforce numbers dropped 5% from 18,594 (2017) to 17,611 (2018). The number of full-time employees declined by 37% from 8,856 to 5,601, while the number of contractors rose 23% from 9,738 to 12,010.

**Workforce by region (end December)**

	Total workforce		Employees	Proportion of Nationals		
	2018	2018		2017	2018	
<b>Total workforce by region</b>	<b>2018</b>	<b>2018</b>	<b>2017</b>	<b>2018</b>	<b>2017</b>	<b>2018</b>
Americas	2,322	373	365	1,949	1,669	100%
Australia	3,176 <sup>1</sup>	1,577	1,449	1 599 <sup>2</sup>	888	100%
South Africa	4,643	2,472	4,012	2,171	2,420	85%
West Africa	7,370	1,079	2,910	6,291	4,761	99%
Corporate	100	100	120	0	0	94%
Total	17,611	5,601	8,856	12,010	9,738	

**Key HR metrics (end December)**

<b>Category</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
Total workforce	<b>17,611</b>	18,594	18,091	16,850	15,440
HDSA employees South Africa (%) <sup>3</sup>	<b>72</b>	71	72	71	71
HDSA employees South Africa senior management (%) <sup>3</sup>	<b>43<sup>5</sup></b>	57	55	48	47
Minimum wage ratio <sup>4</sup>	<b>2.39<sup>6</sup></b>	2.43	2	2	2
Female employees (%)	<b>19</b>	16	15	14	14
Ratio of basic salary men to women	<b>1.25</b>	1.25	1.31	1.09	1.10
Employee wages and benefits (US\$m)	<b>442</b>	506	482	435	468
Average training hours per employee	<b>262</b>	223	273	240	181
Employee turnover (%)	<b>35<sup>7</sup></b>	6	12	8	20

<sup>1</sup> Includes Gruyere

<sup>2</sup> High increase due to the employment of contractors for Gruyere construction phase

<sup>3</sup> Excluding foreign nationals, but including white females; HDSAs - Historically Disadvantaged South Africans

<sup>4</sup> Entry level wage compared to local minimum wage

<sup>5</sup> Lower ratio due to South Deep restructuring

<sup>6</sup> Excluding Ghana, as the region only employs management level employees with the move to contractor mining. Ratio is 3.39 if Ghana is included

<sup>7</sup> High turnover due to South Deep restructuring and transition to Tarkwa contractor mining

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**Table of Contents*****Key developments in 2018*****South Deep restructuring**

Ongoing losses at South Deep during 2017 led to a restructuring exercise in Q4 2017 and Q1 2018 during which 261 employees and 47 managers (25% of management level employees) accepted voluntary severance packages. Despite these interventions the mine continued to experience a cash burn of around R100m (US\$8m) a month, and, in August 2018, South Deep embarked on its most significant restructuring to date. In addition to operational interventions, the mine issued a section 189 notice in terms of South Africa's Labour Relations Act to its trade unions, the National Union of Mineworkers (NUM) and UASA, to reduce the workforce by around 30%.

At the end of the 60-day consultation period and after receiving submissions from the unions, South Deep started implementing the retrenchments of 1,082 employees and 420 contractors. The NUM opposed these retrenchments and commenced a legal, no work, no pay strike action on 2 November 2018.

The strike was characterised by violence and intimidation, with protesters blocking access to the mine in contravention of the collective agreement and court interdicts served on the NUM and its members. Although critical essential services were maintained, employees who wished to return to work were prevented from doing so by a group of around 200 NUM branch members and supporters. The mine experienced a cash burn of around R6m (US\$450,000) per day during the 45-day strike as no production was possible.

Amid the continued violence, and following representations from many NUM members wanting to return to work, the NUM National and Regional suspended the NUM branch and called off the strike on 13 December 2018. On 18 December 2018 a settlement agreement was signed with the trade unions, which included the retrenchment of the affected employees and contractors. Retrenched employees received the agreed upon financial packages, portable skills training and financial advice.

As part of the settlement agreement, the NUM and management also agreed to renegotiate key aspects of the collective and other labour agreements. These were concluded in March 2019.

**Tarkwa contractor mining**

Our Tarkwa mine in Ghana made the transition from owner to contractor mining during 2018. As the mine matures it will incur increasing costs, which would have made the current owner mining model unsustainable. These costs include higher blasting costs as the pits deepen, increased fuel costs due to longer hauling distances, increasing cost of reagents and other input materials, high exploration costs, the cost of replacing an ageing fleet, and the year-on-year escalation of union-negotiated wage increases. A change to contractor mining at our Damang mine in 2016 has seen a

significant turnaround in productivity and operational flexibility, with a potential upside in terms of the mine's longevity.

The Ghana Mineworkers' Union (GMWU) opposed the move to contractor mining on the basis that Gold Fields had no justifiable basis to

change its business model. However, its application to the Labour Division of the High Court was dismissed, following which Gold Fields issued severance letters to 1,346 employees in the mining and heavy equipment (HME) department and 765 employees in other departments. Of these, 1,209 of affected HME employees were absorbed by the two mining contractors appointed and 505 of the other affected employees were re-engaged by the mine on fixed-term contracts. In Damang, a further 306 employees were moved from a full-time to a contractor basis. All affected employees received generous retrenchment packages in line with Ghana's labour laws and were offered financial wellness training.

***Balanced scorecard objectives***

**Driving diversity and inclusion**

We continued to focus on building a more diverse and inclusive workforce, with particular emphasis on employing more women, residents from our host communities and, in South Africa, people from historically disadvantaged communities. This forms a key pillar of the HR strategy. A diversity policy was approved by the Board during the year in addition to increasing employee representation from diverse groups, it also emphasises the importance of ensuring that all people are treated with dignity and respect.

Diversity training was rolled out to managers, with a particular emphasis on cultural awareness and how to identify and overcome unconscious bias. This training will support our efforts to increase and retain the number of people we employ from diverse backgrounds.

Key diversity indicators include the percentage of women among our employees (excluding contractors) in management, women in mining and Indigenous/local/HDSA people:

	<b>Australia</b>	<b>Ghana</b>	<b>Peru</b>	<b>South Deep Corporate</b>	<b>Group</b>	
Total women	20%	9%	18%	23%	49%	19%
Women in management	17%	5%	16%	17%	43%	18%
Women in mining	13%	9%	4%	17%	0%	13%
Indigenous people/localisation/HDSA	2%	3%	99%	50%	79%	56%

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A fit-for-purpose workforce continued

#### **Managing talent pipeline and ensuring succession for critical roles**

We continued to monitor succession planning and regional and operational level by tracking turnover rates with a focus on critical roles. The following figures indicate the extent of succession cover across the group:

**Australia:** 73% of Regional Exco and 100% of Mine Exco roles

**Ghana:** 10% of Regional Exco and 46% of Mine Exco roles

**Peru:** 33% of Regional Exco and 91% of Mine Exco roles

**South Deep:** 44% of management roles

**Corporate:** 19% of all corporate roles

The reason for the low rate at Corporate level is that we have a lean corporate structure with few supporting roles. The low rate in Ghana reflects the move to contractor mining at both mines.

#### **Strengthening a values-based culture that drives delivery**

At the end of 2018, we rolled out an employee engagement survey as part of the ongoing work to drive a values-based, high-performance culture. Amongst other things, the survey measured employee satisfaction; understanding of strategy; and the extent to which the work environment supports employees in the achievement of their objectives. Its findings will feed into our HR work during 2019.

In 2019, initiatives are set to be implemented to address key areas of concern in each region and measurements of living the Gold Fields values will be incorporated into employees' balanced scorecards.

#### ***Workforce remuneration, benefits and wellness***

We successfully concluded wage negotiations in:

**Ghana:** a 4% average salary increase was finalised with the GMWU, backdated for 2018 for all qualified active and ex-employees

**Peru:** wage increases varying between 5.3% and 5.8% a year for 2017, 2018 and 2019 were awarded to the unionised contractor workforce

**South Deep:** a three-year wage agreement for 2018 to 2020 was concluded, with an average annual compounded salary increase of 7.31% over three years for Category 4 to 8 employees, miners, artisans and officials. Other benefits included higher loco driver allowances, an increase in the housing allowance, introduction of a funeral benefit plan and improved maternity leave

High levels of employee indebtedness have resulted in the approval of just 47% of bond applications by our South Deep employees, equating to the sale of only 126 houses under the mine's Tswelopele Homeownership Scheme. A review of the scheme considered employee willingness to invest in property close to the mine and the time it could

take for employees to clear their debts. Alternative options to house our employees and their families are currently being considered.

A Group Flexible Work Guideline was approved by Exco and provides regions with a framework to implement flexible work practices where appropriate and suited to local conditions.

The mental health of Fly-In Fly-Out (FIFO) employees remains an industry-wide issue in Australia. Detail on how we are addressing this issue can be found on p69.

### ***Training and developing our people***

Gold Fields continued to focus on programmes and policies that develop and retain people who are skilled and motivated to deliver sustainable value creation. These programmes and policies are fundamental to ensuring we have the skills needed to keep our business agile, innovative and well-positioned

to take on the challenges in our sector. They include:

- Our new diversity policy
- Our employee climate survey
- Disciplinary and grievance processes
- Talent management processes
- Learning and development approach
- Human rights
- Our approach to vulnerable people
- Focus on gender rights

### ***Looking ahead to 2019***

HR targets and focus areas for 2019 include the following:

- Achieve 5% increase in productivity beyond the business plan
- Further enhance leadership capability to align leadership skills with new competency framework
- Continue to entrench diversity by:
  - Accelerating the development of female employees
  - Training leadership to embrace multicultural diversity
  - Improving ranking in the Bloomberg Gender Equality Index
  - Implementing a transformation strategy
  - Developing a baseline for measurement of the employment of vulnerable people across regions
  - Achieving >54% HDSA representation among South Deep management and <4% expatriate representation in Ghana
- Decrease turnover of critical roles to 5%
- Improve performance management through line manager coaching programmes

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***Summarised Remuneration Report***

This is a summarised version of the Remuneration Committee's Remuneration Report, the full version of which can be found in the Annual Financial Report on p28 – 60.

**Our remuneration philosophy and practices**

Gold Fields' remuneration philosophy is underpinned by a pay-for-performance approach, in which people are rewarded for delivery against Balanced Scorecard (BSC) objectives.

There is a direct cascade of strategic objectives from the Group BSC – which is informed by the Group strategy – to the regional, operational, departmental and, ultimately, individual BSCs. This

ensures that each individual's objectives are aligned to the Gold Fields strategy and all employees play a role in contributing to the overall value creation of the Group.

During 2018, the overall framework of our Remuneration Policy remained unchanged and no changes were made to the remuneration mix for executives. We did, however, make a number of enhancements and refinements to the implementation, including:

Enhancing the link between performance and strategy by:

- Simplifying the Gold Fields strategy to a strategy-on-a-page to enhance communication
- Implementing the cash-settled LTI plan for management-level employees, complete with localised targets
- Refreshing the four drivers of the strategic objectives to maximise total shareholder return (TSR) sustainably
- Ensuring strategic alignment between Group, regional and personal scorecards
- Clarifying policies, where appropriate, to remove ambiguity and to cater to the numerous jurisdictions in which Gold Fields operates

**Gold Fields' remuneration practices**

We do:

Provide pay for performance:

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75% of CEO's total remuneration is pay-at-risk

A significant percentage of the CEO's short-term incentive is based on corporate performance

The CEO's long-term incentive is entirely performance-based through performance shares

Performance share awards are earned based on absolute and relative TSR and free cash-flow margin (FCFM)

Threshold (partial) performance share payouts require relative TSR performance at least at the median when compared to the performance comparator group and absolute TSR to exceed the cost of equity

Have a clawback policy

Have executive director share ownership guidelines through the executive minimum shareholding plan

Require a double-trigger for CEO and CFO upon a change of control

Promote retention with equity awards that vest over three years

Have an independent Remuneration Committee, with all members being independent directors

Retain an independent remuneration consultant whose primary purpose is to advise the Remuneration Committee

Conduct annual advisory votes on our remuneration policy and implementation report, as they appear in the Remuneration Report

We do not:

Reprice underwater share options

Pay dividends on unearned performance shares

Provide guaranteed bonuses

Grant share awards to non-executive directors

Allow the use of unvested LTI awards as collateral, or protect the value of unvested awards, or the value of any shares and securities held as part of meeting the MSR provisions

Provide financial assistance to directors or prescribed officers

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A fit-for-purpose workforce continued

*Our remuneration mix*

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A fit-for-purpose workforce continued

***Executive directors and prescribed officers remuneration***

The table of remuneration for executive directors and prescribed officers based on the total single-figure remuneration prescribed by King IV is displayed below. King IV requires the disclosure of a total single figure of remuneration, received and receivable for the reporting period that ties remuneration to the individual's performance for the period.

The definitions used in the adoption of these remuneration reporting requirements under King IV follow below. These should assist in a clearer understanding of the values and related terminology used in the table of remuneration.

***Reflected***

In respect of the LTI plans, remuneration is reflected when performance conditions have been met during the reporting period. If the only remaining vesting condition is continued employment, the remuneration is reflected in the period when all other performance conditions have been met. Remuneration included may not have legally transferred to the individual, and the individual may not yet have the unconditional right to enjoy the benefits thereof.

***Settlement***

This refers to remuneration that has been included in the total-single figure remuneration in respect of any prior period but has only been unconditionally transferred to the individual concerned in the current period.

Remuneration for executive directors and prescribed officers All figures in US\$ '000

Name	Status		Salary <sup>1</sup>	Pension		Cash incentives <sup>2</sup>
				contribution	fund	
N Holland	Executive Director	2018	1,251.6	26.5		661.5
		2017	1,186.9	26.3		1,002.2
P Schmidt	Executive Director	2018	626.6	48.2		306.2
		2017	588.6	48.2		542.7
L Rivera <sup>8</sup>	Prescribed Officer	2018	668.6	72.8		134.0
		2017	626.3	48.4		270.4
A Baku <sup>9</sup>	Prescribed Officer	2018	808.0	185.8		634.8
		2017	784.7	180.5		719.8

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R Butcher	Prescribed Officer	2018	384.5	37.3	192.4
		2017	353.0	37.9	278.5
N Chohan	Prescribed Officer	2018	367.2	26.5	213.9
		2017	342.8	26.3	288.3
B Mattison <sup>10</sup>	Prescribed Officer	2018	453.6	26.5	271.9
		2017	426.7	26.3	369.9
T Harmse	Prescribed Officer	2018	369.7	26.5	215.3
		2017	344.7	26.3	290.1
A Nagaser	Prescribed Officer	2018	243.3	27.0	131.1
		2017	228.1	25.3	192.0
S Mathews <sup>11</sup>	Prescribed Officer	2018	438.2	29.5	289.4
		2017	397.5	21.2	326.1
M Preece	Prescribed Officer	2018	541.7	26.5	168.8
		2017	338.2	16.6	
R Bardien <sup>12</sup>	Prescribed Officer	2018	274.3	24.3	150.5

Average exchange rates were US\$1 = R13.20 for FY2018 and US\$1 = R13.33 for FY2017. No termination payments during the year

<sup>1</sup> The total US\$ amounts paid for 2018, and included in salary were as follows: NJ Holland US\$406,700, P Schmidt US\$124,150 and BJ Mattison US\$88,200. The total US\$ amounts paid for 2017, and included in salary were as follows: NJ Holland US\$396,500, P Schmidt US\$121,000 and BJ Mattison US\$86,000

<sup>2</sup> The annual bonus accruals for the year ended 31 December 2017 and 31 December 2018, paid in February 2018 and February 2019, respectively

<sup>3</sup> The values of the 2015 LTI Plan with a performance period ending 31 December 2017 is reflected in the 2017 figures

The values of the 2016 performance shares with a performance period ending 31 December 2018 is reflected in the 2018 total single figure of remuneration based on a US\$3.29 price as at 31 December 2018. The vesting date is 1 March 2019 and will be reflected in the 2019 cash value equivalent on settlement

<sup>4</sup> The 2017 total single figure of remuneration includes the cash equivalent value of matching shares awarded in terms of the MSR policy in 2017

<sup>5</sup> Other includes special bonuses and incidental payments unless otherwise stated

<sup>6</sup> Includes cash incentive, cash LTI plan and matching shares reflected for the year

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This refers to remuneration that has been included in the total single figure of remuneration in the current period but has not been unconditionally transferred to the individual concerned in the current period, or where an election has been made by the individual to defer the settlement thereof in fulfilment of their minimum shareholding requirement.

**Unconditional transfer**

Means that the individual now enjoys full right to the remuneration (excluding any applicable clawback), and it is no longer subject to any further service, employment or other conditions.

For the two executive directors, the 2018 total single figure of remuneration reported is lower than was reported for the 2017 period. The reasons are as follows:

Matching shares awarded (US\$942,800 and US\$157,500 for the CEO and CFO respectively) were included in the reporting for the 2017 period as required, with none in 2018

Both the CEO and CFO have lower cash-incentives in 2018 than in 2017 due to these being performance-related outcomes as described in Section 2

				<b>Total</b>			
				<b>single</b>		<b>Add:</b>	<b>Total</b>
				<b>figure</b>		<b>cash</b>	<b>cash</b>
				<b>of</b>		<b>value on</b>	<b>equivalent</b>
	<b>LTI plan</b>	<b>Matching</b>		<b>of</b>	<b>Less:</b>	<b>settlement<sup>7</sup></b>	<b>remuneration</b>
	<b>reflected<sup>3</sup></b>	<b>shares</b>	<b>Other<sup>5</sup></b>	<b>remuneration</b>	<b>amounts</b>	<b>value on</b>	<b>remuneration</b>
		<b>reflected<sup>4</sup></b>			<b>not yet</b>	<b>settlement<sup>7</sup></b>	
					<b>settled<sup>6</sup></b>	<b>value on</b>	
	1,027.2			2,966.8	(1,688.7)	1,475.6	2,753.7
	463.5	942.8	-	3,621.7	(2,408.5)	677.6	1,890.8
	646.4		2.1	1,629.4	(952.6)	1,011.2	1,688.0
	459.0	157.5	4.0	1,800.0	(1,159.2)	891.2	1,532.0
			385.7	1,261.3	(519.7)	481.3	1,222.9
			253.3	1,198.4	(486.7)	111.0	822.7
	621.9		68.0	2,318.6	(1,256.8)	1,237.2	2,299.0

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463.5	51.9	150.2	2,350.6	(1,235.2)	924.4	2,039.8
90.3			704.5	(282.7)	267.6	689.4
			669.4	(278.5)	323.2	714.1
248.7		1.8	858.2	(462.7)	403.5	799.0
126.0	54.0	3.3	840.7	(468.3)	417.2	789.6
410.1		2.5	1,164.6	(681.9)	672.5	1,155.1
297.0	55.4	1.0	1,176.3	(722.3)	622.2	1,076.2
331.6		7.8	950.8	(546.9)	548.0	951.9
252.0	10.0	6.8	929.9	(552.1)	484.3	862.1
124.8		0.4	526.6	(255.9)	245.1	515.8
90.0		0.7	536.1	(282.0)	221.1	475.2
274.2		4.9	1,036.3	(563.6)	514.2	986.9
		10.0	754.8	(326.1)		428.7
		0.4	737.3	(168.8)		568.6
			354.8			354.8
		106.1	555.2	(150.5)		404.7

<sup>7</sup> The 2018 figure includes the bonus related to the 2017 financial year paid in February 2018 and the 2015 cash LTIP vested and settled in March 2018. The 2017 figure includes the bonus related to the 2016 financial year paid in February 2017 and the 2014 cash LTIP vested and settled in March 2017.

<sup>8</sup> L Rivera other payments for 2018 relate to cash in lieu of 2016 share award payable upon vesting in March 2019. His appointment package and conditions were approved by RemCo but the LTI award was inadvertently not executed hence he was never physically awarded. This value reflects the equivalent cash compensation in this regard. Cash Incentives include legislated bonus portion. Company contributions to pension erroneously not reported previously

<sup>9</sup> A Baku other payments for 2018 relate to approved profit share bonus payment approved and 2017 relates to leave allowance in line with related policy.

<sup>10</sup> BJ Mattison other payments for 2018 relate to a service award in line with Company practice.

<sup>11</sup> S Mathews other payments for 2018 relate to bonus payment in lieu of most improved operation bonus scheme.

<sup>12</sup> R Bardien Appointed on 1 February 2018. Other payments relate to sign on bonus.



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Financial performance  
Summarised financials



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## Financial performance

**Introduction**

The focus of Gold Fields' business strategy is to grow margin and free cash-flow (FCF) for every ounce of gold produced, and to sustain this FCF in the long term. In this regard, our target is to generate a FCF margin of at least 15% per region at a notional long-term planning gold price of US\$1,200/oz. However, to ensure the sustainability of this cash-flow, the Group had to reinvest in the portfolio during 2017 and 2018, spending project capital of US\$502m over this period. Importantly, Gold Fields spent this capital on projects that will improve the overall quality of its asset base and enhance FCF generation in the future.

After two years of elevated levels of project capital, 2019 looks set to be an inflection point for Gold Fields in terms of FCF generation. During 2018, the Group spent US\$64m at Salares Norte and incurred project capital of US\$277m (US\$125m at Damang, US\$134m at Gruyere, and US\$18m at South Deep), underpinning a net cash-outflow of US\$132m (2017: US\$2m).

Further project capital of US\$143m will be spent at Damang and Gruyere in 2019, with the majority scheduled for the first half of the year. The project capital is then expected to decrease significantly in H2 2019,

at which point an increase in FCF is anticipated. Once the capital bill has rolled off, Gold Fields does not envisage spending material growth capital in the short to medium term. The objective is to reap the rewards of the capital invested through an increase in FCF, which will go towards decreasing debt and, potentially, increased dividends.

The Group's FCF margin, which is adjusted for share-based payments, Salares Norte exploration expenditure and Damang and Gruyere project capital, remained steady at 16% in 2018 (2017: 16%). Encouragingly, this is in line with our targeted 15% FCF margin at a US\$1,200/oz gold price.

Despite the significant project capital incurred, our priorities for the cash we generated have remained unchanged during the reinvestment period:

**Rewarding our shareholders with dividends**

Our policy is to pay out between 25% and 35% of normalised earnings

**Funding growth projects**, which will improve the quality of the Gold Fields portfolio. The bulk of the project capital is being spent on Damang in Ghana and Gruyere in Western Australia. Once these two mines reach full production, which is anticipated by 2020, they are set to significantly improve Group AIC and, subsequently, cash generating ability

**Maintaining the strength of the balance sheet** and limiting the increase in debt through the peak capital expenditure years. Gold Fields ended 2018 on a net debt:adjusted EBITDA of 1.45x. Once we have incurred all project capital expenditure on Damang and Gruyere, our target is to once again reduce our net debt:EBITDA to 1.0x.

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**Table of Contents*****2018 financial performance***

Gold Fields' financial performance was underpinned by the strong operational performance of the Ghanaian, Australian and Peruvian assets in 2018, with South Deep presenting a drag on Group results. The outperformance of these operations (relative to guidance), coupled with a US Dollar gold price received that was higher than our business planning price, enabled the Group to contain the cash-outflow, limit the increase in net debt and maintain a healthy balance sheet during the year. Net debt increased to US\$1,612m during 2018 from US\$1,303m at end 2017, resulting in a net debt:adjusted EBITDA of 1.45x at 31 December 2018 (December 2017: 1.03x). A large portion of this increase was due to the US\$165m upfront payment relating to the Asanko Gold acquisition.

Net revenue declined by 7% to US\$2,578m in 2018 from US\$2,762m in 2017, driven by the decrease in production coupled with a slightly lower gold price received. Cost of sales decreased by 3% to US\$2,043m in 2018 from US\$2,105m in 2017. The bulk of Gold Fields' costs in Australia and South Africa are incurred in local currencies. As such, the slight strengthening of the Australian Dollar and South African Rand had a negative impact on costs in US Dollar terms and ultimately profits in these geographies during 2018.

The Group AISC of US\$981/oz and All-in Costs (AIC) of US\$1,173/oz in 2018 compared with AISC of US\$955/oz and AIC of US\$1,088/oz in 2017. Encouragingly, costs came in below guidance (AISC: US\$990/oz US\$1,010/oz; AIC: US\$1,190/oz US\$1,210/oz) for the sixth consecutive year. The increase in AIC was driven by an increase in Salares Norte expenditure and project capital incurred at Gruyere.

Other salient features during 2018 included:

- Royalty of US\$63m in 2018 compared with US\$62m in 2017

- Total capital expenditure of US\$814m in 2018 versus US\$834m in 2017

- A decrease in the normal taxation charge to US\$146m in 2018 (2017: US\$205m)

- Asset write-downs and impairments of US\$520m were recognised in 2018 (2017: US\$200m), comprising mainly a US\$482m impairment of South Deep

Taking into account all of the above, the net loss attributable to Gold Fields' shareholders amounted to US\$348m in 2018, compared to a net loss of US\$19m in 2017. Headline earnings were US\$61m in 2018 compared to US\$210m in 2017.

A detailed analysis of our financial performance is provided in the management's discussion and analysis of the financial statements in the 2018 Annual Financial Report on p61-124.

The consolidated income statement, statement of financial position and cash flow statement extracted from the 2018 Annual Financial Report are provided on p150-154.

## Free Cash-Flow

Gold Fields recorded a net cash-outflow (see footnote 3 on p2) of US\$132m in 2018 compared with an outflow of US\$2m in 2017. Included in the 2018 number is project capital of US\$125m (2017: US\$115m) and US\$134m (2017: US\$81m) for Damang and Gruyere, respectively. South Deep recorded a net cash-outflow of US\$141m compared with an outflow of US\$60m in 2017. US\$143m in project capital is budgeted for 2019, with the majority scheduled to be spent during H1 2019.

At a mine level, cash generation remained strong in 2018. Excluding project capital and off-site exploration expenditure, mine cash-flow was US\$334m (US\$195m in Australia, US\$114m in Peru, US\$149m in Ghana and a negative US\$123m in South Africa) versus US\$441m in

2017. Our Australian, Ghanaian and Peruvian mines collectively generated a net cash-flow of US\$457m (2017: US\$484m), demonstrating again the quality of this portfolio of assets.

FCF margin, which is adjusted for share-based payments, Salares Norte exploration expenditure and Damang and Gruyere project capital, remained unchanged at 16% in 2018 compared to 2017.

## Dividends

Gold Fields has a long and well-established policy of rewarding shareholders by paying out between 25% and 35% of normalised earnings as dividends. This policy is viewed as an important element of Gold Fields' investment case, and we have consistently honoured this commitment with an average pay-out of approximately 30% of earnings every year over the past nine years.

Despite recording a net cash-outflow in 2018, the Group maintained its dividend policy and declared a final dividend of R0.20/share for the year. Together with the interim dividend of R0.20 per share (for the six months ending on 30 June 2018), this brings the total dividend for 2018 to R0.40/share. In 2017 we paid a total dividend of R0.90 per share.

## Reducing debt

A strategic objective of management during the peak capital expenditure years (2017 and 2018) has been to maintain a healthy balance sheet and minimise the increase in net debt through limiting the cash-outflow.

Net debt increased by US\$309m during 2018 to end the year at US\$1,612m (end December 2017: US\$1,303m). This includes US\$165m related to the Asanko Gold acquisition, which closed on 31 July 2018. The outperformance of the international portfolio and a higher gold price received than budgeted enabled Gold Fields to end 2018 on a better than expected net debt:adjusted EBITDA ratio of 1.45x (2017: 1.03x).

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## Financial performance continued

During 2018, the Group successfully extended the maturity of its US\$380m term loan by 12 months to 6 June 2020 (from 6 June 2019). As such, the first material debt maturity is now due in June 2020. In addition, having entered into an A\$500m revolving credit facility in June 2017, Gold Fields' balance sheet is in a comfortable position with regards to solvency and liquidity. At the end of 2018, the Group had committed and uncommitted loan facilities totalling US\$2.5bn, A\$500m and R4.2bn, of which US\$976m, A\$50m and R2.2bn, respectively, are unutilised. Our debt is currently rated BB+ by

Standard & Poor's and Baa3 (investment grade) by Moody's, the latter being an upgrade from 2017.

During the course of 2019, Gold Fields will look to refinance and extend the maturities of its syndicated bank facilities (US\$1.3bn) and US\$1bn bond (US\$852m outstanding).

**Hedging**

Given the high levels of project capital expenditure incurred during the year, together with the volatility in commodity prices and exchange rates, as well as our higher net debt

position, management continued with the short-term, tactical hedging programme that was implemented in 2017. These hedges were put in place to protect cash-flows during the investment phase, and Gold Fields will look to continue the hedging programme during the first half of 2019, whilst the remainder of capital is spent on Damang and Gruyere. Hedges during 2018 and those put in place in Q1 2019 are in the table below. Net realised gains from these hedge positions were US\$17m in 2018, compared with US\$13m in 2017.

2018				
Hedge	Country	Quantity hedged	Hedging instrument and price	Hedge term
Gold hedge	Australia	453koz (51% of production)	Zero-cost collars; Average (Ave) floor price of A\$1,703/oz, Ave cap price of A\$1,767/oz	Apr 2018 Dec 2018
	Australia	221koz (25% of production)	Swaps; Ave strike price of A\$1,714/oz	June 2018 Dec 2018
	Ghana	489koz (69% of production)	Zero-cost collars; Ave floor price of US\$1,300/oz,	Jan 2018



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<b>Copper</b>	South Africa	production) 64koz (41% of	Ave cap price of US\$1,418/oz Zero-cost collars; Ave floor price of R600,000/kg,	Dec 2018 Jan 2018
	Peru	production) 29.4kt (92% of	Ave cap price of R665,621/kg Zero-cost collars; Ave floor price of US\$6,600/t,	Dec 2018 Jan 2018
<b>Oil</b>	Ghana	production) 126 million litres	Ave cap price of US\$7,431/t Swaps; Equivalent Brent crude swap price	Dec 2018 June 2017
<b>Oil</b>	Australia	78 million litres	US\$49.80/bbl Swaps; Equivalent Brent crude swap price	Dec 2019 June 2017
			US\$49.92/bbl	Dec 2019

2019

Hedge	Country	Quantity hedged	Hedging instrument and price	Hedge term
<b>Gold</b> <b>hedge</b>	Australia	283koz (31% of guidance)	Swaps; Ave strike price of A\$1,751/oz	Jan 2019 Dec 2019
	Australia	173koz (19% of guidance)	Zero-cost collars; Ave floor price of A\$1,720/oz,	Jan 2019
	Australia	456koz (51% of guidance)	Ave cap price of A\$1,789/oz Zero-cost collars; Ave floor price of A\$1,800/oz,	Dec 2019 Jan 2019
	South Africa	113koz (59% of guidance)	Ave cap price of A\$1,869/oz Forwards; Ave strike price of between R615,103/kg and R620,000/kg	Dec 2019 Between June 2019
				Dec 2019
<b>A\$ Forex</b> <b>hedge</b>	Australia	US\$366m	Average strike price between US\$0.7075 0.7330/A\$	Jan 2019 Dec 2019
<b>Oil</b>	Ghana	126 million litres	Swaps; Equivalent Brent crude swap price	June 2017
<b>Oil</b>	Australia	78 million litres	US\$49.80/bbl Swaps; Equivalent Brent crude swap price	Dec 2019 June 2017
			US\$49.92/bbl	Dec 2019

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**Table of Contents****Consolidated income statement**

for the year ended 31 December 2018

	United States Dollar		
<i>Figures in millions unless otherwise stated</i>	2018	2017	2016
<b>CONTINUING OPERATIONS</b>			
Revenue	2,577.8	2,761.8	2,666.4
Cost of sales	(2,043.0)	(2,105.1)	(2,001.2)
Investment income	7.8	5.6	8.3
Finance expense	(88.0)	(81.3)	(78.1)
Gain on financial instruments	21.0	34.4	14.4
Foreign exchange gain/(loss)	6.4	(3.5)	(6.4)
Other costs, net	(44.8)	(19.0)	(16.8)
Share-based payments	(37.5)	(26.8)	(14.0)
Long-term incentive plan	(1.1)	(5.0)	(10.5)
Exploration expense	(104.2)	(109.8)	(86.1)
Share of results of equity accounted investees, net of taxation	(13.1)	(1.3)	(2.3)
Restructuring costs	(113.9)	(9.2)	(11.7)
Silicosis settlement costs	4.5	(30.2)	
Gain on acquisition of Asanko	51.8		
Impairment, net of reversal of impairment of investments and assets	(520.3)	(200.2)	(76.5)
Profit on disposal of investments			2.3
(Loss)/profit on disposal of assets	(51.6)	4.0	48.0
<b>(Loss)/profit before royalties and taxation</b>	<b>(348.2)</b>	214.4	435.8
Royalties	(62.5)	(62.0)	(78.4)
<b>(Loss)/profit before taxation</b>	<b>(410.7)</b>	152.4	357.4
Mining and income taxation	65.9	(173.2)	(189.5)
<b>(Loss)/profit from continuing operations</b>	<b>(344.8)</b>	(20.8)	167.9
<b>DISCONTINUED OPERATIONS</b>			

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Profit from discontinued operations, net of taxation		13.1	1.2
<b>(Loss)/profit for the year</b>	<b>(344.8)</b>	(7.7)	169.1
<b>(Loss)/profit attributable to:</b>			
Owners of the parent	<b>(348.2)</b>	(18.7)	158.2
Continuing operations	<b>(348.2)</b>	(31.8)	157.0
Discontinued operations		13.1	1.2
<b>Non-controlling interests</b>	<b>3.4</b>	11.0	10.9
Continuing operations	<b>3.4</b>	11.0	10.9
	<b>(344.8)</b>	(7.7)	169.1
<b>(Loss)/earnings per share attributable to owners of the parent:</b>			
Basic (loss)/earnings per share from continuing operations cents	<b>(42)</b>	(4)	19
Basic earnings per share from discontinued operations cents		2	
Diluted basic (loss)/earnings per share from continuing operations cents	<b>(42)</b>	(4)	19
Diluted basic earnings per share from discontinued operations cents		2	

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Financial performance continued

**Statement of financial position**

at 31 December 2018

United States Dollar

*Figures in millions unless otherwise stated*

	2018	2017
<b>ASSETS</b>		
<b>Non-current assets</b>	<b>5,183.2</b>	5,505.7
Property, plant and equipment	<b>4,259.2</b>	4,892.9
Goodwill		76.6
Inventories	<b>133.3</b>	132.8
Equity accounted investees	<b>225.1</b>	171.3
Investments	<b>235.3</b>	104.6
Environmental trust funds	<b>60.8</b>	55.5
Deferred taxation	<b>269.5</b>	72.0
<b>Current assets</b>	<b>921.1</b>	1,114.4
Inventories	<b>368.2</b>	393.5
Trade and other receivables	<b>153.2</b>	201.9
Cash and cash equivalents	<b>399.7</b>	479.0
Assets held for sale		40.0
<b>Total assets</b>	<b>6,104.3</b>	6,620.1
<b>EQUITY AND LIABILITIES</b>		
Equity attributable to owners of the parent	<b>2,586.1</b>	3,275.8
Stated capital	<b>3,622.5</b>	3,622.5
Other reserves	<b>(2,110.3)</b>	(1,817.8)
Retained earnings	<b>1,073.9</b>	1,471.1
Non-controlling interests	<b>120.8</b>	127.2
<b>Total equity</b>	<b>2,706.9</b>	3,403.0
<b>Non-current liabilities</b>	<b>2,781.9</b>	2,363.1

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Deferred taxation	<b>454.9</b>	453.9
Borrowings	<b>1,925.3</b>	1,587.9
Provisions	<b>319.5</b>	321.3
Finance lease liabilities	<b>80.1</b>	
Long-term incentive plan	<b>2.1</b>	
<b>Current liabilities</b>	<b>615.5</b>	854.0
Trade and other payables	<b>503.0</b>	548.5
Royalties payable	<b>12.5</b>	16.3
Taxation payable	<b>5.2</b>	77.5
Current portion of borrowings	<b>86.3</b>	193.6
Current portion of finance lease liabilities	<b>8.5</b>	
Current portion of long-term incentive plan		18.1
<b>Total liabilities</b>	<b>3,397.4</b>	3,217.1
<b>Total equity and liabilities</b>	<b>6,104.3</b>	6,620.1

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**Table of Contents****Cash-flow statement**

for the year ended 31 December 2018

*Figures in millions unless otherwise stated*

	United States Dollar		
	2018	2017	2016
<b>Cash flows from operating activities</b>	<b>557.8</b>	762.4	917.5
Cash generated by operations	<b>998.0</b>	1,286.5	1,245.4
Interest received	<b>6.8</b>	5.1	7.3
Change in working capital	<b>(16.3)</b>	(69.4)	(2.3)
Cash generated by operating activities	<b>988.5</b>	1,222.2	1,250.4
Interest paid	<b>(91.0)</b>	(90.4)	(81.7)
Royalties paid	<b>(65.5)</b>	(66.0)	(76.4)
Taxation paid	<b>(217.2)</b>	(239.5)	(155.6)
Net cash from operations	<b>614.8</b>	826.3	936.7
Dividends paid/advanced	<b>(57.0)</b>	(70.7)	(40.7)
Owners of the parent	<b>(45.5)</b>	(62.8)	(39.2)
Non-controlling interest holders	<b>(9.8)</b>	(6.4)	(0.2)
South Deep BEE dividend	<b>(1.7)</b>	(1.5)	(1.3)
Cash generated by continuing operations	<b>557.8</b>	755.6	896.0
Cash generated by discontinued operations		6.8	21.5
<b>Cash flows from investing activities</b>	<b>(886.8)</b>	(908.6)	(867.9)
Additions to property, plant and equipment	<b>(814.2)</b>	(833.6)	(628.5)
Proceeds on disposal of property, plant and equipment	<b>78.9</b>	23.2	2.3
Purchase of Gruyere Gold project assets			(197.1)
Purchase of Asanko Gold joint venture investment	<b>(165.0)</b>		
Purchase of investments	<b>(19.3)</b>	(80.1)	(12.7)
Proceeds on disposal of investments	<b>0.5</b>		4.4
Proceeds on disposal of APP	<b>40.0</b>		
Proceeds on disposal of Darlot		5.4	
Contributions to environmental trust funds	<b>(7.7)</b>	(16.7)	(14.8)
Cash utilised in continuing operations	<b>(886.8)</b>	(901.8)	(846.4)
Cash utilised in discontinued operations		(6.8)	(21.5)

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<b>Cash flows from financing activities</b>	<b>257.3</b>	84.2	37.0
Shares issued			151.5
Loans raised	<b>691.7</b>	779.7	1,298.7
Loans repaid	<b>(431.9)</b>	(695.5)	(1,413.2)
Payment of finance lease liabilities	<b>(2.5)</b>		
Cash generated by continuing operations	<b>257.3</b>	84.2	37.0
Cash generated by discontinued operations			
Net cash (utilised)/generated	<b>(71.7)</b>	(62.0)	86.6
Effect of exchange rate fluctuation on cash held	<b>(7.6)</b>	14.3	0.1
Cash and cash equivalents at beginning of the year	<b>479.0</b>	526.7	440.0
<b>Cash and cash equivalents at end of the year</b>	<b>399.7</b>	479.0	526.7

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Overview  
Environmental stewardship  
Stakeholder relations

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Overview

Sustainable gold mining is imperative for Gold Fields' longevity and key to being the company of choice for all our stakeholders – our workforce, government, businesses, capital providers and our communities. This means developing mines across the world, operating responsibly and profitably over lives-of-mine and creating shared value for stakeholders.

Through environmental stewardship, we protect and enhance relationships between our operations and the communities in close proximity. By minimising the impact of our operations on these communities, ensuring ongoing meaningful engagement with stakeholders, and implementing sustainable development policies, we create Shared Value and deliver clear economic, social and environmental benefits to them.

The five key elements of our sustainable development strategy are:

The ability to fulfil our commitment to stakeholders requires that we operate sustainably and profitably. Above all, we require the highest levels of corporate governance and compliance. This is essential given the long-term, capital-intensive nature of our mining projects, as well as the, at times, challenging social and political contexts in which we operate.

In this section we deal with our licence and reputation, a pillar of our balanced scorecard. The section is divided into two parts, environmental stewardship and stakeholder relations.

Regulatory licences are issued by all levels of governments of the countries we operate in, and requires, first and foremost, good corporate citizenship from Gold Fields in terms

of adherence to all relevant legislation. This includes the payment of taxes and other levies, as well as a robust governance and compliance approach. By building strong relationships with our stakeholders, we ensure that we operate beyond pure compliance.

During 2018, Gold Fields' total value distribution to our stakeholders was US\$2.71bn (2017: US\$2.85bn), in the form of payments to governments, capital providers, communities, businesses and our workforce. Over 90% of the value created remains in the countries of operation and increasingly in the communities that host our mines and projects.

Our objectives	Priorities	More info
Energy and climate change	Maintain security of supply Stabilise energy costs Drive renewables and a lower carbon energy mix Start managing climate change adaptation risks	p70 73 p97 99
Social acceptance	Build strong community and government relationships Drive impact through Shared Value Enhance stakeholder engagement and communications	p106 124
Water stewardship	Set and achieve water withdrawal and recycling/reuse targets Achieve water security through catchment approach	p100 102
Integrated mine closure and progressive rehabilitation	Business-wide integrated approach Liabilities optimised through progressive closure and rehabilitation Address social transition at closure	p105
Integrated approach	Achieve collaboration across disciplines Regional leadership Integrated planning	p29 39

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## Environmental stewardship

***Introduction***

Gold Fields seeks to enhance the environments in which it operates and limit the impact that mining can cause on the surrounding areas. To manage this, we remain committed to responsible environmental stewardship.

Gold Fields has three Group environment-related policy statements, on environmental stewardship, climate change and materials stewardship, and five environmental guidelines, on energy and carbon management, water management, tailings management, mine closure and biodiversity. Furthermore, all regions are aligning processes to our critical control management approach (p63).

Our approach to environmental stewardship is guided and informed by several external standards as well as local legislation, supported by risk management, internal policies and priorities. Additional local priorities are identified through

In 2018, we completed the process of recertifying our operations in terms of the new ISO 14001 (2015) environmental management standard. During the year, Agnew, St Ives, Damang, Tarkwa, Cerro Corona and South Deep secured recertification, while an audit will be conducted at Gruyere in 2019. Other than Gruyere, no operation is due for recertification in 2019.

During 2018, risk assessments were completed in all regions on the transport of hazardous materials. No material risks were identified. Opportunities for improvement were found, the most important of which was the construction of a pipeline to deliver gas to our Ghana operations instead of by road (p73).

***Environmental incidents***

A scale of Level 1 (most minor) is used to 5 (most severe) to report environmental incidents. We have not experienced any Level 4 or 5 environmental incidents over the

adjacent to affected water courses. Drinking water was provided to these communities, though monitoring showed that their water supplies were safe to drink. No lasting environmental impacts were identified, and, after the permeable rock burden was removed, the area was rehabilitated to the original design with a final clay tie-in. The storage facility was recommissioned.

On 16 December, over a period of three hours, approximately 180m<sup>3</sup> of water containing tailings from the Cerro Corona TSF flowed through an authorised diversion pipe into a creek leading to the Tingo river. A nearby fish farm on the bank of the river was affected. The incident did not compromise the dam's integrity or physical stability. Gold Fields immediately communicated the incident, and subsequently sent a full report, to the environmental authorities. An emergency response team was activated and corrective measures were taken immediately to stop the discharge; within 24 hours the environmental parameters in the river had returned to normal.

stakeholder consultation.

All our mines are certified according to the International Cyanide Management Code (ICMC), which prescribes how to manage, treat, transport, store and dispose of cyanide. Our operations work to prepare for recertification audits every three years by helping to identify and address potential gaps in advance. South Deep, Damang and Tarkwa were successfully recertified during 2018 and Q1 2019. Gruyere was recommended for pre-operational certification. However, we are still awaiting confirmation by the International Cyanide Management Institute. Gold Fields does not use mercury for the beneficiation of gold or in any of its processes.

past ten years.

During 2018, we experienced two Level 3 environmental incidents (2017: two):

During the commissioning of Damang's Far East tailings storage facility (FETSF) in April, supernatant water leaked into the external environment. Permeable waste rock overburden, originally believed to represent natural ground during construction, led to the transfer of the liquid to underlying waste rock fill, which had not been identified and from there to an adjacent water body. Deposition was immediately returned into the East TSF (ETSF) and downstream monitoring initiated. The incident was communicated to relevant regulatory bodies and communities

Rehabilitation of the affected area also started immediately and was completed within 20 days. No fines nor sanctions have as yet been formalised.

### Group environmental incidents

	Level 2	Level 3
Year	incidents	incidents
2014	54	4
2015	67	5
2016	131	3
2017	83	2
<b>2018</b>	<b>68</b>	<b>2</b>

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Environmental stewardship continued

***Supporting biodiversity***

Our Biodiversity Conservation Practice guideline ensures that we integrate biodiversity conservation into all aspects of mine life, from pre-feasibility to closure. We aim to contribute to the conservation of biodiversity where opportunities arise. Furthermore, we subscribe to the International Council on Mining & Metals (ICMM) Position Statement on Mining and Protected Areas, which includes a commitment to respect protected areas and an undertaking not to explore or mine in World Heritage listed sites. Biodiversity considerations are incorporated into our integrated mine closure and progressive rehabilitation processes.

Two examples indicating our commitment to biodiversity are:

During 2018 we invested around US\$2.2m in environmental programmes at our Salares Norte project in the Atacama Desert of northern Chile, including US\$700,000 on initiatives to protect the endangered Short-tailed Chinchilla found in the area. During 2018, with the help of environmental experts, we continued improving our the baseline information on the Chinchilla and worked on a detailed plan and protocol to relocate them if the EIA is approved.

The St Ives operations in Western Australia extend over a large salt-lake system known as Lake Lefroy. In recent years, the riparian (bank) zones of such salt lake systems have been recognised as areas of sensitive biodiversity. The current mining disturbance of the Lake Lefroy riparian zone by St Ives and other mining companies is limited to 90ha or 2.5% of the riparian habitat. St Ives has undertaken numerous ecological studies and monitoring programmes in the area. The studies indicate that, outside of the physical disturbance of a small portion of the riparian zone, mining and related activities have no discernible impact on the area's biodiversity. Nonetheless, as part of the Beyond 2018 project at St Ives, regulatory approval of which is still awaited, we have included protection measures for Lake Lefroy's fauna.

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## Climate change

Gold Fields' climate change programme focuses on the assessment and mitigation of climate change-related risks, including the development and implementation of action plans and energy management programmes to reduce emissions (p70-73), while at the same time ensuring water security (p100-102). Gold Fields' objectives are to minimise the Company's contribution to climate change and to build resilience to impacts of climate-related risks on our operations and host communities. It is increasingly clear that the negative physical impacts of climate change are real and immediate, due to:

The long-term risks posed by climate change to the Group's operations and surrounding communities

Increasing efforts to regulate carbon emissions in most of our jurisdictions

Taxes increasingly imposed by governments on non-renewable

formerly the Carbon Disclosure Project. The report details aspects of governance and climate-related risks, as well as our risk management framework, our strategic approach in adapting to and mitigating impacts of climate change, and presents trends in our key climate change-related metrics.

Gold Fields has been disclosing emissions, risks and opportunities for more than 10 years through the CDP. Key energy and carbon emissions data are assured externally. Gold Fields maintained its A- score for its 2018 CDP performance, ranking it among the leaders in the mining sector for both our disclosures and management practices.

***Group performance and strategies***

Our carbon emission performance mirrors the energy usage trends at our operations. These are detailed on p70-73. Gold Fields' disclosures cover all three carbon emission scopes, Scope 1-3, both in absolute figures and intensities. Total Scope 1-3 CO<sub>2</sub>-e emissions during 2018 amounted to 1.85Mt, a

significant drop from 1.96Mt in 2017, reflecting the decrease in total energy usage to 11.62TJ in 2018 from 12.18TJ in 2017. Emission intensity was unchanged from the 0.66t CO<sub>2</sub>-e/oz in 2017, due to a decline in Group gold production. Our aspirational target is to reduce cumulative carbon emissions by 800kt CO<sub>2</sub>-e between 2017 and 2020. Cumulative carbon emission reductions from 2017-2018 totalled 265kt CO<sub>2</sub>-e.

Our commitment to low-carbon and renewable energy is a significant contributor to our efforts in reducing

energy consumption

Climate change-related regulations, comprising carbon emission and renewable energy targets, continue to evolve across our regions, and we consistently assess and investigate how these changes will affect our operations. These are detailed in the regional reports on p98 – 99.

***Task Force on Climate-related Financial Disclosures (TCFD)***

Business impact on the climate, and companies' ability to withstand climate change, are issues of increasing global importance, and vital to our stakeholders. In 2018, Gold Fields became the second Johannesburg Stock Exchange Limited (JSE)-listed company in South Africa (and the first mining company) to publicly back the United Nations (UN)-endorsed recommendations of the TCFD. The recommendations have been adopted by many national financial regulators.

By following the TCFD, we will be reporting our climate-related performance in a more targeted and practical way than before, linking it to financial risks and opportunities. In 2019, we will release our first TCFD report, which will replace our annual submission in terms of the CDP,

The 2018 Group risk register includes the impact of climate change among the top 20 Group risks. Furthermore, the Board's Safety, Health and Sustainable Development (SHSD) Committee reviews the performance of energy and climate change programmes on a quarterly basis. Every five years we review our vulnerability to climate change and develop Group-wide strategies and programmes in response to these.

During 2017 our Ghanaian operations piloted use of an ICMM climate-data viewer tool, which provides insight into physical changes in precipitation, temperature, wind and water stress levels. These outcomes were used in developing adaptation plans, such as reviewing design flood lines and inclusion of climate change impacts in our project standards. The ICMM tool is in the process of being rolled out to our other operations.

**Gold Fields Scope 1 & 3 CO<sub>2</sub> Emissions**

carbon emissions. All our operations, other than South Deep, are largely powered by LP gas, a low carbon energy source. In Q1 2019, Granny Smith and Agnew announced significant renewable energy projects to be operational later in 2019 or early 2020 (p72). South Deep, Tarkwa and Damang are also investigating developing renewable energy assets in the near future.

Given the water security impact of climate change to our operations, we also closely monitor our water usage and spending and invest in water security and efficiency initiatives.



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Climate change continued

*Regional performance*

**KEY RISKS**

Water shortages during drier months

Ability to deliver concentrate for shipping during severe weather events

**STRATEGIC RESPONSES**

Seek approval for water abstraction in regular Environmental Impact Assessment (EIA) updates

Ensure that an alternate route to the port is ready for use

Dynamic and predictive water balances

**2018 KEY DEVELOPMENTS**

In April, Peru released a Climate Change Framework law, seeking collaboration between government and the private sector on the government's commitments to:

Reduce emissions by 20% to 30% below business-as-usual by 2030

Meet 20% of carbon reduction goals through the energy, industry, transport, resources and waste sectors

The mine is looking at ways in which it can contribute to the achievement of these targets.

As part of Cerro Corona's climate resilience plan, the mine:

Commencing the permitting process for withdrawing additional water from the Tingo river in preparation for a low rainfall year

Evaluated the key risks of route disruptions as a result of flooding or landslides for transporting ore concentrates to the Salaverry port

<p>Increase storage capacity at the port and Cerro Corona</p>	<p>Constructed an additional storage building for ore concentrate at the Salaverry warehouse.</p>
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**KEY RISKS**

- Adequacy of flood management measures
- Declining water availability
- Tailings dam stability
- Increased cooling costs
- Legislative changes

**STRATEGIC RESPONSES**

- Flood management plans and critical hazard standards
- Trialling site-based weather modelling at Gruyere
- Maintenance of water balances
- Implemented energy management plans, with a savings target of up to 10%
- Conversion to renewable energies at Agnew, and the assessment thereof at Granny Smith
- Dynamic and predictive water balances

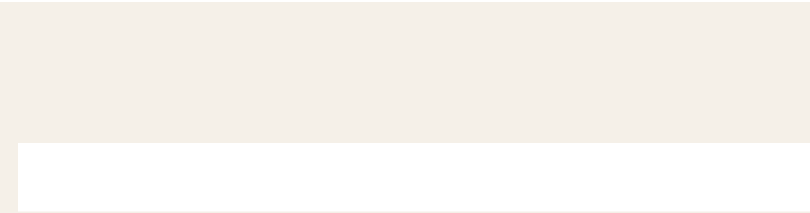
**2018 KEY DEVELOPMENTS**

Australia’s government is reviewing the safeguard mechanism (SGM) introduced in 2016, which applies to facilities emitting more than 100,000 tonnes CO<sub>2</sub>-e emissions each year. We expect Gruyere, once operational, to also be governed by the SGM with the baseline determined by its production plan. Penalties are applied for exceeding emission baselines, or domestic carbon offsets must be purchased to make up the difference. Our Agnew and Granny Smith mines have not exceeded their baseline, but St Ives did so in 2017; emission credits from the Granny Smith gas power were used to offset the penalties. The main impact of the SGM review, which is expected to be implemented by mid-2019, will be the transition from historic to calculated baselines, which will better reflect our operations’ current production profiles.

We continue to manage the lack of certainty regarding the government’s climate change policy through efforts to improve energy efficiencies, as well as taking advantage of the government’s carbon abatement initiatives. During 2018, this initiative at Granny Smith generated 21,032 Australian Carbon Credits Units (ACCUs), with a positive balance of 13,450 ACCUs for use against future liabilities or trading in the open market.

<b>KEY RISKS</b>	<p><b>2018 KEY DEVELOPMENTS</b></p> <p>Increased operational costs linked to road maintenance, replacement of tyres and dewatering</p> <p>Increased volumes of contaminated water requiring treatment</p> <p>Short-term impacts to mining during intense rainfall events</p>
<b>STRATEGIC RESPONSES</b>	<p>Ghana experienced abnormally heavy rainfalls, which impacted both Tarkwa and Damang, and resulted in production delays, the Tarkwa pits being flooded, and additional diesel usage for dewatering. In response, we modified our pumping, storage and pit dewatering strategies.</p> <p>In 2018, we implemented recommendations of the climate change risk and vulnerability assessment conducted in 2017, including increasing pumping capacity for pit dewatering, reduced reliance on the national power grid, which is reliant on hydro power, and engaging communities on climate change impacts. We also started a new water treatment facility at Damang, which includes adding chemicals to reduce nitrate levels to approved standards, while improving water treatment costs and effectiveness.</p> <p>To meet the requirements of the Renewable Energy Act of 2011, proposals for renewable power, amounting to 6MW for Damang and Tarkwa, are currently being investigated.</p>
	<p>Staggering of pit floors to aid drainage and dewatering</p> <p>Review catchment mapping</p> <p>Implement a control process for maintaining</p>

road quality for long haulage routes  
 Dynamic and predictive water balances  
 Provision made for rain delays in operational plan



**KEY RISKS**

Variability in rainfall intensity increasing costs of alternative water sources  
 Temperature increases affect surface cooling plant efficiency and causes heat stress for surface employees  
 Climate change-related regulatory uncertainty

**STRATEGIC RESPONSES**

Dynamic and predictive water balances  
 Reduce freshwater withdrawals  
 Reduce potential Scope 1 and Scope 2 emissions through improved diesel efficiencies and renewable energy

**2018 KEY DEVELOPMENTS**

South Deep continues to work with an independent power producer (IPP) to finalise the construction of a solar photovoltaic (PV) plant at the mine, though the approach may be more incremental than originally envisaged, taking cognisance of more recent financial and regulatory requirements. In terms of the plan, the IPP will raise funding for the plant in return for a long-term purchase power agreement with South Deep. Funding issues are currently being finalised. The IPP is consulting with the Department of Energy on regulatory clarity around the licensing, technical and other requirements of the plant.

Legislation to levy taxes on companies' Scope 1 CO<sub>2</sub> emissions will come into effect on 1 June 2019. South Deep's exposure to the tax is minimal as its Scope 1 emissions, largely related to diesel usage, were only 5,504t CO<sub>2</sub>-e in 2018. A carbon tax levy of R0.10/l was announced by the Finance Minister in early 2019, which amounts to an exposure of around R197,000 (US\$15,000) for South Deep. However, should Eskom, the state utility, be allowed to pass on the cost of the tax on diesel usage to customers, their electricity tariffs could rise significantly.

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## Water management

Access to clean water is a fundamental human right and a vital resource for Gold Fields' mining and ore processing activities. We are committed to responsible water stewardship as it enables security of supply to our own operations. Managing our impact on and access to water is also essential to maintaining our licence to operate, as water is a critical resource for many of our host communities.

We have adopted an integrated approach to water management, including alignment to the ICMM Water Position Statement, baseline water assessments at the operations, and the adoption of a catchment approach to water management based on risk and opportunity analyses. Through careful management, we are able to reduce our environmental impact through responsible use, storage and release of water, while also reducing our costs. Furthermore, we aim to develop our water management policy by Q2 2019.

***Group performance***

All our operations have predictive and dynamic water balances in place.

During 2018, Gold Fields spent a total of US\$32m on water management and projects (2017: US\$29m). Our operations are investing heavily in improving water management practices, including pollution prevention, recycling and water conservation initiatives.

Water withdrawal<sup>1</sup> across the Group decreased to 21.2Gt (2017: 32.9Gt), including a total of 14.5Gt relating to freshwater usage. The main reason is a change in the definition of water withdrawal to align with the ICMM Water Reporting Guideline. Dewatered and diverted water<sup>4</sup> was previously reported as withdrawn water by our Australian operations, but has been reclassified as water diverted in alignment with the ICMM definitions as it is not used in

**Total water used in processes<sup>5</sup>****Water withdrawal per tonne processed****Water recycled/reused as percentage of total**

The ICMM Position Statement on water stewardship commitments was adopted by Gold Fields in 2017. Gaps in terms of our alignment with the ICMM statement were assessed and closed-out by each of our operations in 2018. During this year, we also engaged an external company to conduct a third-party review to verify this alignment to the position statement. This company confirmed our overall alignment rating and found a strong commitment to water stewardship at both corporate and operational levels, with transparent communication and disclosure of our water performance statistics both internally and externally. They also found a need for greater alignment of Gold Fields operations water balances within the context of the water requirements of the wider catchment area, particularly adjacent communities.

the mine processes. Water withdrawal per tonne processed declined to 0.64Kl (2017: 0.96Kl) and per ounce produced to 10.3Kl in 2018 (2017: 14.8Kl), in line with the significant drop in water withdrawal.

Water recycled<sup>2</sup> or reused<sup>3</sup> amounted to 41.4Gl (2017: 43.3Gl). The ICMM has recommended a recycling/reuse target of 65% for mining operations, which we adopted in 2018 and we achieved 66% (2017: 57%).

We benchmark our water usage by participating in the CDP water disclosure programme. The CDP's water score is an indicator of a company's commitment to transparency around its water risks, and the sufficiency of its response to them. During 2018, Gold Fields achieved a B score, down from the A- score in its 2017 CDP water assessment. This is a notch below the top mining performers and reflects broader assessment criteria for the mining sector, many of which are not relevant to Gold Fields.

<sup>1</sup> *Water withdrawal* – The the sum of all water drawn into Gold Fields' operations from all sources (including surface water, ground water, rain water, water from another organisation or state/municipal provider) for any use at the mine

<sup>2</sup> *Recycled water* – water/waste water that is treated before being recycled and reused

<sup>3</sup> *Reused water* – water/waste water that is re-used without treatment at the same operation

<sup>4</sup> *Diverted water* – water pumped from our underground operations or pits that is discharged into the environment with regulated limits so as to ensure continued and safe mining

<sup>5</sup> *Total water used in process* = water withdrawal + water recycled/reused

*Regional performance*

**KEY RISKS**

Poorly developed public water infrastructure

Cerro Corona being blamed for ongoing or perceived water quality pollution by neighbouring mines

Leakage of polluted water from our mine into neighbouring rivers

Water-related activism at local and regional levels

**STRATEGIC RESPONSES**

Cerro Corona has a water management strategy in place that includes:

Permits for water use

Water balance to control the volume of run-off water stored in the TSF

**2018 KEY DEVELOPMENTS**

Cerro Corona remains committed to providing local communities with potable water and implements projects focusing on water provision and improvement of municipal water systems. The Health Authority approved the registration of Cerro Corona’s water systems used for human consumption.

On 16 December 2018, approximately 180m<sup>3</sup> of water containing tailings from the Cerro Corona TSF in Peru, flowed through a creek and reached the nearby Tingo river. This has since been rectified (p95).

We continued negotiations to purchase land for a water treatment plant for the Haulgayoc drinking water system, improving the availability of drinking water for about 4,000 beneficiaries.

Two water efficiency projects, which will reduce the consumption of drinking water in the accommodation camp and reduce the evaporation from water ponds, are

Rainwater storage and recycling

Community water supply programmes

Water monitoring and quality controls at discharge points

Proactive engagements with community organisations and local government

Diversion channels for clean water

Water permits for the mine, plant and tailings dam

planned for 2019/2020.

## KEY RISKS

The limited availability of fresh water

Impacts of flooding from extreme events

## STRATEGIC RESPONSES

Water management strategies are in place, including the development and maintenance of appropriate water balances, linked to operating strategies and post-closure water management plans

The operations have a long history of using saline to hypersaline water

Nano-filtration water treatment technologies are being evaluated at St Ives to remove magnesium from the water, improving the quality of

## 2018 KEY DEVELOPMENTS

Granny Smith implemented an initiative to improve surface water through harvesting rain and surface water and reinjecting this water into an aquifer, improving recharge rates and yield. This reduces the reliance on the Mt Weld borefield and supplements the water required for the process plant and Wallaby underground mine.

St Ives has two water agreements in place: the first with the Water Corporation, terminating in 2050, which provides for the majority of the potable water, as well as an agreement with a neighbouring mine, which provides for declining entitlements until 2021 when it will be replaced in full by provisions from the Water Corporation.

Agnew receives water from a number of sources, including a range of pits filled with rainwater.

At the Gruyere project, two borefields will supply the mine and the Gruyere village. The Yeo borefield will serve as the main water source for Gruyere's processing plant. To date, 21 boreholes have been drilled and



recycled water

installation of a 95km water pipeline to the processing plant has commenced.

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Water management continued

**KEY RISKS**

Intense periods of precipitation during Ghana's rainy seasons

Water pollution affecting communities adjacent to both operations

Providing potable water in the event of possible water pollution

The impact of illegal mining on water sources

Mining landforms affecting natural surface water flow

**STRATEGIC RESPONSES**

Water management strategies include:

Water storage and reuse

An inaugural Regional Water Working Group was held in Q4 2018, seeking to identify and further incorporate water management opportunities at our Ghanaian operations.

Brine recirculation from the Tarkwa northern heap leach pads continued in 2018. Tarkwa is also examining contracting external companies to provide more advanced treatment options for brine and increase treatment capacity. Damang implemented the treatment of nitrate-laden water from the open pits. The mine also established a water monitoring team, comprising members of the local community, to enhance transparency and communication of water results.

Both operations now have fully functioning water balance software, with teams trained in developing water management models.

Water volume and quality monitoring  
Controlled water releases to external  
water bodies

Landform reviews to ensure adequate  
surface water drainage

Expanded cut-off trenches

Enhanced pit dewatering strategies

### KEY RISKS

Growing concerns around water  
scarcity in South Africa

Seepage plumes at South Deep's  
Doornpoort TSF

### STRATEGIC RESPONSES

Usage of a number of water sources,  
including recycling and conservation  
initiatives, water treatment plants,  
boreholes and access to the public  
water system

Ongoing water monitoring,  
containment in storage facilities,  
water treatment and purification, to  
ensure water security and mitigate  
water pollution. Undertaking studies  
of the mine's impact on the wider  
catchment area, including a  
post-closure water management plan  
and the Leeuspruit legacy study

Participation in the existing catchment  
forum

Environmental educational lectures  
and tours for local communities

### 2018 KEY DEVELOPMENTS

The Department of Water and Sanitation (DWS) issued  
South Deep's water licence in December 2018.

South Deep and Sibanye-Stillwater jointly undertook a  
study of the impact of historical mining pollution in the  
Leeuspruit stream, which flows through the operational  
area of both companies. The Leeuspruit Legacy Project  
report was presented to the DWS and an environmental  
NGO, the Federation for a Sustainable Environment.  
Both parties supported the study and recommended that  
further work be undertaken. A risk assessment and  
development of a remediation and closure plan with  
costs are under way.

Seepage plumes have previously been identified at  
South Deep's Doornpoort TSF. As part of the project to  
contain and reduce these plumes, 13 boreholes and two  
seepage sumps were equipped with a pumping and  
monitoring system, which is monitored on an ongoing  
basis.



**Table of Contents****Waste and tailings**

The most significant waste materials produced by our operations are tailings, waste rock, chemical waste and hydrocarbon waste. By managing these wastes responsibly, we minimise the environmental and potential social impact, so as to maintain our licence to operate.

All of our operations have tailings management plans in place, including closure and post-closure management plans. In total, as at end-2018, our ten operations (including three JV sites) contained 33 tailings dams, of which 14 were active and one under construction. With regards to active TSFs, Gold Fields currently has two in-pit tailings dams operating at Agnew and St Ives, five downstreams/centreline tailings dams and seven upstream tailings dams.

Gold Fields operations with active downstreams/centreline tailings dams are Cerro Corona, Damang and Tarkwa.

The new Gruyere TSF, currently in construction, is also a downstream TSF. Gold Fields has only three operations where upstream tailings are being used, being South Deep, Tarwa and Granny Smith.

As two of our sites, South Deep and Granny Smith, are located in relatively dry regions, limited amounts of water need to be stored on the facilities, significantly reducing the risk of saturation on the dams. Tarkwa's upstream tailings dams in Ghana have been constructed from imported fill materials, and are designed assuming worst-case scenario conditions, to ensure the embankments remain stable throughout both the wet and dry seasons, and also for the life of the facility.

***TSF management***

The mining industry's TSFs are in the spotlight following the catastrophic tailings failure at Vale's Feijão iron ore mine in Brumadinho, Brazil, in January 2019, which resulted in over 300 deaths. This follows the 19 fatalities during the Samarco TSF failure in 2015, and significant environmental damage after the Mt Polley tailings dam collapse in 2014.

After the Samarco accident, the ICMM members developed a Tailings Position Statement in 2016 and approved a tailings aspirational goals roadmap in late 2018. Gold Fields' Group Tailings Management Guidelines are aligned to the ICMM Tailings Position Statement. The guidelines were strengthened during 2017 with the inclusion of additional performance guidance and minimum assessment criteria. Subsequent to the Brumadinho tragedy, the ICMM agreed to

establish an independent panel of experts to develop an international standard for tailings facilities for its member companies.

## **METHODS OF TAILINGS CONSTRUCTION**

### **Upstream**

### **Downstream**

*Source: Jon Engels [www.tailings.info/disposal/conventional.htm](http://www.tailings.info/disposal/conventional.htm)*

*The two most common designs for a raised tailings embankments are upstream and downstream TSFs. A downstream tailings facility is one where the new embankment raise is constructed and supported beyond the downstream slope.*

*Downstream TSFs may have supernatant water ponded against the embankment, as shown in the diagram, or they may have a tailings beach.*

*In upstream tailings dams, each new embankment raise is constructed partially on the embankment immediately below and partially on the consolidated tailings beach adjacent to the embankment.*

All Gold Fields TSFs, as well as associated pipeline and pumping infrastructure, are subject to an independent, external audit every three years or more frequently where required by local circumstances or regulations as well as

regular inspections and formal annual Engineer of Record reviews.

A number of improvement areas were recommended, including:

- Seismicity design considerations
- Appointment of an Engineer of Record for each TSF
- Dam break assessments
- Update of emergency response plans
- TSF seepage management and control

In addition to closing out these identified gaps during 2018, Gold Fields also embarked on a programme to further improve operational safety of its TSFs, including moving away from the construction of upstream facilities

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Waste and tailings continued

to centre-line or downstream designs, consideration of filtered and dry stacked tailings, as well as in-pit tailings disposal.

These are in line with the main areas of work under the ICMM's aspirational goals: improving critical controls and reducing tailings water content.

The following actions have been implemented or are currently in process at our operations:

The use of a new downstream TSF for the Damang Reinvestment project

The use of filtered and dry stacked tailings for the planned Salares Norte mine

Gold Fields is also working with Lepanto Mining, its majority partner in the Far Southeast project in the Philippines, on enhancing risk mitigating measures for the TSF used by Lepanto for tailings disposal from its nearby gold mine. Gold Fields and Lepanto have commissioned external consultants to undertake detailed hydrological, seismic and geotechnical reviews and make recommendations on strengthening the TSF. The TSF is located in a region with high seismic activity and frequent typhoons.

Our technical teams are also working with Asanko Gold to further strengthen risk assessment and governance of the lined and upstream-designed TSF at the Asanko gold mine (AGM) JV in Ghana.

During 2018, two new TSFs were commissioned at our West African operations: the FETSF at the Damang mine and TSF 5 at Tarkwa.

***Waste management***

**Group mining waste**



The increased use of in-pit tailings disposal in Australia (Agnew and St Ives)

Increased use of tailings for underground backfill at the Granny Smith and St Ives Invincible mines

Improved governance over seepage control at TSFs through the installation of liners. All new TSFs recently constructed at Tarkwa, Damang and Gruyere are lined

In February 2019, the Gold Fields Board also requested strengthened governance of the Group's TSFs through among others, quarterly TSF update reports, continuous environmental monitoring, including satellite monitoring scans, and increased external and independent verification. These are currently being investigated by management with a view to rapid implementation.

Total Group waste rock volumes mined decreased to 149Mt in 2018 from 171Mt in 2017, due to lower volumes moved at our Tarkwa and St Ives mines. Tailings depositions were at 41Mt in 2018,

unchanged from 2017 and despite a sharp fall in depositions at South Deep, due to lower production.

Gold Fields has set a target to maintain the general landfill waste mass (non-hazardous waste other than tailings and waste rock) at 2015 levels of 11.2Mt, by ensuring a reduction in the waste that reaches landfill through greater use of on-site waste separation and recycling. During 2018 the Group reduced landfill waste by 19% to 9Mt as a result of lower waste volumes at Damang, Cerro Corona and St Ives.

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## Mine closure

Sustainable and integrated mine closure remains one of Gold Fields five key sustainability focus areas. We aim to reduce our environmental, community and social impacts, optimise our closure liabilities and, where possible, enhance asset values. Integrated mine closure planning and progressive rehabilitation are a crucial part of our mine closure management programme.

The Group's focus on progressive rehabilitation during mining operations was advanced in 2018. Progressive rehabilitation presents many opportunities for mining operations, including building credibility with regulators and stakeholders, reducing closure liabilities and achieving cost savings through:

- Utilising available equipment
- Eliminating the need for contractor mobilisation costs
- Utilising current resources such as the environmental management team
- Potential tax savings

supporting the Gold Fields focus on social transitioning.

All mining operations have closure plans and closure cost estimates in place, which are reviewed and updated annually. Noteworthy was that the Western Australian Department of Mines, Industry Regulation and Safety informed the St Ives mine in 2018 that its closure plan had been approved for implementation and would be used as a benchmark for other Western Australian mines. The mine closure plan has established a platform for the site's progressive rehabilitation and has realised an 11% reduction of the closure liability of A\$14m (US\$10.5m) through improved closure planning and practices.

All operations updated their 2018 closure cost estimates, which were externally assured. The funding methods used in each region to make provision for the mine closure cost estimates are:

Peru bank guarantees

Australia existing cash and resources<sup>1</sup>

Ghana reclamation security agreements and bonds underwritten by banks along with restricted cash

South Africa contributions into environmental trust funds and guarantees

The total gross mine closure liability for Gold Fields rose by 5% to US\$400m in 2018. A breakdown is provided in the table below.

Improving the rehabilitation knowledge base

Progressive rehabilitation opportunities, as identified in mine closure plans, have been embedded in our mines' 2019 business plans. Our operations have identified practical progressive rehabilitation activities and costs that are aligned to regulatory requirements and which can be implemented in 2019. The 2020 objective is to identify integrated mine closure opportunities to reduce the Group's long-term closure liabilities. This means planning for post-closure and long-term sustainability in consultation with our communities and other stakeholders. Ongoing participation in the ICMM Mine Closure Working Group and Social Guidance for Closure Taskforce is

**Group closure estimates 2018 (US\$m)**

	2018	2017
Australia region <sup>1</sup>	<b>178<sup>2</sup></b>	179
West Africa region	<b>100</b>	98
Americas region	<b>79</b>	62
South Africa region	<b>42</b>	42
<b>Group total</b>	<b>400</b>	381

<sup>1</sup> Due to legislative changes introduced in Western Australia, there is no longer a legal obligation to have unconditional performance bonds in place for mine closure liabilities. Such liabilities for continuing operations are now self-funding. In addition, companies are now required to pay a levy to the state based on the total mine closure liability. This levy is 1% of the total liability per mine, paid annually. This levy goes into a state administered fund known as the Mine Rehabilitation Fund. Capital and interest from the fund will be used to rehabilitate legacy sites or sites that have prematurely closed or been abandoned

<sup>2</sup> Includes 50% of the total Gruyere closure cost estimate

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## Stakeholder relations

The quality of our relationships with our stakeholders, those individuals and organisations who have a substantial influence on our ability to create value, are integral to our licence to operate. We consistently balance the needs and expectations of our stakeholders with the best interests of Gold Fields, and therefore cultivate relationships that are open, transparent and constructive. Gold Fields has well established stakeholder engagement practices, and we actively engage our key stakeholders continuously on material issues and publicise these engagements. We consider the following to be our key stakeholders: shareholders and other investors, employees and contractors, communities, governments and business partners (suppliers).

Our Stakeholder Relationship and Engagement Policy, approved by the Board in February 2018, was rolled out during the year as part of the alignment with King IV to adopt a stakeholder-inclusive approach that balances the needs, interests and expectations of material stakeholders

***Investor relations***

Gold Fields has positioned itself as a globally diversified gold mining company with a portfolio that is characterised by mechanised underground and open-pit mining. Central to our vision of leadership in sustainable gold mining, is the objective of positioning the Group as a focused, lean and globally diversified gold mining company that generates significant free cash-flow, and provides investors with leverage to the price of gold.

Mining is a long-term game. As a business, we need to balance investing for future growth of our portfolio whilst generating cash today. Through our investment projects and strategic decisions, we aim to sustainably extend the life of Gold Fields overall portfolio at lower costs than today. We believe that this is also a prerequisite for improving the confidence with which long-term investors as well as buy-side and sell-side market participants view Gold Fields.

people-related balanced scorecard objectives were driving diversity and inclusion, managing the talent pipeline and ensuring succession planning for critical roles, and strengthening a values-based culture that drives delivery.

For a full analysis of our stakeholder relationship with our workforce see p76 78.

***Government relations***

As the issuers of mining licences, developers of policy and implementers of regulations, host governments are among Gold Fields most important stakeholders. This requires first and foremost good corporate citizenship from Gold Fields in terms of adherence to all relevant legislation, including the payment of taxes and other levies. We are committed to working with governments at national, regional and local level in establishing sound and transparent working relationships that benefit the

in the best interests of the company . We further developed an internal portal to register material engagements with our key stakeholders. Our management teams have been incentivised to enhance the number and quality of their engagements with these stakeholders during 2019.

We create and distribute value for all stakeholders in the countries in which we operate. Our total value distribution, graphically depicted on p6, highlights the economic value we created at Group level during 2018, as well as value created in our individual regions. Gold Fields' total value distribution during 2018 amounted to US\$2.71bn (2017: US\$2.85bn), in the form of payments to governments, business partners, our workforce, host communities and capital providers.

For a full analysis of our stakeholder relationship with investors, see the Capital Discipline section on p84-90 and the Portfolio Management section on p40-55.

### ***Employee relations***

Our workforce is critical to safe operational delivery. We remain focused on ensuring we have the necessary skills, culture and workforce profile required to meet our objectives and that our workforce is structured to support the delivery of immediate and long-term strategic objectives.

During 2018, the two most significant people-related developments were the restructuring exercise and related strike action at South Deep, as well as the transition from owner to contractor mining at Tarkwa. The key

countries and host communities.

Gold Fields does not provide financial contributions to political parties and lobby groups unless explicitly approved by the Gold Fields Board of Directors in accordance with the Company's Code of Conduct. No political donations were made in 2018.

A worrying development over the past few years has been a strong resurgence of resource nationalism in many leading mining jurisdictions. During 2018, these have been particularly pertinent in our South Africa and West Africa regions.

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Our engagement in Peru is focused at local, regional and national government levels to address operational, social and sustainability matters. A business-friendly national government is in power in Lima and our engagement with the relevant departments is largely carried out via the National Chamber of Mines, Oil and Energy, especially on regulatory matters. Gold Fields Peru's legal stability agreement, signed with the Peruvian government in 1997 to facilitate the build-up of our Cerro Corona mine, expired during 2017 and Gold Fields is now subject to the same taxation regime as the rest of the mining sector.